

Water Operations 2025 Annual Report District of Lake Country

10150 Bottom Wood Lake Road
Lake Country, British Columbia V4V 2M1
Ph: 250-766-6677 Fax: 250-766-0200

Prepared by: The District of Lake Country Utility Department

For further details contact Shelby McFarlane, District of Lake Country Engineering Technician smcfarlane@lakecountry.bc.ca

WATER OPERATIONS	4
2025 Overview	4
Summary	4
System descriptions & classifications	4
Water Demand	4
Cross Connection Control (CCC) Program	6
Operational Duties Summary	7
Reservoir Cleaning	7
Notable Water Quality Events	7
Bulk Water Meter and Pressure Reducing Valve (PRV) 24 Upgrade – Jim Bailey Road and Beaver Lake Road	7
Oyama Water Quality	8
Lakestone PRV Maintenance – Okanagan Lake System	8
Oyama Water Main Break	8
Air Valve Maintenance – Okanagan Lake System	9
Capital Projects and Strategic Initiatives	9
City of Kelowna Bulk Metering Facility	9
Glenmore PRV and Corridor Improvements	10
Irvine Booster Station	10
Beaver Lake Intake Tower Replacement	10
Beaver Lake Chain and Vernon Creek Water Management	12
Potable Water Emergency Response Plan	13
Water Quality	13
Source Water Quality	13
Source Chemistry / Raw Comprehensive	13
Algae	13
Drinking Water Quality	14
Regulations	14
Water Quality Testing	14
Lead in Drinking Water	17

Disinfection Byproducts & Health Effects _____	17
Water Conservation _____	18
Watershed Activity and Wildfire Planning _____	19
Report All Poachers and Polluters _____	20
Snowpack _____	20
Beaver Lake and Oyama Lake Drought Forecasting _____	20
Dam Maintenance _____	22
Environmental Operators Certification Program (EOCP) _____	22
APPENDIXES: _____	24
Appendix A: Water Source Area Map _____	24
Appendix B: Water Demand Graphs by Source _____	25
Appendix C: Raw Comprehensive Test Results _____	28
Appendix D: Nutrient Sampling Upland Drinking Water Reservoirs _____	31
Appendix E: Beaver Lake System _____	35
Raw Water Chemistry _____	35
Lead _____	36
Disinfection Byproducts – THM and HAA _____	36
Appendix F: Okanagan Lake System _____	38
Raw Water Chemistry _____	38
Lead _____	39
Disinfection Byproducts – THM and HAA _____	39
Appendix G: Kalamalka Lake System _____	41
Raw Water Chemistry _____	41
Lead _____	42
Disinfection Byproducts – THM and HAA _____	42
Appendix H: Oyama Creek System _____	43
Raw Water Chemistry _____	43
Lead _____	43
Disinfection Byproducts – THM and HAA _____	44
Appendix I: Lake Pine System _____	45

Raw Water Chemistry	45
Lead	45
Disinfection Byproducts – THM and HAA	46
Appendix J: Coral Beach System	47
Raw Water Chemistry	47
Lead	48
Disinfection Byproducts – THM and HAA	49
Appendix K: Summary of Positive Bacteriological Results in Distribution	50
Appendix L: Sample Sites Per System	51
Beaver Lake System	51
Okanagan Lake System	51
Kalamalka Lake System	52
Oyama Creek System	52
Lake Pine System	52
Coral Beach System	52

WATER OPERATIONS

2025 Overview

Summary

This report outlines operational work performed on the water system within the District of Lake Country (DLC) in 2025. This report contains data and observations collected on the quality of water in the distribution system, as well as the quality of source water.

System descriptions & classifications

The DLC is a growing municipality of approximately 18,000 people, with a majority of residents connected to the DLC's public water systems. The infrastructure managed by the DLC includes: 6 storage dams, 10 reservoirs, 6 chlorine injection systems, 9 pumphouses, 2 UV disinfection systems, 6 pressure boosting stations, 41 pressure reducing stations, 82 pressure reducing valves, 518 hydrants, and approximately 176 km of water distribution mains.

Water sources used by the DLC include:

- Beaver Lake (Upper elevation, Crooked Lake chain flows into Beaver Lake, feeds Beaver Lake system)
- Oyama Lake (Upper elevation, Damer Lake flows into Oyama Creek, feeds Oyama Lake system)
- Okanagan Lake (Low elevation, feeds Okanagan Lake, Lake Pine, Coral Beach systems)
- Kalamalka Lake (Low elevation, feeds Kalamalka Lake System)

Water Demand

The consumption demand for each source within the District varies according to the total number and type of connections serviced by each source. These connections include residential, multifamily, commercial, seasonal irrigation, and agricultural. The six water systems include Beaver Lake, Oyama Creek, Kalamalka Lake, Okanagan Lake, Lake Pine and Coral Beach. Figure 1 is a map of the water systems. To see a more detailed of the water systems are, [Appendix A. MyWater Map v11 \(arcgis.com\)](#)

