

REGIONAL DISTRICT OF NANAIMO

Water Service Area Annual Report 2023



Nanoose Bay Peninsula Water Service Area

June 2024



REGIONAL DISTRICT OF NANAIMO

Water & Utility Services Department

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1. Introduction

The following annual report describes the Nanoose Bay Peninsula (NBP) Water Service Area and summarizes the water quality and production data from 2023. This report also includes a summary of inquiries and complaints, completed and proposed maintenance activities, Operator Certification, the Emergency Response & Contingency Plan, and the Cross Connection Control Program. This report is to be submitted to Island Health by the spring of 2024.

2. Nanoose Bay Peninsula Water System

The Nanoose Bay Peninsula Water System was established in 2005 by amalgamating the 7 small water service areas located within the Nanoose Bay Peninsula. The previous service areas, if referred to in this report, are noted as neighbourhoods within the NBP service area. In 2023, the Nanoose Peninsula Water System was comprised of 2320 residential and 67 commercial water service customers.

The water supply is a combination of groundwater wells and surface water from the Englishman River. The water supply is chlorinated and stored in several reservoirs throughout Nanoose Bay.

2.1 Groundwater Wells

Fourteen groundwater production wells are located within the Nanoose Bay Peninsula. Nanoose Wells #2, #3, and #4 are on standby for use during periods of high demand (if required). Nanoose Well #5 has not been in use since 2002, due to saltwater intrusion, and has been permanently converted to a provincial monitoring well. Nanoose Well #6 hasn't been used since 2010 due to operational challenges with chlorination. Nanoose Well #7 was drilled in 2008 but has not yet been approved for community drinking water supply. West Bay #3 experienced reduced production over time and was replaced by West Bay #4, which was drilled in 2019. Fairwinds Well #1 has also experienced reduced production and was replaced by Tippet Road Well #1, which was drilled in 2020.

Well / Name	Well Depth	Wellhead Protection In Place	Treated/Untreated with Chlorine
Wallbrook #1	16.9 m	Yes	Treated
Madrona #4	52.1 m	Yes	Un-treated
Madrona #8	17.1m	Yes	Treated
Nanoose #2	53.3 m	Yes	Treated
Nanoose #3	52.7 m	Yes	Treated
Nanoose #4	59.1 m	Yes	Treated
Nanoose #6	107.0 m	Yes	(Not in use)
Nanoose #7	60.6 m	Yes	(Not in use)
Fairwinds #1	69.8 m	Yes	(Not in use)
Fairwinds #2	75.3 m	Yes	Treated
Fairwinds #3	72.2 m	Yes	Treated
West Bay #4	75.6 m	Yes	Treated
Tippet Rd #1	71.0 m	Yes	Treated
Parker Road	91.4 m	Yes	Treated

A drinking water filtration plant is located at 2480 Nanoose Road, and its purpose is to filter out iron, manganese, and ammonia from Fairwinds Wells #2 & 3, Tippet Road Well #1, and West Bay Well #4. A back-up generator is available in the event of a power outage. In the case of an extended power outage, drinking water will continue to be supplied but it will only be chlorinated, not filtered.



Nanoose Bay Water Treatment Plant

2.2 Reservoirs

Six water storage reservoirs are present in the Nanoose Bay Peninsula Water System as follows;

- Madrona (concrete) - 485 m³ (100,000 imperial gallons) capacity
- Eagle Heights (concrete) - 341 m³ (75,000 imperial gallons) capacity
- Dolphin (concrete) - 455 m³ (100,000 imperial gallons) capacity
- Fairwinds Res #1 (concrete) - 701 m³ (154,000 imperial gallons) capacity
- Fairwinds Res #2 (concrete) - 701 m³ (154,000 imperial gallons) capacity
- Arbutus Park (lined concrete, wooden roof) - 568 m³ (125,000 imp. gallons) capacity

A new reservoir is being considered at the Fairwinds Reservoir 1 and 2 site (Notch Hill).

2.3 Distribution System

The water distribution system in Nanoose Bay is summarized in the table below. Fire hydrants (287) are located throughout the water service area.

