

Lyall Harbour/Boot Cove Water Service

2025 Annual Report



Introduction

This report provides a summary of the Lyall Harbour/Boot Cove Water Service for 2025 and includes a description of the service, summary of the water supply, demand and production, drinking water quality, operations highlights, capital project updates and a financial report.

Service Description

The community of Lyall Harbour/Boot Cove is primarily a rural residential development that includes some commercial properties located on Saturna Island in the Southern Gulf Islands Electoral Area. The community was originally serviced by a private water utility, and in 1978 the water system was converted to be a local service under the Capital Regional District (CRD). The Lyall Harbour/Boot Cove water service is made up of 174 parcels (Figure 1) encompassing a total area of approximately 100 hectares. Of the 174 parcels, 158 properties (169 Single Family Equivalent's) are connected to the water system.

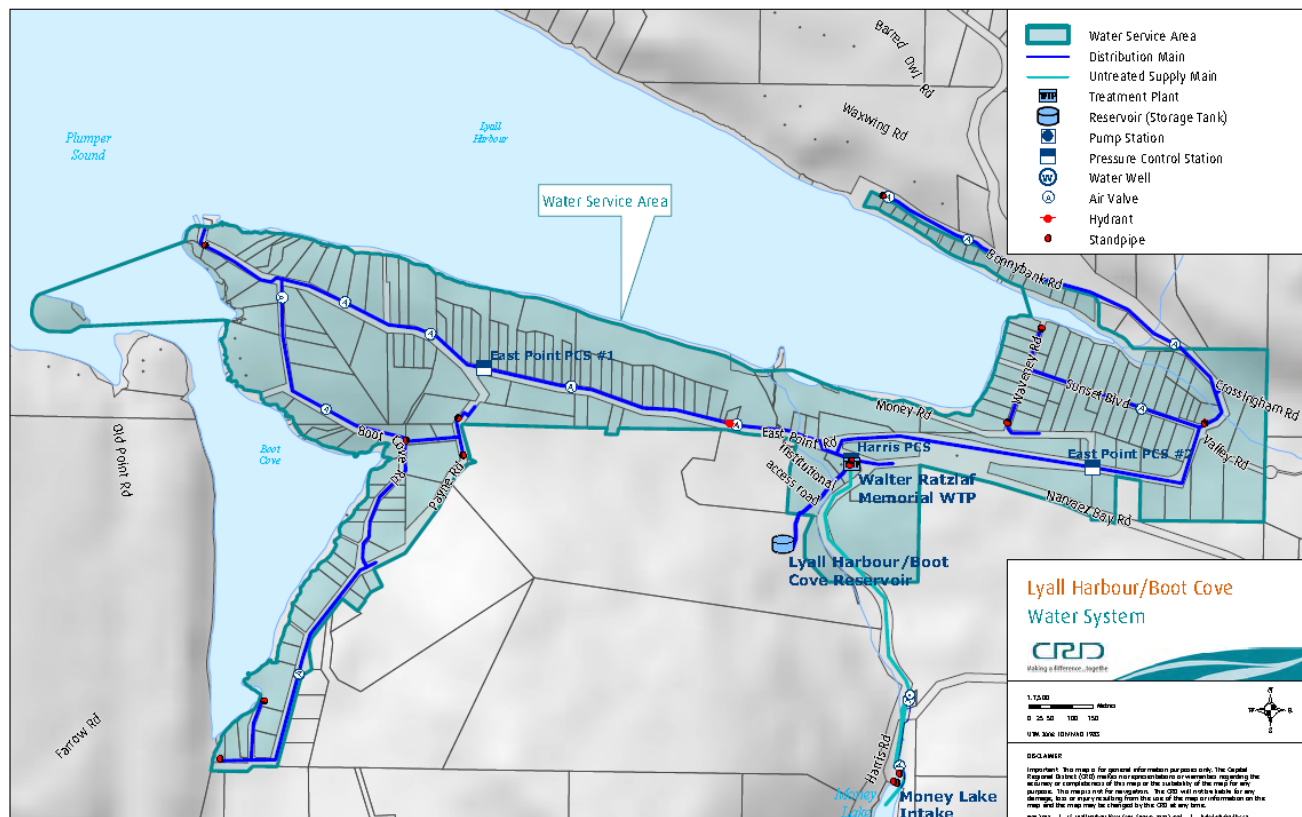


Figure 1: Map of Lyall Harbour/Boot Cove Water System

The Lyall Harbour/Boot Cove water system is primarily comprised of:

- Two raw water sources:
 - Money Lake, a small, impounded, surface water body that lies within a 94-hectare (230 acre) watershed on private and public lands.
 - Ground water spring (seepage pit) located near the base of Money Lake Dam.
- One earthen dam structure, Money Lake Dam No. 1.
- Treatment equipment including ozonation (currently offline), two stages of filtration (granular and absorption), ultraviolet light disinfection and chlorine disinfection.
- One steel storage tank (total volume 136 cubic metres or 36,000 US gallons).
- Supervisory Control and Data Acquisition (SCADA) system.
- Distribution system and supply pipe network (8,390 metres of water mains).
- Other water system assets: water service connections and metres, three pressure reducing valve stations, 50 gate valves, 12 standpipes and a small auxiliary generator.