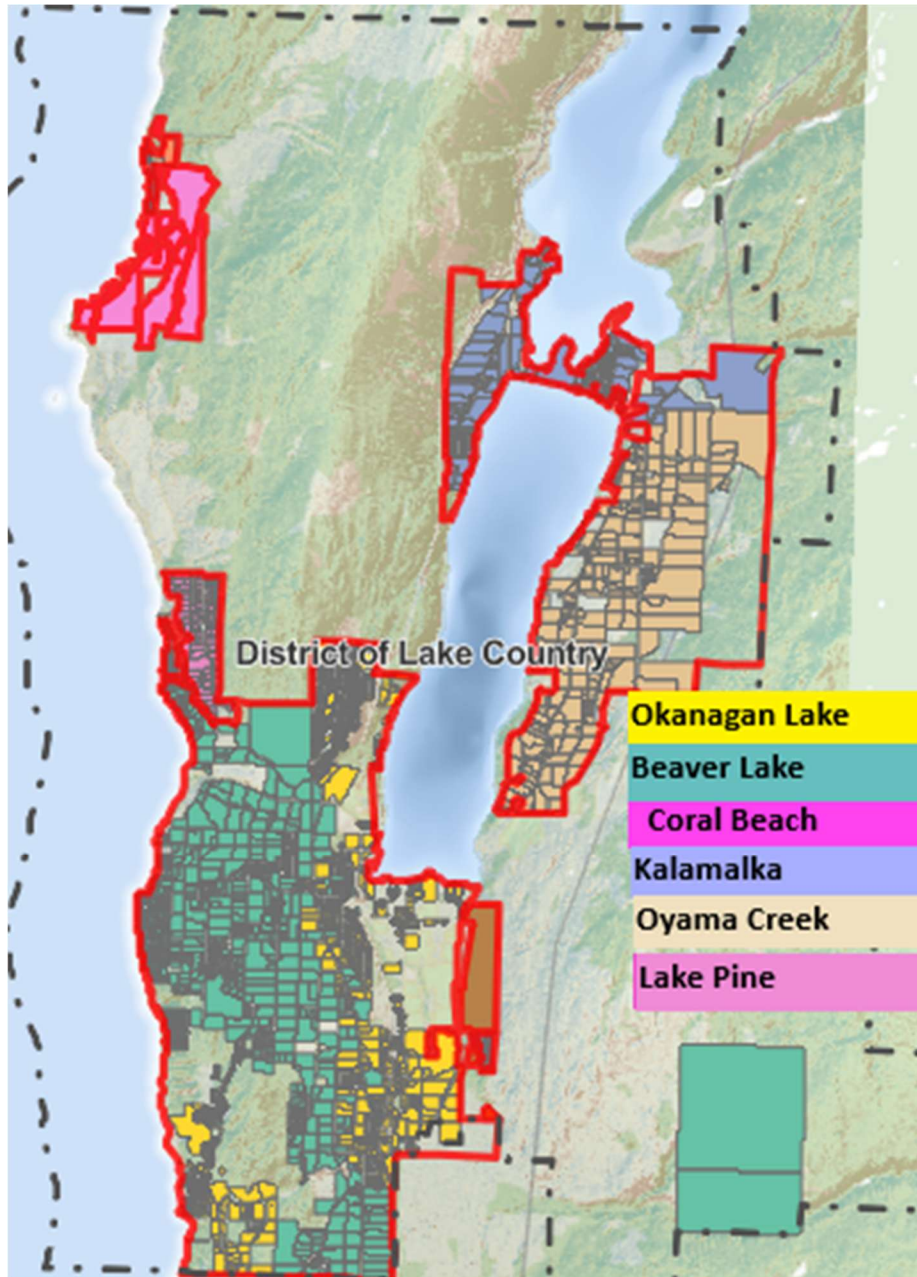


Figure 1 Water Systems Map

Total water usage among all District systems in 2025 was 8,245,466 m³. This is an increase in usage from 7,183,407 m³ in 2024. Figure 2 illustrates the total water demands year over year and monthly. In 2025 an increase in water usage occurred in May and June which in turn reduced the peak usage in July and August. See [Appendix B](#) to view water usage by individual system.

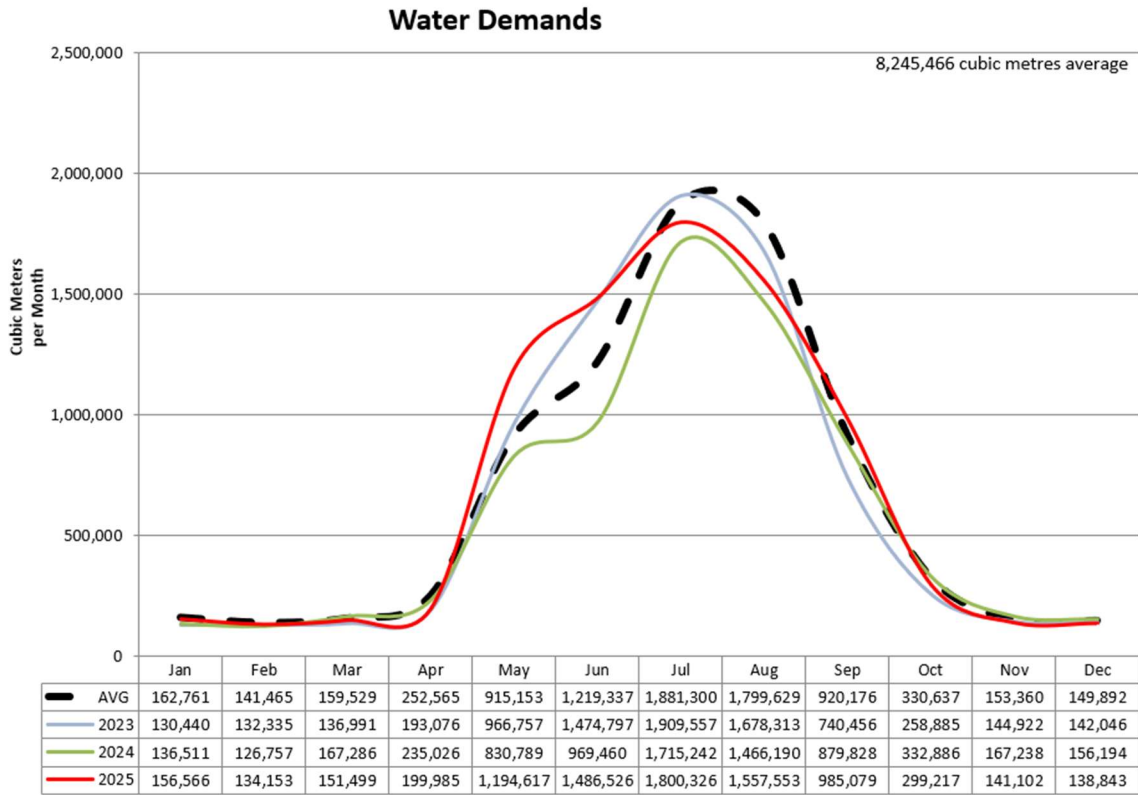


Figure 2 Total Monthly Water Demands

Cross Connection Control (CCC) Program

The District prioritizes protecting the integrity of its water distribution system and therefore oversees robust protocols for managing backflow devices and ensures regulatory compliance standards are met. Testing backflow prevention assemblies occurs in compliance with CSA Standard B64.10-11/B64.10.1-11. Bylaw 984 (Water Rates & Regulations Bylaw) empowers staff to inspect and enforce cross-connection control requirements in the BC Building Code and CSA Group Standards. A rotating schedule of assessments, utilizing FAST software, ensures changes in ownership/usage are captured by the CCC program and that deviations from regulatory requirements are responded to promptly.

As of 2025, the District effectively tracks 1078 backflow prevention devices. District Water Operators test the agricultural backflow devices on a three-year rotation. Table 1 delineates the distribution of properties by type:

Table 1 Backflow Prevention Devices

	Properties	Backflow Devices
ICI	149	340
Residential	212	205
Agriculture	441	462
DLC Facilities	42	71
Total	844	1078

Operational Duties Summary

Annual operational duties that were completed by DLC staff include:

- Service installation and repairs
- Collection and analysis of water quality
- Upland dam inspections and water releases
- Maintenance and cleaning of reservoirs, chlorination, and pumping facilities
- Air valve maintenance
- Meter installations, troubleshooting, reads, and repairs
- Pressure reducing valve maintenance
- Hydrant maintenance
- Main line leak repairs
- Seasonal irrigation turn on and offs
- Responding to customer complaints and inquiries
- Water main flushing
- Cross connection assembly testing

Reservoir Cleaning

The District performs routine reservoir cleaning on a rotating schedule. In 2025, the Coral Beach, Oyama Creek and both cells of the Eldorado treated reservoir were drained and cleaned by the operations crew.

Notable Water Quality Events

Bulk Water Meter and Pressure Reducing Valve (PRV) 24 Upgrade – Jim Bailey Road and Beaver Lake Road

A pressure-reducing station was upgraded and relocated above ground to eliminate confined space entry, and new infrastructure was installed to improve tracking of water supplied by Lake Country to properties within the City of Kelowna. Completing the work required a complex water main tie-in, which necessitated shutting off water to part of Lake Country. Because the tie-in was expected to take approximately 20 hours, an overland water supply was installed to maintain service. A Boil Water Notice was issued on June 11, 2025, for residents on the



Figure 3 June 11, 2025, Water Main Tie-in Bulk Water Meter Project

south side of the Copper Hills subdivision and for the District of Lake Country Wastewater Treatment Plant (4062 Beaver Lake Road) due to the potential for low water pressure during the planned maintenance. The work was completed on June 12, 2025, after which the system was fully flushed and two consecutive bacteriological samples were collected 24 hours apart on June 12 and 13. Laboratory results showed <1 CFU/100 mL for both Total Coliforms and E. coli on both days, and all other water quality parameters met required standards. Based on these results, the Boil Water Notice was rescinded on Monday, June 16, 2025.

Oyama Water Quality

On July 15, 2025, the Oyama Lake Country Fire Department conducted a field training exercise using one of the District of Lake Country’s hydrants. This temporarily resulted in rust-coloured water due to the disturbance of iron sediments within the water mains when the hydrant was operated. Utilities staff were immediately dispatched to flush the affected areas and restore water clarity.