Watermain Material	Length of mains in NBP Water Service Area	Prevalence in Water Service Area
<u>Asbestos-concrete:</u> 150mm or smaller 200mm or larger	9.7 km 2.7 km	12.2% 3.4%
<u>PVC:</u> 150mm or smaller 200mm or larger	23.2 km 33.5 km	29.1% 42.1%
<u>Ductile Iron:</u> 150mm or smaller 200mm or larger	0.2 km 10.3 km	0.2% 13.0%

Note: 'PVC' is poly-vinylchloride (plastic)

3. Water Sampling and Testing Program

Water sampling and testing is carried out weekly in the distribution system. Notably, the chlorine residual levels are tested weekly to ensure the absence of bacterial regrowth in the watermains. The following table includes a summary of all testing:

Timing	Location	Tests
Weekly	RDN (in-house) Laboratory	Total coliforms, E.Coli, pH, TDS, Temperature, Conductivity, Turbidity, Chlorine residual, Salinity
Monthly (Health Dept.)	BC Centre for Disease Control	Total coliforms, E.Coli
Annual Source Water Testing (every Fall)	Bureau Veritas	Complete potability testing of all raw well water, including T-Ammonia
Annual System Water Testing (every Spring)	Bureau Veritas	Complete potability testing of distribution system, including T-Ammonia
Filtration Plant Output Once per month	Bureau Veritas	True colour, Ammonia, Iron, Manganese, and Chloramines

4. Water Quality - Source Water and Distribution System

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



Stewart Road Pump Station (2020)

5. Water Quality Inquiries and Complaints

Tap water quality has improved over the years with the construction of the Nanoose Bay Peninsula water filtration plant and Englishman River Water Service. Filtered groundwater from the Fairwinds and West Bay wells is mixed with filtered water from the Englishman River (as required) and stored in the same six reservoirs throughout Nanoose Bay.

Several inquiries were received from the Nanoose Bay Peninsula Water Service Area in 2023. Iron and manganese water discoloration was present intermittently in the Fairwinds and Beachcomber areas, which were cleared up by flushing the watermains and water services in these areas. Complaints regarding high water bills were addressed through the RDN’s Leak Adjustment Policy. Inquiries regarding water pressure are answered on a case by case basis.

A few inquiries were received about subdivision in Nanoose Bay. Due to the increased water supply available from the Englishman River Water Service, additional water connections are now available. However, these connections are only designed to serve customers already located within the Nanoose Bay Peninsula Water Service (whose properties are large enough to subdivide). More information can be found at <https://rdn.bc.ca/connect-rdn-water>.

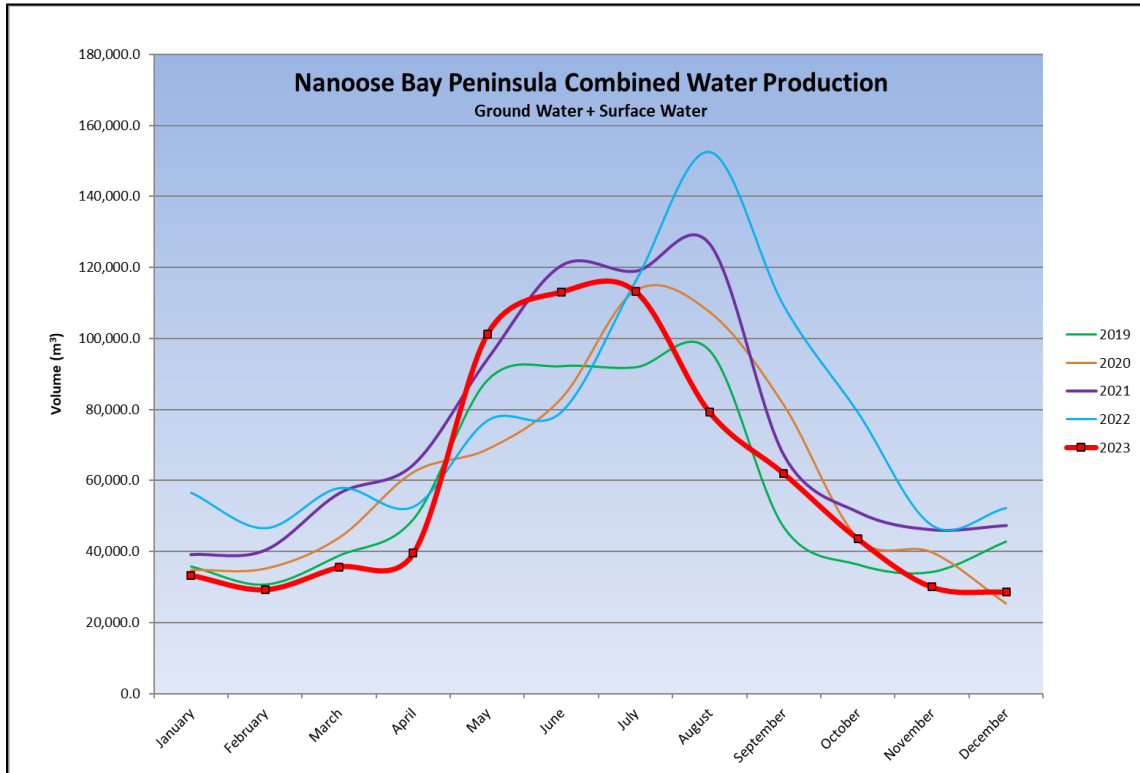
A summary of the water system incidents in 2023 is given in the table below.