Water Supply

Referring to Figure 2 below, Money Lake monthly water levels are highlighted for 2025. It is important to note that water supply levels in Money Lake, prior to 2008, were historically lower during the summer period. An upgrade to mitigate the low water levels involved the installation of a groundwater seepage spring recirculation pumping system. Excess water from the seepage spring is pumped back to Money Lake to keep the Lake as full as possible. The groundwater seepage spring water level is not monitored; however, the seepage spring weekly flow rate is monitored to confirm production rate. The seepage spring typically provides 100% of the winter water system demand for the community. Money Lake water is used periodically to supplement seepage spring flows and is typically the primary source during the summer dry period.

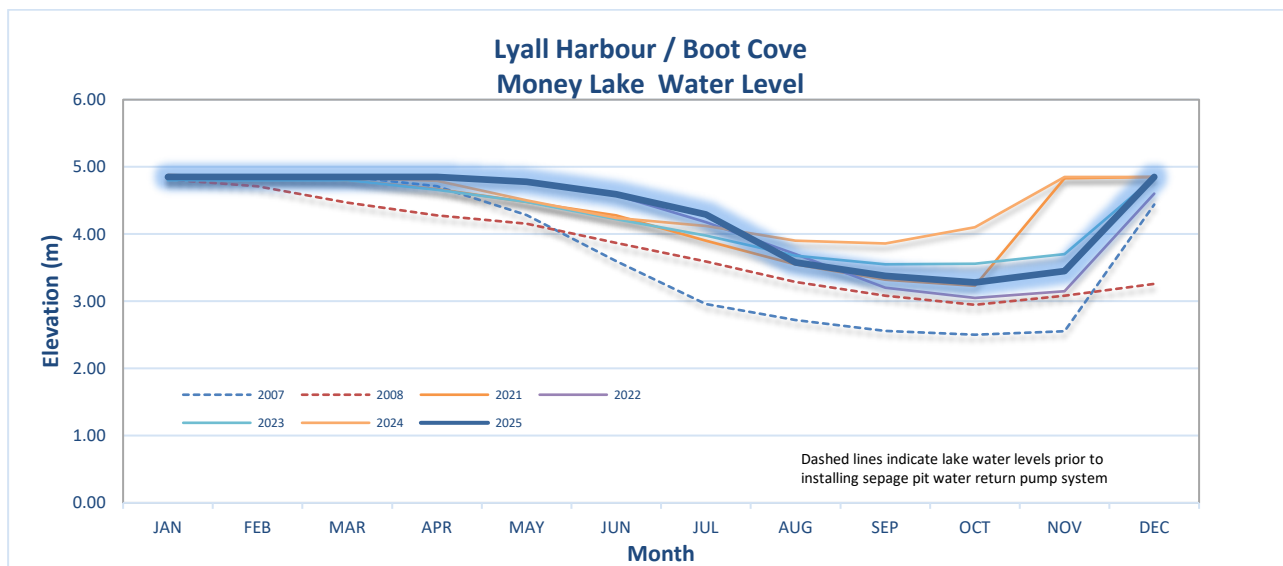


Figure 2: Money Lake Monthly Water Level

Water Production and Demand

Referring to Figure 3, 24,331 cubic metres of water was extracted (water production) from the seepage spring and Money Lake Reservoir in 2025; a 4% decrease from the previous year and a 4% decrease from the five-year average. Water demand (customer water billing) for the service totaled 18,120 cubic metres of water; 2% increase from the previous year and a 9% decrease from the five-year average.