Figure 4 District of Lake Country Hydrant in Oyama

Lakestone PRV Maintenance – Okanagan Lake System

On October 2, 2025, a planned water infrastructure maintenance required a temporary shutdown, with the potential of system pressure loss, affecting approximately 150 customers in the Lakestone area. In collaboration with Interior Health, hand-delivered notices were provided to all impacted properties. Once the repairs were completed, the system was thoroughly flushed, and a bacteriological sample was collected. Laboratory results confirmed no bacteriological presence, allowing the Water Quality Advisory to be lifted on Oct 6, 2025.

Oyama Water Main Break

October 17, 2025, an emergency notification was issued due to a line break that caused a loss of system pressure affecting roughly 40 customers. Because the Oyama system is permanently under a Water Quality Advisory, the loss of pressure triggered a Boil Water Notice. Hand-delivered notices were provided to all affected properties. Once repairs were complete, the system was thoroughly flushed and two consecutive bacteriological samples were collected 24 hours apart. Laboratory results confirmed no bacteriological presence, allowing the Boil Water Notice to be downgraded back to a Water Quality Advisory on October 21.

Air Valve Maintenance – Okanagan Lake System

October 28, 2025, a planned water infrastructure maintenance was completed at the corner of Berry Road and Highway 97, requiring a temporary shutdown that affected fewer than five customers. The shutdown was scheduled after 9:00 p.m. to minimize impacts on highway traffic and to ensure the work occurred outside peak business hours when nearby businesses were closed. Once repairs were finished, the system was thoroughly flushed, and a bacteriological sample was collected. Laboratory results confirmed no bacteriological presence, allowing the Water Quality Advisory to be rescinded on October 31.



Figure 5 City of Kelowna Bulk Water Meter and PRV 24

Capital Projects and Strategic Initiatives

Capital projects and strategic initiatives complete this year include:

- City of Kelowna Bulk Metering Facility
- Glenmore PRV and Corridor Improvements
- Irvine Booster Station
- Beaver Lake Intake Tower Replacement
- Beaver Lake Chain and Vernon Creek Water Management Plan

City of Kelowna Bulk Metering Facility

The City of Kelowna Bulk Metering Facility project was undertaken to bring existing underground works above ground and to separate the City of Kelowna and District of Lake Country water infrastructure. The District supplies water to the City’s northern industrial park, and, following a recent agreement between the two jurisdictions, it sought to formally separate the systems and install a bulk water meter that would allow all water supplied to the City to be measured and billed from a single point. In addition, relocating the existing underground stations into above-ground kiosks significantly improved worker safety by removing the requirement for confined-space entry.

Glenmore PRV and Corridor Improvements

Early 2025, the District extended a section of watermain from Glenmore to Seaton Road to remove two aging, below-ground pressure reducing valve (PRV) stations. These stations presented confined space safety risks and were approaching the end of their service life. Removal of these stations eliminated ongoing operational and maintenance requirements, as well as future replacement costs. The watermain installation was completed in-house, and the project was bundled with planned road works, resulting in coordinated paving and road improvements from Highway 97 to Seaton Road.



Figure 6 Glenmore Road and Seaton Road Watermain upgrade

Irvine Booster Station

In summer 2025, the District began constructing a new booster station to serve the upper pressure zone of the Kalamalka Lake water system. This zone is currently supplied by two aging, below-ground facilities that present confined-space hazards and house high-voltage electrical equipment alongside water piping. The new booster station will allow both underground stations to be decommissioned, improving safety while reducing ongoing operation and maintenance costs. District crews are completing the earthworks and watermain installation in-house, with overall project completion expected in early 2026.

Beaver Lake Intake Tower Replacement

Replacement of the Beaver Lake Dam intake structure was first identified as necessary in 2017, when the existing water intake tower could no longer receive engineering sign-off. Design and the regulatory approval process was undertaken between 2020 and 2024. Construction activities began in 2024 with the installation of a cofferdam and temporary bypass siphon piping to maintain operational continuity.

In 2025, the intake structure and piping were fully replaced, and the earth fill dam was reconstructed to a height approximately 1 meter higher than the original. Following completion of these works, the cofferdam and temporary siphon piping were removed. The final remaining project component, automation of reservoir releases, is scheduled for completion in 2026.

With the dam reconstruction now complete, and barring any unforeseen circumstances, this infrastructure is expected to reliably serve the community for an additional 75 years or more.



Figure 7 Aerial view of coffer dam holding back water in Beaver Lake to remove the old dam control structure

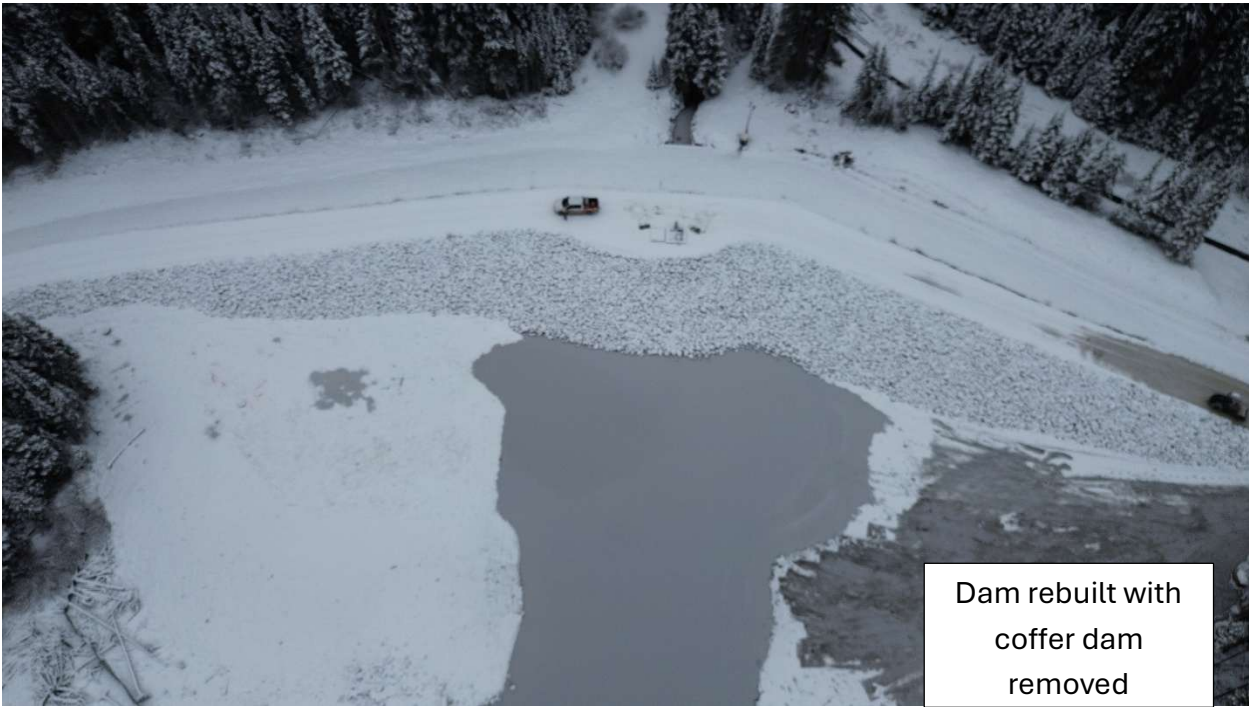


Figure 8 Fall 2025 commissioning of the new Beaver Lake Dam Control Structure

Beaver Lake Chain and Vernon Creek Water Management

The Beaver Lake Chain and Vernon Creek Water Management Plan aim to provide reliable environmental flow needs (EFN) in Middle Vernon Creek without jeopardizing community water availability during multi-year drought scenarios. The District is now in Phase 3 of this plan. Phase 1 focused on defining the problems through interest holder engagement. Phase 2 evaluated potential solutions, resulting in three promising options:

- A Duck Lake control structure
- A Duck Lake partial bypass
- Flow augmentation using groundwater extracted from a well adjacent to the Wastewater Treatment Plant (WWTP)

Phase 3 involves completing environmental impact studies, conceptual drawings and cost estimates for these three options. Due to a limited budget, the District has prioritized the groundwater-extraction well near the WWTP, as it provides the most immediate pathway to enhancing EFNs in Middle Vernon Creek. The District is working collaboratively with the Ministry of Environment and Parks and the Ministry of Water, Land, and Resource Stewardship on these solutions. See Figure 9 for a summary of the challenges within these waterways, the proposed solutions, and the jurisdictional boundaries.