Activity in 2023	Date(s)	History/Notes
Boil Water Advisories	None	None
High Turbidity Events	None	None
Equipment Malfunction	None	None

Water Main Breaks	February	Andover Rd.
Pump Failures	None	None

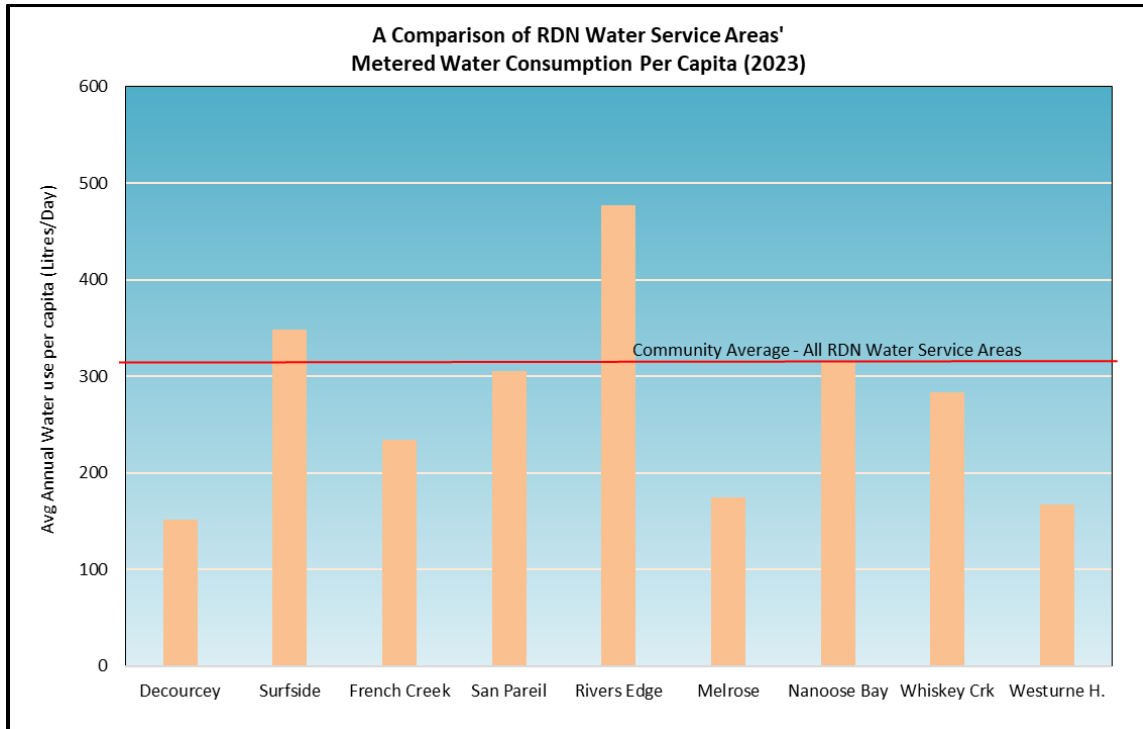
6. Surface Water and Groundwater Production and Consumption

The monthly combined surface and groundwater well production for the past 6 years is shown in the chart below. The reliance on groundwater has been reduced due to the year-round use of surface water supply from the Englishman River.



