

Regional District of Nanaimo

DRIFTWOOD

**Water Local Service Area
Annual Report**

2006

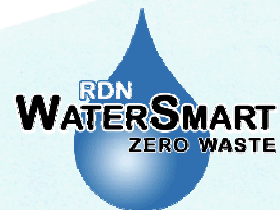


Table of Contents

1.	Introduction.....	1
2.	Driftwood Water System	1
2.1	Groundwater Wells	1
2.2	Reservoirs.....	1
2.3	Distribution System.....	1
3.	Water Sampling and Testing Program.....	1
4.	Water Quality - Source Water and Distribution System.....	2
5.	Water Quality Inquiries and Complaints	2
6.	Groundwater Production and Average Consumption.....	2
7.	Maintenance Program.....	2
8.	Water System Projects.....	2
8.1	2006 Completed Projects	2
8.2	2007 Proposed Projects & Upgrades	3
8.3	2007 Proposed Studies.....	3
9.	Emergency Response Plan.....	3
10.	Cross Connection Control.....	3
11.	Closing.....	3

Appendix A - Map of Driftwood Water Local Service Area

Appendix B - Water Quality Testing Results

Appendix C - Emergency Response Plan

1. Introduction

The following annual report describes the Driftwood Water Local Service Area and summarizes the water quality and production data from 2006. This report also includes a summary of inquiries and complaints, completed and proposed maintenance activities, the Emergency Response Plan, and the Cross Connection Control Program.

This report is to be submitted to the Vancouver Island Health Authority by the Spring of 2007.

2. Driftwood Water System

The Driftwood Water Service Area was established in 2001 and comprises an area on Higginson Road and Delancey Way on the Nanoose Peninsula. The water source for the Driftwood Water Service Area comes from a series of groundwater wells located nearby. A map of the Driftwood Water System is provided in Appendix A for reference.

2.1 Groundwater Wells

There are no groundwater production wells in the Driftwood Water System.

2.2 Reservoirs

No reservoirs are present in the Driftwood Water System. Drinking water is supplied from both the Beachcomber and Eagle Heights reservoirs in the Nanoose Bay Water System.

2.3 Distribution System

The water distribution system in Driftwood is comprised of 150mm and 200mm PVC watermains. Fire hydrants are located throughout the system.

3. Water Sampling and Testing Program

Water sampling and testing is carried out weekly in the Nanoose Bay water distribution system, which is considered to be representative of the drinking water in the Driftwood water system (through shared reservoirs). The following table includes a summary of all testing in the Nanoose Bay water system:

Timing	Location	Tests
Weekly	RDN (in-house) Laboratory	Total, Fecal coliforms, Temperature, pH, Conductivity, Chlorine residual, Salinity Total Dissolved Solids, Iron, Manganese
Weekly (Health Dept. Requirement)	North Island Labs	Total, Fecal coliforms
Annual Source Water Testing	North Island Labs	Complete potability testing of each well
Annual System Water Testing	North Island Labs	Complete potability testing of distribution system

4. Water Quality - Source Water and Distribution System

Up-to-date water quality reports and lab data are posted monthly on the RDN website (www.rdn.bc.ca/WaterSmart). Tables of water quality testing results for both the source water and distribution system (from Nanoose Bay) are provided at the end of this report under Appendix B.

5. Water Quality Inquiries and Complaints

No complaints or inquiries were received from the Driftwood Water System.

6. Groundwater Production and Average Consumption

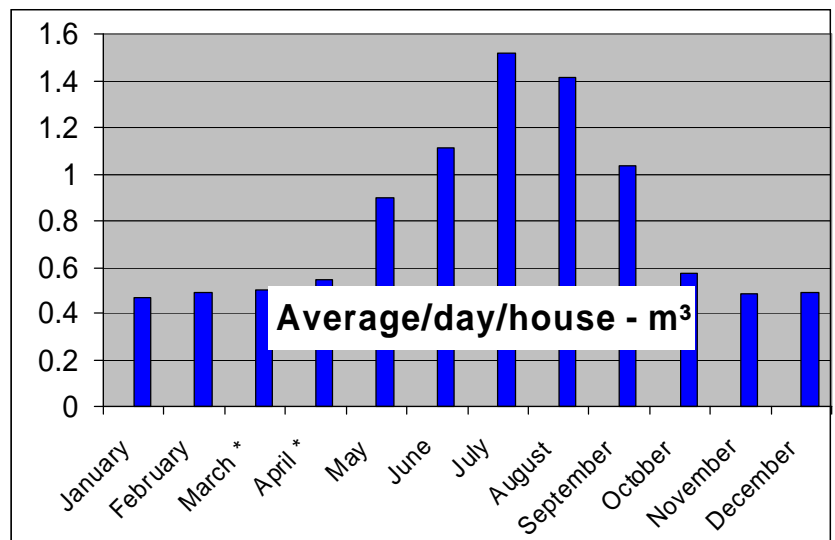
No groundwater production takes place within the Driftwood Water System.

The average household water consumption per month is considered similar to the Nanoose Bay water system. The figures from the Nanoose Bay water system are shown in the table and chart below.

Average / Day / House

January	0.464	m ³
February	0.490	m ³
March*	0.499	m ³
April*	0.550	m ³
May	0.899	m ³
June	1.112	m ³
July	1.521	m ³
August	1.414	m ³
September	1.039	m ³
October	0.570	m ³
November	0.478	m ³
December	0.488	m ³

* indicates flushing these months



Household water consumption increased dramatically from May to September despite the implementation of outdoor watering restrictions.

7. Maintenance Program

Watermains are flushed once annually; in the Spring.

8. Water System Projects

8.1 2006 Completed Projects

- Water audit for the whole Nanoose Bay Peninsula (including Driftwood) was completed.
- A comprehensive water conservation program was carried out from May to October.
- A Standard Operating Procedures Manual was created for all routine Utilities duties.

- The Emergency Response Plan was reviewed and updated.
- A security review was completed by an independent agency and a report with recommendations was provided.
- A web-based Capital Asset Management Program was completed to inventory all water system pipes, valves, wells, reservoirs, hydrants, and manholes, etc. to assist with infrastructure replacement priorities.

8.2 2007 Proposed Projects & Upgrades

- Re-keying all locked facilities.
- Other security improvements.
- Developing objectives for a SCADA system.

8.3 2007 Proposed Studies

- Innovative water supply and re-use.
- Well redevelopment planning.
- Water Use Bylaw/Best Practices Review.

9. **Emergency Response Plan**

The Emergency Response Plan (ERP) was reviewed and updated in 2006. A copy of the ERP is attached in Appendix C.

10. **Cross Connection Control**

A formalized Cross Connection Control Program will be initiated in 2007. Cross connection controls already in-place include check valves at each residential water meter.

11. **Closing**

An annual report for the year 2007 will be prepared and submitted to the Vancouver Island Health Authority in the Spring of 2008. Annual reports are also available on our website at www.rdn.bc.ca/WaterSmart.

APPENIDX A

**MAP OF DRIFTWOOD
WATER LOCAL SERVICE AREA**

APPENDIX B

WATER QUALITY TESTING RESULTS

APPENDIX C

EMERGENCY RESPONSE PLAN