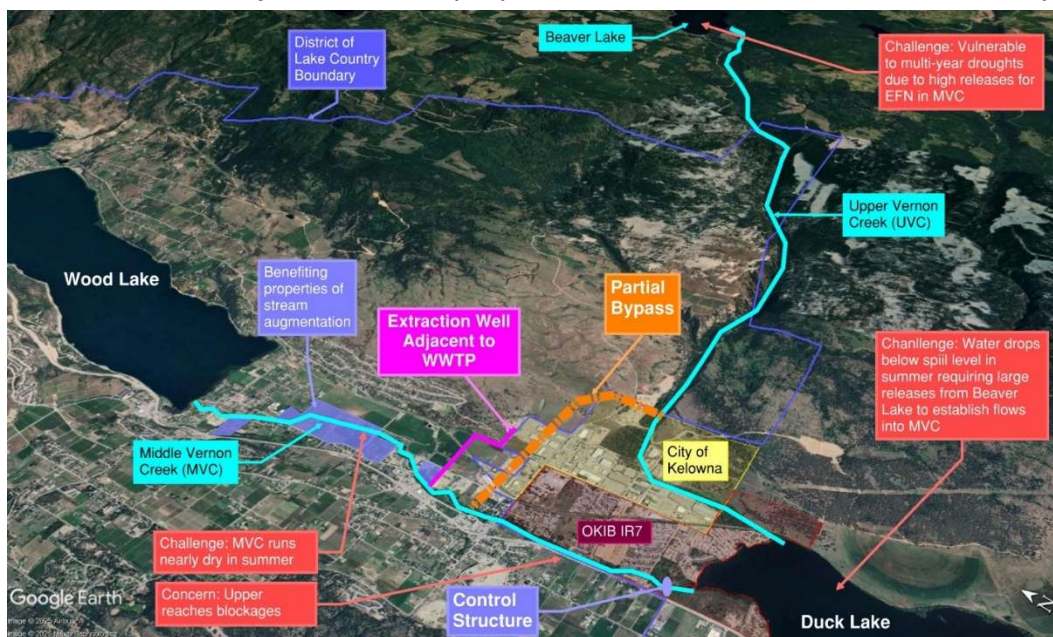


Figure 9 Summary of the Beaver Lake Chain and Vernon Creek Water Management Plan challenges, proposed solutions and jurisdictional boundaries.

Potable Water Emergency Response Plan

The DLC has a Potable Water Emergency Response Plan that is updated annually (or more often as required). The plan outlines operational response and communication procedures that are to be undertaken in an emergency event that may present health threats to people using the water system. Emergency events include, but are not limited to power outages, loss of supply, watermain breaks, and algae blooms. Both the Emergency Response Plan and Annual Water Operations Report are provided to Interior Health Authority (IHA) annually.

Water Quality

Source Water Quality

Source Chemistry / Raw Comprehensive

Raw water sampling occurs at intakes, upland drinking water reservoirs, and at deep water intake pump stations. At raw water intakes, we analyze key water quality parameters to monitor chemical and physical water quality, comparing against GCDWQ and recommendations from Oyama and Vernon Creek Watersheds Source Water Assessment. Comprehensive tests are conducted annually at all intakes, which involves a detailed analysis of water chemistry (results available for each source in [Appendix C](#)). Nutrient sampling occurs in the upland reservoirs (results available in [Appendix D](#)).

DLC's upland drinking water reservoirs, Beaver and Oyama Lakes, exceed the GCDWQ physical parameters for colour. Similar results are common throughout the Okanagan region for water sourced from upland reservoirs.

The raw water chemistry results for each system can be found:

- [Beaver Lake System \(Appendix E\)](#)
- [Okanagan Lake System \(Appendix F\)](#)
- [Kalamalka Lake System \(Appendix G\)](#)
- [Oyama lake System \(Appendix H\)](#)
- [Lake Pine System \(Appendix I\)](#)
- [Coral Beach System \(Appendix J\)](#)

Algae

Visual algae monitoring is conducted year-round at all DLC drinking water intakes. Frequent sampling occurs at the Kalamalka Lake intake, with algae monitoring from Spring through to November, increasing as needed based on changing conditions. Should an observed or reported condition require further action,

the appropriate response would be followed as per the DLC's Potable Water Emergency Response Plan. All samples consistently met acceptable drinking water standards.

Algae is monitored due to the potential harmful effects of cyanobacteria, or blue-green algae. The toxins (specifically microcystins) released from blue-green algae can lead to numerous [health effects](#) if ingested, such as nausea, fever, headaches, and other symptoms.

Drinking Water Quality

Regulations

The District of Lake Country is mandated by the Province's [Drinking Water Protection Act](#) to supply potable water and adheres to the targets outlined by the [BC Drinking Water Treatment Objectives](#), adopted in 2012. These objectives provide performance targets for the treatment and deactivation of enteric viruses, pathogenic bacteria, Giardia cysts, and Cryptosporidium oocysts. These regulations adhere to the [Guidelines for Canadian Drinking Water Quality](#). This framework utilizes the 4-3-2-1-0 objectives, which are as follows:

- 4-log (99.99%) inactivation and/or removal of viruses.
- 3-log (99.9%) inactivation and/or removal of Giardia and *Cryptosporidium*.
- Two treatment processes for surface water.
- Less than or equal to one nephelometric turbidity unit (NTU) of turbidity.
- No detectable E. coli, fecal coliform, and total coliforms.

The Oyama Creek and Beaver Lake systems do not meet the 4-3-2-1-0 objectives, as they do not have two treatment processes, and are therefore placed on a year-round water quality advisory.

Water Quality Testing

District of Lake Country distribution sites across all systems are regularly monitored throughout the year for water chemistry parameters, including free and total chlorine, turbidity, temperature, pH, and conductivity. Chlorine levels are monitored at system dead ends, and corrective operational actions such as flushing and additional bacteriological sampling are conducted as required.

Raw water is sampled and monitored for changes in water chemistry, including monthly analysis from CARO on total organic carbon (TOC), dissolved organic carbon (DOC), total suspended solids (TSS), alkalinity, true color and UV transmission.

In conjunction with regular chemistry monitoring, bacteriological samples are collected and submitted to the Interior Health Authority in compliance with the Guidelines for Canadian Drinking Water Quality. In-house bacteriological Presence/Absence tests are conducted bi-weekly to ensure further compliance.

The required number of monthly samples is outlined in the DWPR Schedule B (Table 2) and the DLC Water Quality and Monitoring Plan; Frequency of monthly bacteriological tests (Table 3). Weekly Total Coliform and E. coli results from raw water sources and throughout the distribution system, including both membrane filtration and Presence-Absence tests, are compiled and submitted to the assigned Drinking Water Officer.

Any results failing to meet water quality standards outlined in the DWPR, Schedule A (Table 4) are promptly reported to the Drinking Water Officer, triggering implementation of corrective actions according to the DLC's Potable Water Emergency Response Plan.