Water Consumption

In the Fall/Winter of 2023, water billing records indicate that the average winter water usage per home in Nanoose Bay was 0.54 cubic metres per day (118.8 imperial gallons). In the summer, the average water usage was 1.2 cubic metres per day (264 imperial gallons). Based on these figures, the annual consumption per capita is estimated to be 315 L/day (based on 2.4 people/household). This consumption is **1% more** than the RDN system average of 313 L/day/capita in 2023.



7. Maintenance Program

Weekly pump station inspections are carried out to reduce or eliminate the risk of contamination and system failure, and to ensure the consistent application of chlorine for treatment purposes. Watermains are flushed once annually in the Spring. Fire hydrants are serviced once per year (either 'A-level' or 'B-level' maintenance). Water storage reservoirs are drained and cleaned once every 3-4 years, as required. Twenty-four hour on-call coverage is in place to respond to water system emergencies and alarms.

8. Operator Certification

The Regional District Water & Utility Services staff are comprised of one Manager, one Project Engineer, one Engineering Technologist, one Engineering Technician, one Chief Operator, and seven certified operators. The operators receive ongoing training and certification in:

- | | | |
|----------------------------|---|----------------------------|
| ✓ Water Treatment | ✓ Chlorine Handling | ✓ Confined Space Awareness |
| ✓ Water Distribution | ✓ WHMIS (Workplace Hazardous Material Information System) | ✓ Fall Protection |
| ✓ Wastewater Collection | ✓ TDG (Transportation of Dangerous Goods) | ✓ First Aid |
| ✓ Cross Connection Control | | ✓ Silica Awareness |
| ✓ Asbestos Awareness | | |



**Fairwinds
Reservoir No. 1**

9. Water System Projects

9.1 2023 Completed Studies & Projects

- Begin Nanoose Well #6 decommission project. All above ground equipment removed;
- Continue water meter replacement project;
- Continue Andover Road PRV upgrade;
- Continue Arbutus reservoir decommissioning and replacement feasibility study/review;
- Continue design upgrade to Arbutus booster pump station;
- Corresponded with residents regarding water conservation;
- Utilized leak detection equipment and tracking;
- Began billing for metered consumption based on revised water rates;
- Followed Cross Connection Control program to reduce backflow prevention risks;
- Enforced outdoor watering restrictions during summer months;
- Advised residents regarding water leak repairs and bill adjustments;
- Continued the 2021-2030 Water Conservation Plan;
- Completed regular watermain flushing and hydrant maintenance;
- Maintained a high level of water quality;
- Continued quality control through regular testing and monitoring of water system;
- Implemented Phase 2 Water Systems SCADA Master Plan; and
- Continued valve maintenance program.

9.2 2024 Proposed Projects & Upgrades

- Continue water meter replacement;
- Complete Andover Road PRV upgrade;
- Begin Fairwinds Well #2 PRV upgrade project;
- Begin aquifer storage and recovery project planning and initial construction;
- West Bay #4 backup power upgrade project;
- Begin public engagement for Arbutus and Notch Hill reservoirs project funding;
- Complete Nanoose well #6 decommission project;
- Begin backup power design for Fairwinds Wells #2, 3 and Tippet Well #1;
- Complete irrigation checks for high-water users;
- Continue watermain flushing program and hydrant maintenance;
- Continue leak detection equipment utilization program;
- Introduce new watermain flushing and metering procedures to promote conservation;
- Continue valve maintenance program;
- Continue the 2020-2030 DWWP Water Conservation Plan; and
- Continue to offer numerous water-saving incentives via rebates.