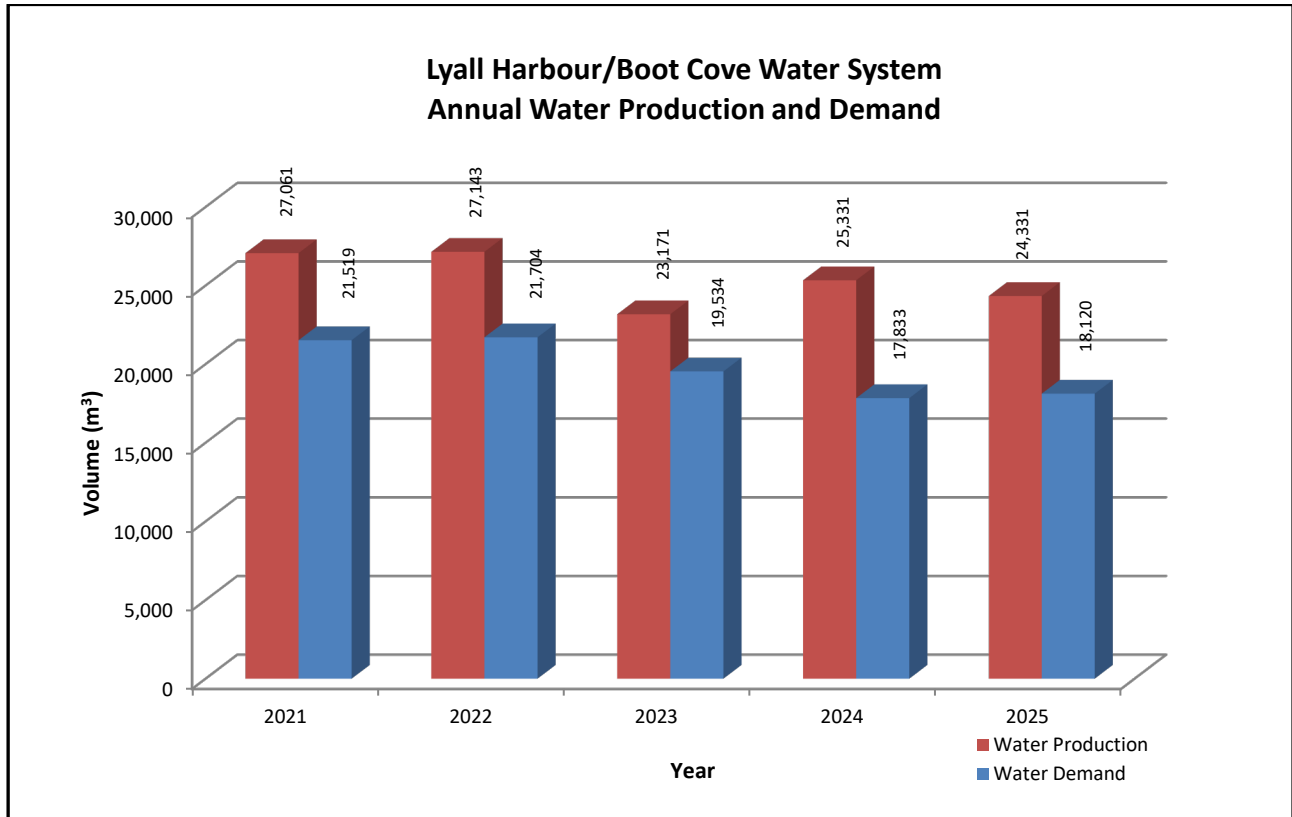


Figure 3: Lyll Harbour/Boot Cove Water System Annual Water Production and Demand

The difference between annual water production and annual customer demand is referred to as non-revenue water and can include water system leaks, water system maintenance and operational use (e.g. water main flushing, filter system backwashing), potential unauthorized use, and fire-fighting use.

The 2025 non-revenue water (6,211 cubic metres) represents about 26% of the total water production for the service area. However, almost 13% of the total water can be attributed to operational use, which includes water main flushing to keep chlorine residuals at acceptable levels at the extremities of the water system, and water treatment filtration system backwashing activities. Therefore, the non-revenue water associated with system losses is approximately 13%. Although this is considered acceptable for small water systems, this is an increase from previous years and is likely the result of water system leaks of which the leaking water tank is a contributor. Tank leak repairs are planned for 2026 .

Figure 4 illustrates the monthly water production for 2025 along with the historical water production information. The monthly water production trends are typical for small water systems such as the Lyll Harbour/Boot Cove water system.