Table 2 Schedule B – Frequency of Monitoring Samples for Prescribed Water Supply Systems (Section 8)

Population Served by the Prescribed Water Supply System:	# Samples per month:
less than 5,000	4
5,000 to 90,000	1 per 1,000 of population
more than 90,000	90 plus 1 per 10,000 population in excess of 90,000

Table 3 Frequency of monthly bacteriological tests: Membrane Filtration (MF) and Presence-Absence (P/A)

System/Source	MF Distribution # samples required per mo.	P/A	Total MF Distribution and Raw	Distribution Bacteriological/Chlorine test sites:
DLC Water System: Beaver Lake source: Est. Population 3,260	4	2	8	15*
DLC Water System: Okanagan Lake source: Est. Population: 7,409	7	2	8	14**
DLC Water System: Okanagan Primary source for Beaver & Okanagan Est Population: 10,660	10	2	11	29* & **
DLC Water System: Oyama Lake source: Est. Population 637	4	2	8	5
DLC Water System: Kalamalka Lake source: Est Population 759	4	2	8	5
Coral Beach Water System: Okanagan Lake source Est Population 131	4	2	8	2
Lake Pine Water System: Okanagan Lake source Est Population 214	4	2	8	3**
<ul style="list-style-type: none"> • * Includes Camp Rd. Reservoir (Offline unless required) • ** Includes two reservoirs 				

Table 4 Schedule A - Water Quality Standards for Potable Water (sections 2 and 9) DWPR

Parameter:	Standard:
Escherichia coli (<i>E. coli</i>)	No detectable Escherichia coli (<i>E. coli</i>) per 100 ml
Total coliform bacteria:	
(a) 1 sample in a 30-day period	No detectable total coliform bacteria per 100 ml
(b) more than 1 sample in a 30-day period	At least 90% of samples have no detectable total coliform bacteria per 100 ml and no sample has more than 10 total coliform bacteria per 100 ml

In 2025, 319 samples were collected and analyzed at CARO Analytical Services in Kelowna for total coliforms and *E. coli*. An additional 203 in-house Presence/Absence tests were conducted. The summary of bacteriological results is found in [Appendix K](#). *E. coli* was not detected in any of the DLC distribution systems in 2025. Total Coliform samples were detected in four distribution systems (Beaver, Okanagan,

Kalamalka and Oyama Creek). All sites were resampled confirming no total coliforms. The list of sample sites for each distribution system can be found in [Appendix L](#).

Ultraviolet (UV) water treatment works by inactivating pathogens in surface water (such as cryptosporidium, giardia lamblia and more) with UV radiation. The UV light radiation disrupts their DNA and disables their ability to replicate. UV disinfection provides no residual to prevent system regrowth. The Kalamalka and Okanagan Lake sources utilize ultraviolet water treatment as a secondary form of disinfection.

Field instruments used for water quality were calibrated regularly, and in 2025 were serviced by a certified accredited agent from Hach. Online water quality instruments that are monitored through the Supervisory Control and Data Acquisition (SCADA) system were verified weekly and serviced/maintained as required by guidelines. Quality data stated in this report was collected through weekly monitoring of source and distribution water. Data obtained through SCADA was reported monthly to the Interior Health Authority.

Lead in Drinking Water

Under the Drinking Water Protection Act (DWPA), drinking water supply systems in BC are responsible for monitoring water to test if it is within acceptable limits. The Guidelines for Canadian Drinking Water Quality (GCDWQ) state that the maximum acceptable concentration of lead is 0.005mg/L. Lead concentrations observed in samples collected within the DLC distribution systems were **below** the maximum concentrations. Detailed results are found within [Appendix E through J](#).

[Health Canada](#) outlines that ingesting a low level of lead can be harmful and can cause chronic health issues. Lead can harm intellectual and behavioral development, hearing, and cause damage to the nervous system, particularly for fetuses, infants, and young children. Lower exposure levels within these populations can have higher health effects. Therefore, the District monitors treated water for lead levels.

Drinking water within the distribution system is not a significant source of lead intake, as source water is low in lead concentrations. However, lead can be introduced into drinking water through [plumbing fixtures](#) in homes and buildings, as well as older service lines. This is often found within buildings dated prior to 1989. The introduction of the BC Plumbing Code required phasing out lead-containing components. Property owners are responsible for assessing their plumbing system and taking necessary action to minimize lead exposure. A plumber can assist in identifying any lead-containing plumbing components in your home, including the service line on your property.

Disinfection Byproducts & Health Effects

Chlorine is used in all systems to disinfect water from pathogens and maintain residual protection from bacterial regrowth in the distribution system. The use of chlorine has far reduced the risk of infection from waterborne diseases but does form hazardous by-products in low concentrations. Disinfection

byproducts (DBPs) are formed when chlorine reacts with natural organic matter found in surface source water. The District of Lake Country monitors levels of trihalomethanes (THMs) and haloacetic acids (HAAs). [The Guidelines for Canadian Drinking Water Quality \(GCDWQ\)](#) outline the regulatory limits and sampling requirements for THMs and HAAs. The maximum allowable concentration of THMs in drinking water is 0.100 mg/L, and the maximum allowable concentration (MAC) of HAAs is 0.080 mg/L.

Elevated levels of natural organic matter in higher elevation lakes produce higher concentrations of by-products when treated with chlorine. For this reason, both the Oyama and Beaver Lake systems exceed the average allowable THM and HAA concentrations specified by the GCDWQ during the summer months, roughly between April and October. During the winter months, October until April, residents on Oyama Lake and Beaver Lake source are switched to Kalamalka Lake and Okanagan Lake respectively. During this time the DBPs are below the MAC therefore the annual average of THMs and HAAs for each household meets the drinking water guidelines. For details on this, please see [Appendix E through J](#). Sampling occurs at the far ends of the distribution system, where water has the longest contact time with chlorine, and therefore monitors the highest concentrations of by-products in the system.

Trihalomethanes (THMs) are considered to be carcinogenic, and evidence suggests THMs could affect reproduction if ingested at high concentrations. Haloacetic acids (HAAs) comprise of a group of chemicals with varying associated health hazards. These chemicals are considered to be probable carcinogens and have possible links to developmental effects and potentially cause cancer.

All drinking water chemistry, lead and disinfection byproduct results for each system can be found:

- [Beaver Lake System \(Appendix E\)](#)
- [Okanagan Lake System \(Appendix F\)](#)
- [Kalamalka Lake System \(Appendix G\)](#)
- [Oyama lake System \(Appendix H\)](#)
- [Lake Pine System \(Appendix I\)](#)
- [Coral Beach System \(Appendix J\)](#)

Water Conservation

The District of Lake Country is addressing water conservation concerns on an ongoing basis. To learn more please read the [2024 Water Conservation Plan](#).

Watershed Activity and Wildfire Planning

Approximately 65% of the District's water supply originates from the Oyama and Beaver Lake watersheds, which support forestry, range, recreation, and other land-based activities. Protecting these areas is critical to safeguard drinking water at the intake level. Harvesting blocks for Tolko, BC Timber Sales (BCTS), and the Small-Scale Salvage Program (SSSP) occur within high and very high vulnerability zones located below dam outflows and above drinking water intakes. While Tolko and BCTS maintain Sustainable Forestry Initiative (SFI) certification, and the SSSP is a publicly driven provincial program with a different oversight approach, none of these processes are fully aligned with our local values and priorities for protecting critical water resources. The District meets annually with all groups to review activities and monitor potential impacts. Wildfire remains a significant risk due to runoff, debris flows, post-fire flooding, and long-term watershed instability. The District maintains ongoing communication with the BC Wildfire Service and continues to integrate wildfire considerations into watershed planning.



Figure 10 Watershed Meeting – (Left to Right) Mayor Victor Cumming, Chief Dan Wilson, Mayor Blair Ireland

Historically, watershed planning on the North Aberdeen Plateau reflected disconnected perspectives, overlapping regulatory requirements, guidelines, and governance, as well as competing land uses such as forestry, range, recreation, and other values. The North Aberdeen Plateau Guidance Plan (NAPGP), finalized September 8, 2025, brought the Okanagan Indian Band (OKIB), District of Lake Country (DLC), and Regional District of North Okanagan (RDNO) together to create a more holistic framework. The Plan advances Syilx stewardship responsibilities by protecting community drinking water and agricultural irrigation sources while safeguarding *tmix^w* (all living things). Rooted in partnership and guided by Syilx knowledge and governance, it aligns wildfire mitigation, watershed resilience, and source water protection as interconnected priorities.