ERWS Bulk Water
Transmission Line
Construction
near Hwy 19
(2017)

10. **Emergency Response & Contingency Plan**

The Regional District has an Emergency Response & Contingency Plan (ERCP) that contains procedures and contact information to efficiently respond to water system emergencies such as contamination of water supply, loss of supply, pump failure, and drought management. The ERCP was reviewed and updated in 2023, and copies are available on our website, at each RDN office, in each pumphouse, and in each Water Services vehicle. A copy of the ERCP is also attached to this report in Appendix C. A separate Emergency Response & Contingency Plan has been developed exclusively for the water filtration plant at 2480 Nanoose Road. A copy of this ERCP is located at the plant, at each RDN office and on the RDN website.

11. Supply Security

The RDN continues to effectively manage water supply in Nanose Bay in response to ongoing demand, development, and the effects of climate change. While this area continues to see new growth via the planned Fairwinds development, initiatives to provide adequate supply and resiliency for the surface and groundwater sources remain a high priority. Reservoir capacity and redundancy are reviewed with regards to water storage during periods of drought, and water is available from multiple sources in the case of an emergency. Surface water from the Englishman River, via the Englishman River Water Service, can be affected by periods of drought, and the RDN continues to work with our partner, the City of Parksville, and provincial agencies to manage this resource. Surface and groundwater quality is regularly tested in all RDN water service areas. The aquifers and streams within the regional district are monitored through the RDN’s Drinking Water and Watershed Protection (DWWP) program. The most sustainable way to protect water supply is through demand management (conservation), which is promoted through outreach and stewardship initiatives provided by the RDN’s Team WaterSmart, as well as the RDN Water Service Area’s Water Conservation Plan 2020-2030. Rebates for well water testing, water smart landscaping, and rainwater harvesting further assist RDN residents to reduce water usage in high demand seasons. A new tiered system for water rates introduced in 2023 will help promote conservation by rewarding low water users with reduced rates and encouraging high water users to seek ways to use less. Additional planning and preparation initiatives will be introduced in the future to support water supply security.

12. Cross Connection Control

The RDN’s Cross Connection Control Program was put in place to protect the public health by reducing the risk of contaminants flowing back into the public water supply. The RDN Manager of Water Services is the designated Cross Connection Control Manager.

The RDN's Cross Connection Control Program addresses cross connection threats through operating policies and procedures, as well as assisting customers with backflow preventer selection, installation, testing, maintenance and reporting. The program receives its authority from *RDN Cross Connection Control Regulation Bylaw No. 1788*, and the *British Columbia Building Code, Part 7*, which requires that potable water be protected from contamination. Additionally, a webpage has been established at <https://rdn.bc.ca/cross-connection-control-program> to educate RDN water service customers about cross connection hazards, and lists the relevant links to current standards and resources.

Two of the RDN’s water system operators carry certification as backflow assembly testers through the British Columbia Water & Waste Association (BCWWA), and one operator is additionally certified as a Cross Connection Control Inspector.



Tippet Road Well
#1 Site (2023)

13. Cyber Security

The RDN uses a multi-level approach to cyber-security. Corporate network security is employed via a universal threat management gateway that implements various methods of data security, which includes daily definition updates to block known cyber threats. In addition, all RDN PC's are protected with anti-virus software. RDN water systems are connected to the corporate network via IP-Sec VPN's for remote management by information technology and equipment operators. Future infrastructure upgrades will see our water systems located on segregated networks to limit the vulnerability from cybersecurity threats. All RDN employees are required to regularly complete extensive training on cyber security awareness.

14. Closing

An annual report for the year 2024 will be prepared and submitted to Island Health in the spring of 2025. Annual reports are also available on our website at: <https://www.rdn.bc.ca/nanoose-bay-peninsula>.