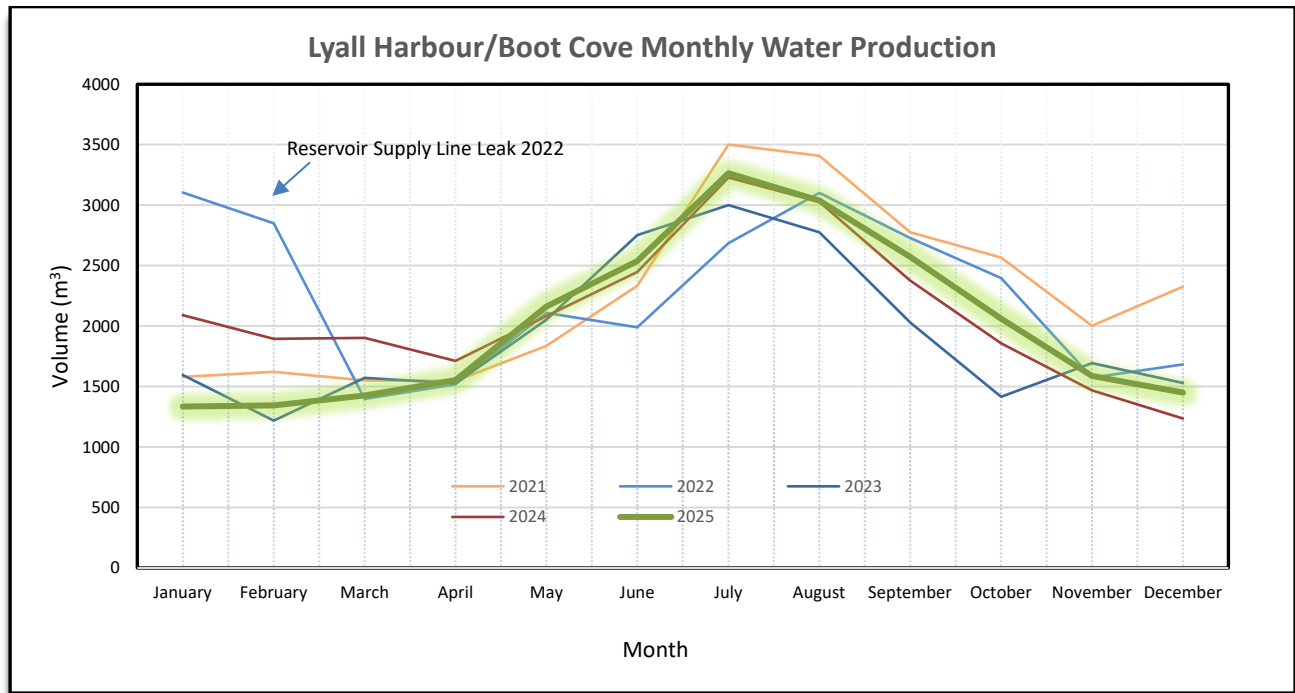


Figure 4: Lyll Harbour/Boot Cove Water Service Monthly Water Production

Drinking Water Quality

The Lyll Harbour/Boot Cove Water System continued to rely primarily on seepage water collected below the Money Lake dam, with seasonal supplementation from Money Lake during the summer and early fall. There is sufficient evidence to conclude that the seepage water is hydraulically connected to the lake source. As in previous years, the raw water quality reflected the influence of warm-season biological activity in the lake and the natural geochemistry of the watershed.

The system did not experience any boil water advisories in 2025, and treated water remained bacteriologically safe throughout the year. Warm-season conditions again produced elevated raw water temperatures and increased biological activity in Money Lake, but these did not translate into health-related risks in the treated water.

Between mid-July and late November, Money Lake experienced cyanobacteria blooms. Multiple cyanotoxin tests did not detect microcystin toxins in the raw water during these events, and the blooms did not pose a public health risk through the drinking water supplied.

The annual average concentration for both regulated disinfection by-products, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA), remained below the maximum acceptable concentration (MAC) in the Guidelines for Canadian Drinking Water Quality (GCDWQ).

The data below provides a summary of the water quality characteristics in 2025:

Raw Water:

- The raw water exhibited low total coliform concentrations during the winter and spring, with much higher levels during the summer and early fall when lake water was the primary source and water temperatures were elevated. Peak total coliform concentrations were recorded in June at 1,400 CFU/100 ml. This pattern is consistent with historical data. Throughout most of the year,

the raw water entering the treatment plant contained either no *E. coli*, or only very low concentrations.

- Money Lake experienced almost continuous cyanobacteria blooms from mid-July to the end of November. There were two distinct blooms of different species: the first from July 16 to August 15, and the second from September 3 to November 21. No microcystin toxins were detected throughout these events.
- The raw water turbidity ranged from 0.75 to 25.7 NTU. The highest raw water turbidity period was recorded during a strong cyanobacteria bloom in October/November. The median annual raw water turbidity was 1.2 NTU.
- No *Giardia* cysts were detected in the two sample sets collected in 2025. One sample contained a very low concentration of *Cryptosporidium* oocysts. The UV treatment system operated continuously throughout the year and is designed to inactivate these parasitic microorganisms in the raw water.
- The raw water had naturally elevated concentrations of iron and manganese. Iron levels were consistently elevated throughout the year, while manganese levels were higher during the spring and fall. The lake turnover event in Money Lake, which occurs each November, typically produces the highest concentrations of both metals, often exceeding the aesthetic objectives of the Guidelines for Canadian Drinking Water Quality (GCDWQ). In 2025, iron concentrations reached up to 499 µg/L and manganese up to 49 µg/L.
- The raw water was slightly hard (median hardness 40.1 mg/L CaCO₃).
- The natural total organic carbon (TOC) in the source water was moderately high (median 5.1 mg/L).
- The raw water had high colour, exceeding the aesthetic objective in the GCDWQ during the fall and winter months.