Building on the Guidance Plan, the North Aberdeen Plateau Partnership Group, formalized through a Memorandum of Understanding on November 7, 2025, is now working to develop an actionable Watershed Resiliency Plan. This plan aims to coordinate further partnerships, including with provincial agencies, to strengthen long-term watershed protection, wildfire resilience, and sustainable management of drinking water sources. Guided by Syilx cultural knowledge, values, and principles of forestry, as well as seven-generation planning, a Terms of Reference is being developed to guide implementation, reflecting the shared commitment of all partners to proactive, watershed-based governance, ecological integrity, and community resilience.

Report All Poachers and Polluters

To report concerns in the community watersheds, contact the Conservation Officer Service’s 24-hour RAPP (Report All Poachers and Polluters) hotline at 1-877-952-7277 or #7377 on the TELUS Mobility Network. Complaints can also be submitted online through [RAPP](#).



Snowpack

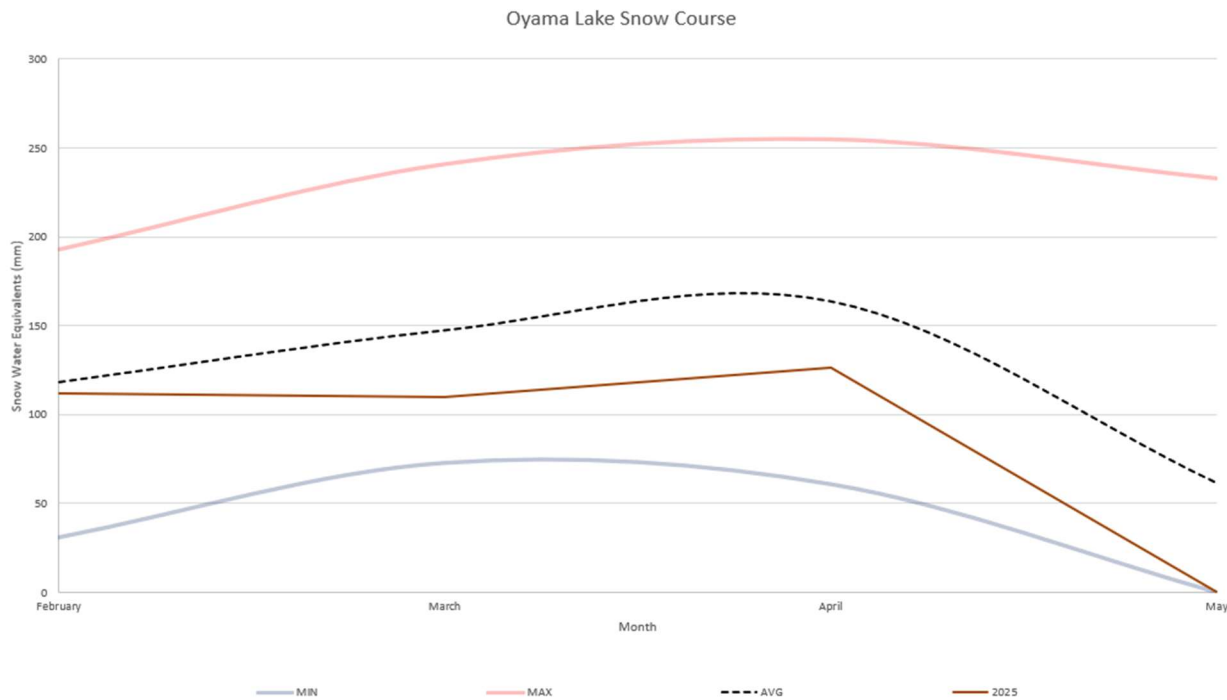


Figure 11 Oyama Lake Monthly Snow Water Equivalents

The snow course uses real time data that is collected from an automated weather station. The weather station records humidity, ambient temperature, snow depth, and snow water equivalents required for proper watershed management. To see the historical snow survey data for Oyama Lake please visit the [BC River Forecast Centre’s](#) website, and search for the station ID “2F19P”.

Beaver Lake and Oyama Lake Drought Forecasting

Figures 12 and 13 present a comparative overview of Beaver Lake and Oyama Lake water levels in 2025 relative to 2024, long-term average conditions, full pool elevations, and established water restriction thresholds. These figures illustrate how 2025 lake storage tracked against historical norms and operational benchmarks, providing context for assessing drought risk. As shown in Figure 12, Beaver Lake water levels in 2025 were slightly below the long-term average for much of the year. The lake reached full pool in mid-May, and no extreme water restrictions were required. By the end of 2025, Beaver Lake levels were comparable to those observed at the end of 2024.

Figure 13 indicates that Oyama Lake reached full pool earlier in the season, and similarly, no extreme water restrictions were issued. For both lakes, a hotter-than-normal fall contributed to increased water demand, particularly from agricultural users, resulting in additional late-season water use.