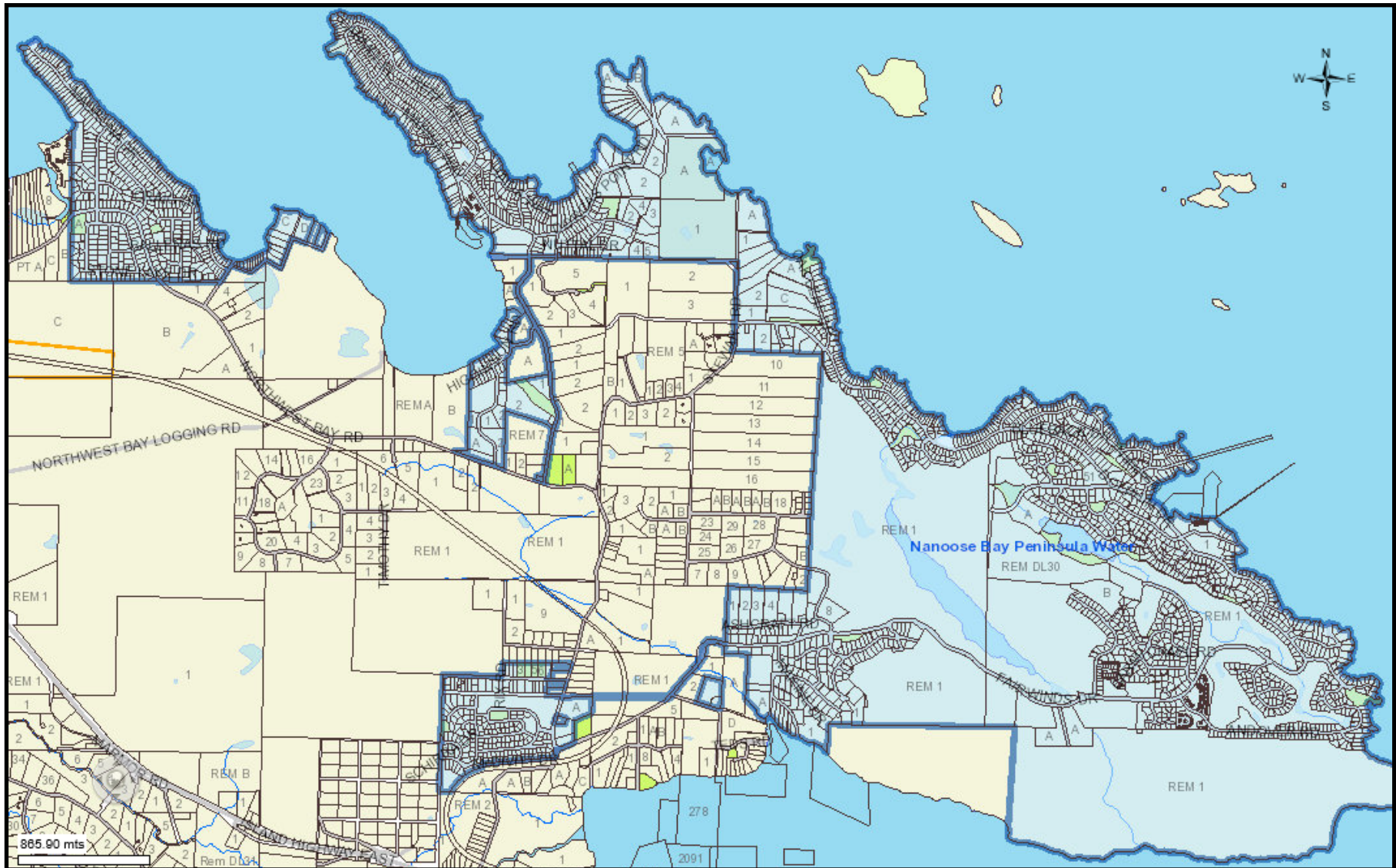
**Arrowsmith Lake and Arrowsmith Dam
(on headwaters of Englishman River)**

APPENDIX A

MAP OF NANOOSE BAY PENINSULA

WATER SERVICE AREA

NANOOSE BAY PENINSULA WATER SERVICE AREA



APPENDIX B

WATER QUALITY TESTING RESULTS

NANOOSE BAY PENINSULA WATER SYSTEM



Facility Location:

2330 Garry Oaks Drive
 Nanoose Bay

Facility Information:

Facility Type: 301-10000 (DWT)

Facility Sampling History:

<u>Site Name</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>Total E. Coli</u>
Arbutus Sample Port - Florence Drive and Anchor Way	03-Jan-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	03-Jan-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	03-Jan-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	03-Jan-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	03-Jan-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	11-Jan-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	11-Jan-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	11-Jan-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	11-Jan-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	11-Jan-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	16-Jan-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	16-Jan-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	16-Jan-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	16-Jan-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	16-Jan-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	16-Jan-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	24-Jan-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	24-Jan-2023	LT1	LT1
Madrona # 8 RAW	24-Jan-2023	1.0	LT1
Nanoose Sample Port - 3119 Swallow Cres.	24-Jan-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	24-Jan-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	07-Feb-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	07-Feb-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	07-Feb-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	07-Feb-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	07-Feb-2023	LT1	LT1

West Bay Sample Port - 2454 Armstrong Cres.	07-Feb-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	14-Feb-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	14-Feb-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	14-Feb-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	14-Feb-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	14-Feb-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	14-Feb-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	22-Feb-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	22-Feb-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	22-Feb-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	22-Feb-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	22-Feb-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	27-Feb-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	27-Feb-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	27-Feb-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	08-Mar-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	08-Mar-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	08-Mar-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	08-Mar-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	08-Mar-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	08-Mar-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	15-Mar-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	15-Mar-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	15-Mar-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	15-Mar-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	15-Mar-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	22-Mar-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	22-Mar-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	22-Mar-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	22-Mar-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	22-Mar-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	28-Mar-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	28-Mar-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	28-Mar-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	28-Mar-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	05-Apr-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	05-Apr-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	05-Apr-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	05-Apr-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	05-Apr-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	11-Apr-2023	LT1	LT1

Beachcomber Sample Port - 1270 Seadog Road	11-Apr-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	11-Apr-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	11-Apr-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	11-Apr-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	11-Apr-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	19-Apr-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	19-Apr-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	19-Apr-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	19-Apr-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	19-Apr-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	25-Apr-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	25-Apr-2023	LT1	LT1
Madrona # 8 RAW	25-Apr-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	25-Apr-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	25-Apr-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	02-May-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	02-May-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	02-May-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	02-May-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	02-May-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	02-May-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	09-May-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	09-May-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	09-May-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	09-May-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	09-May-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	09-May-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	17-May-2023	QRWRT	QRWRT
Beachcomber Sample Port - 1639 Marina Way	17-May-2023	QRWRT	QRWRT
Fairwinds Sample Port - 1996 Highland Rd.	17-May-2023	QRWRT	QRWRT
Fairwinds Sample Port - 3730 Fairwinds Dr.	17-May-2023	QRWRT	QRWRT
Madrona Sample Port - 1565 Stone Lake Dr.	17-May-2023	QRWRT	QRWRT
Fairwinds Sample Port - 3500 Fairwind Dr.	23-May-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	23-May-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	30-May-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	07-Jun-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	07-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	07-Jun-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	07-Jun-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	07-Jun-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	07-Jun-2023	LT1	LT1

Arbutus Sample Port - Florence Drive and Anchor Way	14-Jun-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	14-Jun-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	14-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	14-Jun-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	14-Jun-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	14-Jun-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	21-Jun-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	21-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	21-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	21-Jun-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	21-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	28-Jun-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	28-Jun-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	28-Jun-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	28-Jun-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	04-Jul-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	05-Jul-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	05-Jul-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	05-Jul-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	05-Jul-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	05-Jul-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	11-Jul-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	11-Jul-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	11-Jul-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	11-Jul-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	11-Jul-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	11-Jul-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	19-Jul-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	19-Jul-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	19-Jul-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	19-Jul-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	19-Jul-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	25-Jul-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	25-Jul-2023	LT1	LT1
Madrona # 8 RAW	25-Jul-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	25-Jul-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	02-Aug-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	02-Aug-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	02-Aug-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	02-Aug-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	02-Aug-2023	LT1	LT1