Treated Water:

- The treated water was bacteriologically safe to drink throughout the year. No treated water sample from the distribution system tested positive for *E. coli*. One distribution sample collected on October 1 tested positive for total coliform bacteria. A resample from the same location did not confirm an actual drinking water contamination.
- Treated water turbidity leaving the plant remained consistently below 1 NTU throughout the year, and for the first time in many years no Boil Water Advisory were issued to the community. The cause of this improvement is not fully understood, but staff noted that better lake water quality and the new filter media likely contributed to enhanced treatment performance. Only one distribution system sample showed slightly elevated turbidity in 2025, likely due to sediment accumulation at the end of the system. Overall, this represents a significant improvement over previous years.
- The treated water TOC was periodically high within a range from 2.1 to 5.1 mg/L. The annual mean was 4.4 mg/L. There is currently no guideline in the GCDWQ for TOC levels, however TOC levels > 2 mg/L indicate a potential for disinfection by-product exceedances. TOC levels > 4 mg/L are usually a precursor for high disinfection by-product concentrations.
- The disinfection by-product (DBP) concentrations that result from the chlorination optimization process remained below the GCDWQ health limits. The annual average TTHM and HAA concentrations were 95.3 µg/L and 64.8 µg/L respectively, and therefore below the MAC (100 µg/L and 80 µg/L respectively).
- Iron concentrations in exceedance of the aesthetic objective were only found in distribution system samples from November. This was a result of high iron concentrations in the raw water and the lack of adequate treatment for metals. Manganese concentrations, while elevated in the

raw water, were consistently low in the treated water. Elevated iron concentrations are not a health concern but can lead to discolouration of the drinking water which can be a nuisance for the customers.

- The treated water had colour concentrations above the aesthetic objective throughout the fall.
- The annual median pH of the treated water was 5.9. This is well below the Health Canada recommended range of 7 - 10.5. Drinking water with low pH can cause corrosion issues on metallic pipes and fittings and potentially leach toxic metals such as lead into the drinking water. Lead in drinking water is typically not found in samples from distribution systems but in samples from building taps and faucets.
- The free chlorine residual concentrations ranged from 0.04 to 5.5 mg/L with a median of 0.78 mg/L in the distribution system indicating satisfactory secondary disinfection.

Table 1 and 2 below provide a summary of the 2025 raw and treated water test results.

Water quality data collected from this drinking water system can be also reviewed on the CRD website:

<https://www.crd.bc.ca/about/data/drinking-water-quality-reports>

Operational Highlights

The following is a summary of the major operational issues that were addressed by staff:

- Preventative maintenance completed on the raw water seepage pit infrastructure. Debris and silt were cleared and removed to optimize the infiltrator operation and seepage pit performance.
- Corrective maintenance completed on the raw water recirculation pump and reinstalled for operation during the dry weather period.
- Installed well level data logger equipment in the newly acquired well to collect critical water level data and inform pending ground water well assessment capital work.
- Continued response and effort during this reporting period related to leak detection due to high daily water production. Several properties were identified as having leaks. Water was turned off and residents were notified.
- Leak repair completed on Waveney Road.
- Corrective maintenance performed on the leaking water tank. A leak repair procedure was provided by the tank manufacturer. Unfortunately, this work was unsuccessful, and the tank continues to leak. Further work is pending to address this issue.
- Completed the replacement of the water treatment filtration media during this reporting period. Ongoing filtration process optimization continues with good results currently being observed.
- Preventative maintenance completed on the raw water surge tank. This critical maintenance includes the draining and removal of silt in preparation for the fall and winter operations of the utility to reduce the risk of turbidity excursions.
- Routine drinking water system inspection was conducted of the LH/BC water system on September 17. The inspection was coordinated with an Environmental Health Officer and supported by Infrastructure Water Operations.
- Chlorine chemical metering, feed pump troubleshooting, and corrective maintenance completed.
- Emergency response to several power outages required the deployment of the backup generator at the water treatment plant.

- Water treatment plant pressure regulating, and flow control valve troubleshooting and corrective maintenance.
- Removal of a hazardous tree near the East Point Pressure Regulating Station to address risks to the water system.
- Replacement of the water treatment plant filtration media completed. Filtration media is inspected annually and typically replaced approximately every five years, subject to inspections.

Capital Project Updates

The Capital Projects that were in progress or completed in 2024 included:

1. Petition Process – CRD conducted a petition process to obtain consent to secure borrowing for critical capital projects for the service. The petition was successful and loan authorization has been approved to allow required spending.
2. Dam Improvements – As noted above, debt funding is required to proceed with the required dam improvements. The petition was successful, and loan authorization was approved by the community in September 2025. The Province approved the results, and the CRD Board subsequently approved the bylaw to authorize the loan in May 2026. While waiting for the loan authorization process to complete, CRD was able to utilize remaining funds to advance design information and to initiate coordination with the Dam Safety Office, which will continue into 2026.