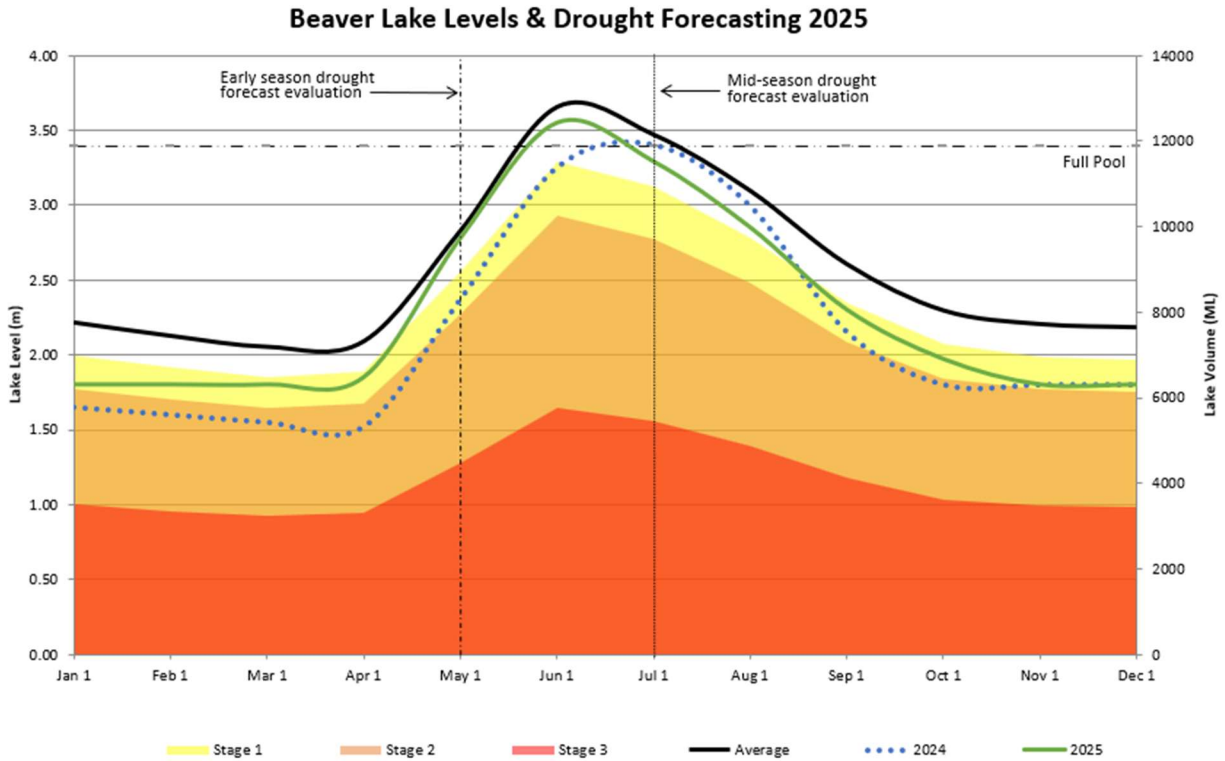


Figure 12 Beaver Lake Level

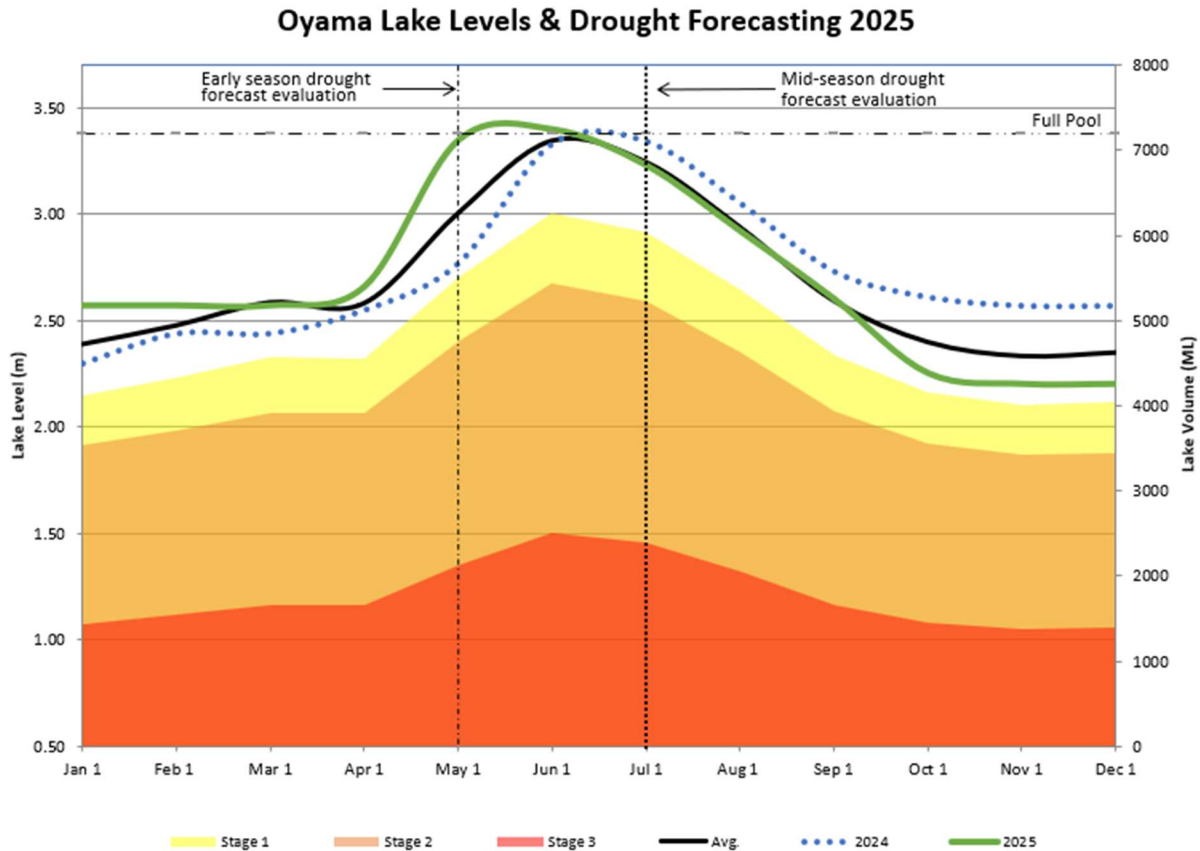


Figure 13 Oyama Lake Level

Dam Maintenance

Weekly inspections of the upland dams (Beaver, Crooked, Oyama, and Damer) were completed by District staff throughout 2025. Regular dam maintenance was performed at all sites, including the refurbishment of the Crooked Lake concrete spillway (Figure 14). Ongoing work continues to ensure full compliance with Ministry of Environment requirements related to the Dam Safety Review documents. In 2025 the completion of Beaver Lake Intake Replacement occurred. More information on this is found in the [Capital Projects and Strategic Initiatives](#) section of this report.



Figure 14 Crooked Lake Spillway

Environmental Operators Certification Program (EOCP)

The EOCP Board of Directors, with the approval of the Ministry of Health, recently changed the water treatment facility definition. As such, since our chlorination

facilities are method of *primary disinfection*, to produce potable water, they are now classified as water treatment facilities. District of Lake Country operator’s certification number and levels are listed in Table 5.

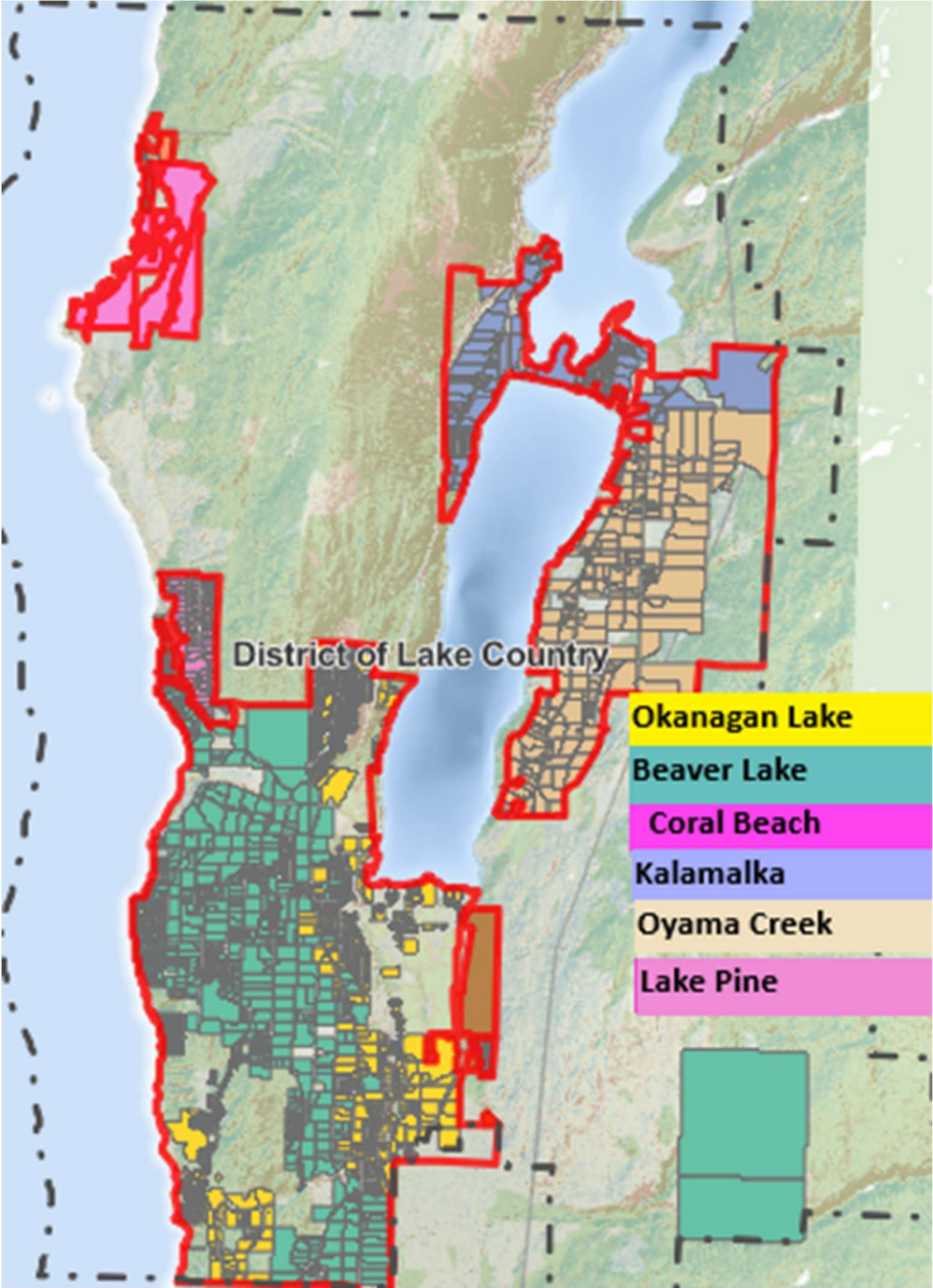
According to the EOCP, primary disinfection can include chlorination and ultraviolet which we utilize alone or combined in our facilities. With this new definition, Operators are now required to update their certification to include water treatment. With the EOCP and Ministry of Health changing our facility classifications to Water Treatment facilities, Section 12 of the BC Drinking Water Protection Regulation requires that our operators must also obtain certification through the EOCP.