Arbutus Sample Port - 2339 Garry Oak Dr.	09-Aug-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	09-Aug-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	09-Aug-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	09-Aug-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	09-Aug-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	09-Aug-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	16-Aug-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	16-Aug-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	16-Aug-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	16-Aug-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	16-Aug-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	22-Aug-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	22-Aug-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	22-Aug-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	05-Sep-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	05-Sep-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	05-Sep-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	05-Sep-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	05-Sep-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	05-Sep-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	12-Sep-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	12-Sep-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	12-Sep-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	12-Sep-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	12-Sep-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	12-Sep-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	19-Sep-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	19-Sep-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	19-Sep-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	19-Sep-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	19-Sep-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	25-Sep-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	25-Sep-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	25-Sep-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	04-Oct-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	04-Oct-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	04-Oct-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	04-Oct-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	04-Oct-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	04-Oct-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	10-Oct-2023	LT1	LT1

Beachcomber Sample Port - 1270 Seadog Road	10-Oct-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	10-Oct-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	10-Oct-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	10-Oct-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	10-Oct-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	17-Oct-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	17-Oct-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	17-Oct-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	17-Oct-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	17-Oct-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	25-Oct-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	25-Oct-2023	LT1	LT1
Madrona # 8 RAW	25-Oct-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	25-Oct-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	08-Nov-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	08-Nov-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	08-Nov-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	08-Nov-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	08-Nov-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	08-Nov-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	15-Nov-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	15-Nov-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	15-Nov-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	22-Nov-2023	LT1	LT1
Fairwinds Sample Port - 1996 Highland Rd.	22-Nov-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	22-Nov-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	22-Nov-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	22-Nov-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	29-Nov-2023	LT1	LT1
Arbutus Sample Port - Florence Drive and Anchor Way	29-Nov-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	29-Nov-2023	LT1	LT1
Fairwinds Sample Port - 3383 Redden Road	29-Nov-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	29-Nov-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	29-Nov-2023	LT1	LT1
Arbutus Sample Port - 2329 Chain Way	06-Dec-2023	LT1	LT1
Driftwood Sample Port - 2359 Higginson Rd	06-Dec-2023	LT1	LT1
Fairwinds Sample Port - 3465 Cambridge Rd.	06-Dec-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	06-Dec-2023	LT1	LT1
Madrona Sample Port - 1565 Stone Lake Dr.	06-Dec-2023	LT1	LT1
Nanoose Sample Port - 3427 Tye Cres.	06-Dec-2023	LT1	LT1
West Bay Sample Port - 2454 Armstrong Cres.	06-Dec-2023	LT1	LT1

Arbutus Sample Port - 2339 Garry Oak Dr.	12-Dec-2023	LT1	LT1
Beachcomber Sample Port - 1270 Seadog Road	12-Dec-2023	LT1	LT1
Fairwinds Sample Port - 2400 Evanshire Cres.	12-Dec-2023	LT1	LT1
Fairwinds Sample Port - 3500 Fairwind Dr.	12-Dec-2023	LT1	LT1
Madrona Sample Port - 1556 Arbutus Dr.	12-Dec-2023	LT1	LT1
Nanoose Sample Port - 3119 Swallow Cres.	12-Dec-2023	LT1	LT1
West Bay Sample Port - 2315 Ida Lane	12-Dec-2023	LT1	LT1
Arbutus Sample Port - 2339 Garry Oak Dr.	18-Dec-2023	LT1	LT1
Beachcomber Sample Port - 1639 Marina Way	18-Dec-2023	LT1	LT1
Fairwinds Sample Port - 3541 Shelby Ln.	18-Dec-2023	LT1	LT1
Fairwinds Sample Port - 3730 Fairwinds Dr.	18-Dec-2023	LT1	LT1
Madrona Sample Port - 1358 Madrona Drive	18-Dec-2023	LT1	LT1

Interpreting Sample Reports

In VIHA, the results of drinking water sampling are reported using the following coding system:

LT1 Less than 1 (no detectable bacteria) - Meaning: No bacteria present

L1 Less than 1 (no detectable bacteria) - Meaning: No bacteria present

GTR200 means Greater than 200 background colonies on membrane filter per 100 ml of sample

REJCT DELAY3 means sample was too long in transit and was not tested