Financial Report

Please refer to the attached 2025 Statement of Operations and Reserve Balances.

Revenue includes parcel taxes (*Transfers from Government*), fixed user fees (*User Charges*), interest on savings (*Interest earnings*), transfer from *Operating Reserve Fund* and miscellaneous revenue such as late payment charges (*Other revenue*).

Expenses include all costs of providing the service. *General Government Services* include budget preparation, financial management, utility billing and risk management services. *CRD Labour and Operating Costs* include CRD staff time as well as the cost of equipment, tools, and vehicles. Debt servicing costs are interest and principal payments on long term debt. *Other Expenses* include all other costs to administer and operate the water system, including insurance, water testing and electricity.

The difference between *Revenue and Expenses* is reported as *Net revenue* (expenses). Any transfers to or from capital or reserve funds for the service (Transfers to own funds) are deducted from this amount and it is then added to any surplus or deficit carry forward from the prior year, yielding an *Accumulated Surplus* (or deficit). In alignment with *Local Government Act* Section 374 (11), any deficit must be carried forward and included in next year's financial plan.

For questions related to this Annual Report please email Justine Starke, Senior Manager, Southern Gulf Islands Electoral Area, jstarke@crd.bc.ca.

Table 1

Table 1: 2025 Summary of Raw Water Test Results, Lyall Harbour / Boot Cove Water System										
PARAMETER		2025 ANALYTICAL RESULTS				CANADIAN GUIDELINES	2015-2024 ANALYTICAL RESULTS			
Parameter Name	Units of Measure	Annual Median	Samples Analyzed	Range Minimum Maximum		≤ = Less than or equal to	Median	Samples Analyzed	Range Minimum Maximum	
ND means Not Detected by analytical method used										
Physical/Biological Parameters										
Carbon, Total Organic	mg/L as C	5.05	12	3.6	6		5.1	137	3.2	18
Colour, True	TCU	20.5	12	13	49		21	89	9	88
Hardness as CaCO ₃	mg/L	40.05	4	39.1	43.5	No Guideline Required	43	75	35.2	49.7
pH	pH units	5.5	2	5.4	5.6	7.0 - 10.5 AO	6.76	29	5.7	7.4
Turbidity, Field Tests	NTU	1.16	26	0.78	25.7		2.81	521	0.67	50.8
Turbidity, Grab Samples	NTU	1.2	12	0.75	4.4		1.9	144	0.2	20.3
Water Temperature	Degrees C	12.1	79	0.1	22.7	15°C AO	11	697	1	25.5
Metals										
Aluminum	ug/L as Al	35.45	4	11.1	47.2	2900 MAC / 100 OG	71.6	75	8.7	739
Antimony	ug/L as Sb	< 0.5	4	< 0.5	< 0.5	6 MAC	< 0.5	75	0.042	< 0.5
Arsenic	ug/L as As	0.34	4	0.28	0.44	10 MAC	0.39	75	0.22	1.06
Barium	ug/L as Ba	3.3	4	1.7	4.3	1000 MAC	3.1	75	1.47	40.4
Beryllium	ug/L as Be	< 0.1	4	< 0.1	< 0.1		< 0.1	75	< 0.01	< 0.1
Bismuth	ug/L as Bi	< 1	4	< 1	< 1		< 1	75	0.017	< 1
Boron	ug/L as B	< 50	4	< 50	< 50	5000 MAC	< 50	75	11	< 50
Cadmium	ug/L as Cd	< 0.01	4	< 0.01	< 0.01	7 MAC	< 0.01	75	< 0.01	0.094
Calcium	mg/L as Ca	10.5	4	10.1	10.7	No Guideline Required	10.7	75	9.17	13
Chromium	ug/L as Cr	< 1	4	< 1	< 1	50 MAC	< 1	75	0.15	< 1
Cobalt	ug/L as Co	< 0.2	4	< 0.2	< 0.2		< 0.2	75	0.022	1.38
Copper	ug/L as Cu	2.31	4	1.49	3.59	2000 MAC / ≤ 1000 AO	3.27	75	1.34	285
Iron	ug/L as Fe	183.5	4	120	499	≤ 100 AO	273	77	25.6	1960
Lead	ug/L as Pb	0.24	4	< 0.2	0.43	5 MAC	0.35	75	< 0.2	105
Lithium	ug/L as Li	< 2	4	< 2	< 2		< 2	47	< 2	20.1
Magnesium	mg/L as Mg	3.405	4	3.33	4.11	No Guideline Required	3.8	75	2.98	4.48
Manganese	ug/L as Mn	26.25	4	16.8	49	120 MAC / ≤ 20 AO	28.95	76	< 1	1370
Molybdenum	ug/L as Mo	< 1	4	< 1	< 1		< 1	75	0.065	< 1
Nickel	ug/L as Ni	< 1	4	< 1	< 1		< 1	75	0.353	4.7
Potassium	mg/L as K	0.5755	4	0.497	0.783		0.658	75	0.494	0.94
Selenium	ug/L as Se	< 0.1	4	< 0.1	< 0.1	50 MAC	< 0.1	75	< 0.04	0.11
Silicon	mg/L as Si	6935	4	6050	8280		7330	75	2750	10100
Silver	ug/L as Ag	< 0.02	4	< 0.02	< 0.02	No Guideline Required	< 0.02	75	< 0.005	0.028
Sodium	mg/L as Na	8.915	4	8.3	9.67	≤ 200 AO	9.01	75	7.77	13.2
Strontium	ug/L as Sr	94.95	4	85.2	103	7000 MAC	95.8	75	79.8	120
Sulfur	mg/L as S	< 3	4	< 3	< 3		< 3	75	< 3	6.1
Tin	ug/L as Sn	< 5	4	< 5	< 5		< 5	75	0.46	< 5
Titanium	ug/L as Ti	< 5	4	< 5	< 5		< 5	75	1.44	41.5
Thallium	ug/L as Tl	< 0.01	4	< 0.01	< 0.01		< 0.01	75	0.008	< 0.05
Uranium	ug/L as U	< 0.1	4	< 0.1	< 0.1	20 MAC	< 0.1	75	0.007	< 0.1
Vanadium	ug/L as V	< 5	4	< 5	< 5		< 5	75	0.5	< 5
Zinc	ug/L as Zn	5.65	4	< 5	6.8	≤ 5000 AO	8.7	75	< 5	258
Zirconium	ug/L as Zr	0.12	4	< 0.1	0.19		0.16	75	< 0.1	0.57
Microbial Parameters										
Indicator Bacteria										
Coliform, Total	CFU/100 mL	81	12	14	1400		114	136	< 1	9200
<i>E. coli</i>	CFU/100 mL	< 1	12	< 1	23		< 1	138	< 1	29
Hetero. Plate Count, 35C (2 day)	CFU/1 mL	Not tested in 2025					2200	2	1100	3300
Parasites										
<i>Cryptosporidium</i> , Total oocysts	oocysts/100 L	< 1	2	< 1	1	Zero detection desirable	< 1	19	0.89	2.8
<i>Giardia</i> , Total cysts	cysts/100 L	< 1	2	< 1	< 1	Zero detection desirable	< 1	19	< 1	< 1
Algal Toxins										
Microcystin	ug/L	< 1	16	< 1	< 1	1.5 ug/L MAC	< 1	27	< 1	< 1

Table 2

Table 2: 2025 Summary of Treated Water Test Results, Lyall Harbour / Boot Cove Water System										
PARAMETER		2025 ANALYTICAL RESULTS				CANADIAN GUIDELINES	2015-2024 ANALYTICAL RESULTS			
Parameter Name	Units of Measure	Annual Median	Samples Analyzed	Range Min. Max.		≤ = Less than or equal to	Median	Samples Analyzed	Range Minimum Maximum	
ND means Not Detected by analytical method used										
Physical Parameters										
Carbon, Total Organic	mg/L as C	4.35	16	2.1	5.1		4.5	175	1.1	66.9
Colour, True	TCU	8	23	6	20		9	108	< 2	> 50
pH	No units	5.9	2	5.5	6.3	7.0 - 10.5 AO	6.705	26	5.9	8
Hardness	mg/L as CaCO3	44.2	8	43.3	49.3		43	79	37.2	50.1
Turbidity	NTU	0.5	23	0.2	1.1	1 MAC and ≤ 5 AO	0.9	235	0.15	5.3
Turbidity, Field Tests	NTU	0.63	9	0.32	0.85		0.87	471	0.06	4
Water Temperature	Degrees C	11.5	123	3.6	19.9	≤ 15 AO	11	2134	0	20.8
Microbial Parameters										
Indicator Bacteria										
Coliform, Total	CFU/100 mL	< 1	97	< 1	380	0 MAC	< 1	872	< 1	460
<i>E. coli</i>	CFU/100 mL	< 1	97	< 1	< 1	0 MAC	< 1	874	< 1	1
Hetero. Plate Count, 7 day	CFU/1 mL	6500	21	20	16000	No Guideline Required	1000	177	< 10	33000
Algal Toxins										
Algal Toxins										
Microcystin	ug/L		Not tested in 2025			1.5 ug/L MAC	< 1	3	< 1	< 1
Disinfectants										
Disinfectants										
Chlorine, Free Residual	mg/L as Cl2	0.78	114	0.04	5.5	No Guideline Required	0.36	2115	0.01	8.8
Chlorine, Total Residual	mg/L as Cl2		Not tested in 2025			No Guideline Required	0.52	1312	0.01	8.8
Disinfection By-Products										
Haloacetic Acids										
HAA5	ug/L	62	4	< 5	130	80 MAC	56	36	< 0.1	160
Trihalomethanes (THMs)										
Bromodichloromethane	ug/L	16	4	12	21		15	44	0.643	40.6
Bromoform	ug/L	< 1	4	< 1	< 1		< 1	44	< 0.1	< 1
Chloroform	ug/L	66.5	4	59	120		76	44	7.26	250
Chlorodibromomethane	ug/L	1.8	4	1.3	2.4		1.6	44	< 0.1	31
Total Trihalomethanes	ug/L	84.5	4	72	140	100 MAC	96	44	7.9	280
Metals										
Aluminum	ug/L as Al	15.9	8	5	39.3	2900 MAC / 100 OG	16.5	79	4.2	138
Antimony	ug/L as Sb	< 0.5	8	< 0.5	< 0.5	6 MAC	< 0.5	79	0.035	< 50
Arsenic	ug/L as As	0.28	8	0.22	0.39	10 MAC	0.33	79	0.2	0.8
Barium	ug/L as Ba	3.1	8	2.2	4.9	1000 MAC	2.6	79	1.5	16.1
Beryllium	ug/L as Be	< 0.1	8	< 0.1	< 0.1		< 0.1	79	< 0.01	< 0.1
Bismuth	ug/L as Bi	< 1	8	< 1	< 1		< 1	79	0.005	< 1
Boron	ug/L as B	< 50	8	< 50	< 50	5000 MAC	< 50	79	13	53
Cadmium	ug/L as Cd	< 0.01	8	< 0.01	< 0.01	7 MAC	< 0.01	79	< 0.005	0.087
Calcium	mg/L as Ca	11.5	8	10.7	13.2	No Guideline Required	10.9	79	9.44	13.2
Chromium	ug/L as Cr	< 1	8	< 1	< 1	50 MAC	< 1	79	< 0.1	< 10
Cobalt	ug/L as Co	< 0.2	8	< 0.2	< 0.2		< 0.2	79	0.01	< 0.5
Copper	ug/L as Cu	28.65	8	12	51.4	2000 MAC / ≤ 1000 AO	31.7	79	2.14	595
Iron	ug/L as Fe	75.2	8	49.4	285	≤ 100 AO	118	81	28.8	1670
Lead	ug/L as Pb	0.795	8	0.42	1.72	5 MAC	1.34	79	< 0.2	25.8
Lithium	ug/L as Li	< 2	8	< 2	< 2		< 2	50	1.74	< 5
Magnesium	mg/L as Mg	3.86	8	3.58	4.12	No Guideline Required	3.76	79	3.2	4.53
Manganese	ug/L as Mn	3.55	8	< 1	11.9	120 MAC / ≤ 20 AO	2	81	< 1	26.3
Molybdenum	ug/L as Mo	< 1	8	< 1	< 1		< 1	79	0.076	< 1
Nickel	ug/L as Ni	< 1	8	< 1	< 1		1.1	79	0.288	80.9
Potassium	mg/L as K	0.606	8	0.49	0.804		0.662	79	0.479	0.956
Selenium	ug/L as Se	< 0.1	8	< 0.1	< 0.1	50 MAC	< 0.1	79	< 0.04	0.12
Silicon	mg/L as Si	7080	8	5790	8390		7220	79	2970	9090
Silver	ug/L as Ag	< 0.02	8	< 0.02	< 0.02	No Guideline Required	< 0.02	79	< 0.005	< 0.02
Sodium	mg/L as Na	12	8	10.2	14	≤ 200 AO	11.5	79	9.26	15.6
Strontium	ug/L as Sr	92.7	8	90.9	99.9	7000 MAC	96.2	79	80.5	121
Sulfur	mg/L as S	< 3	8	< 3	< 3		< 3	79	< 3	5.6
Tin	ug/L as Sn	< 5	8	< 5	< 5		< 5	79	< 0.2	47.8
Titanium	ug/L as Ti	< 5	8	< 5	< 5		< 5	79	0.79	9.3
Thallium	ug/L as Tl	< 0.01	8	< 0.01	< 0.01		< 0.01	79	< 0.002	< 0.05
Uranium	ug/L as U	< 0.1	8	< 0.1	< 0.1	20 MAC	< 0.1	79	0.008	< 0.1
Vanadium	ug/L as V	< 5	8	< 5	< 5		< 5	79	0.48	< 5
Zinc	ug/L as Zn	21	8	11.8	56.1	≤ 5000 AO	27.3	79	< 5	102
Zirconium	ug/L as Zr	< 0.1	8	< 0.1	0.18		0.12	79	< 0.1	0.66