Table 5 District of Lake Country - EOCP Certifications

Name	Certification No.	Level
Mike Mitchell	1839	WD-IV, CH, WT-II
Patti Meger	4838	WT-I, CH, WD-II
Kiel Wilkie	6503	WD-III, CH
Tyler Friedrich	7697	WD-III, WT-I
Mike Kristensen	8344	WD-II, WT-I, CH
Findlay Graham	1003104	WD-1
Krista Winram	1001349	WD-II, CH
Evan Kemp	8114	WWT-III, WWC-I, CH, WT-II
Kyle Barker	1002179	WD-II
Eddie Maher	1001145	WD-II

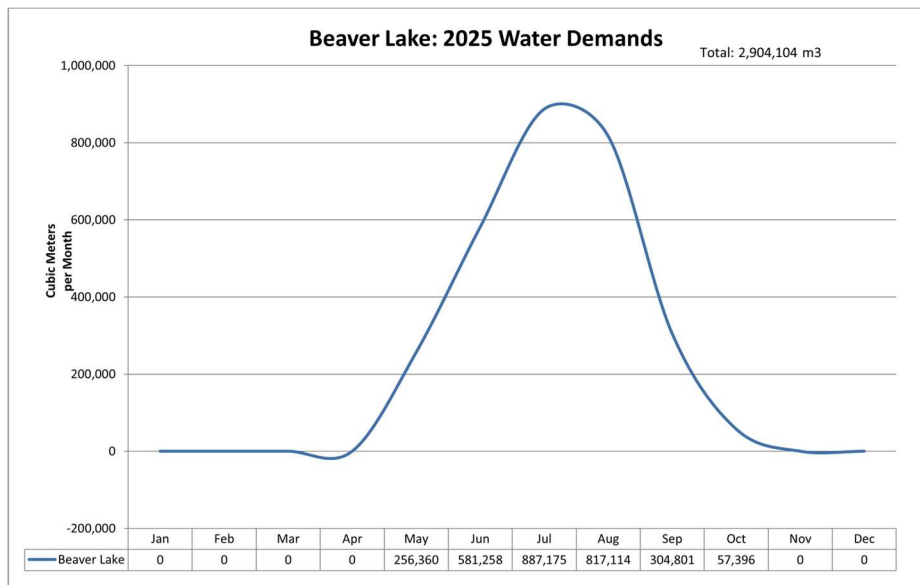
APPENDIXES:

Appendix A: Water Source Area Map



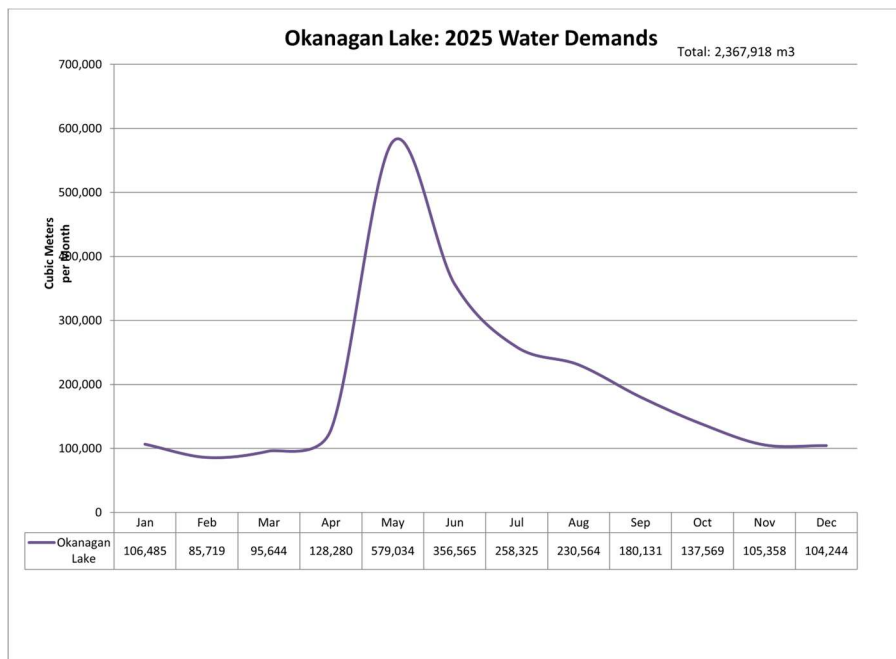
Appendix B: Water Demand Graphs by Source

Beaver Lake:



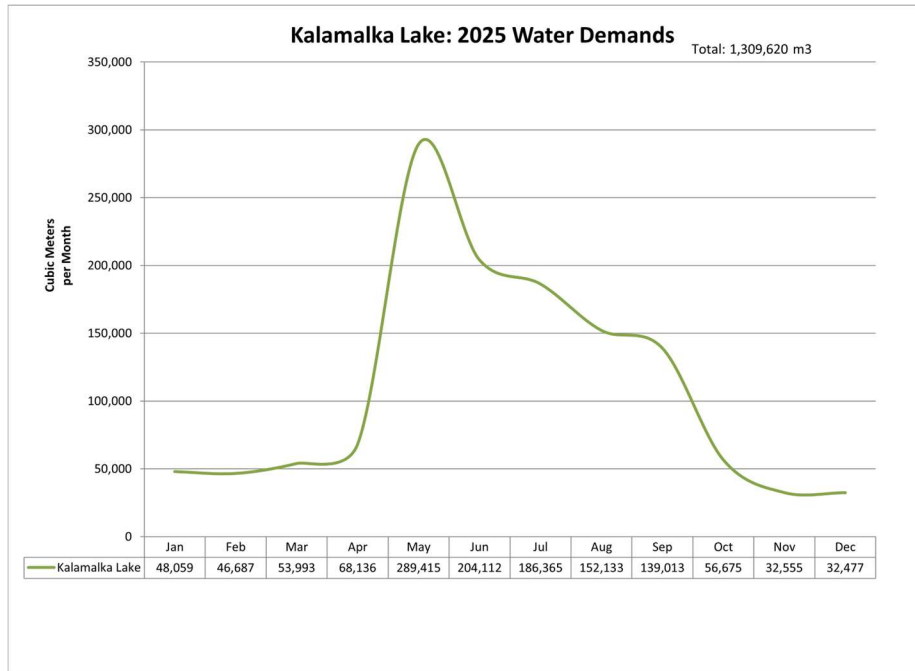
Total water usage in 2025 was 2,904,104 m³ on the Beaver Lake system. Zero demand months is due to the DLC supplying the Beaver Lake source with the Okanagan Lake source during periods of low consumption.

Okanagan Lake:



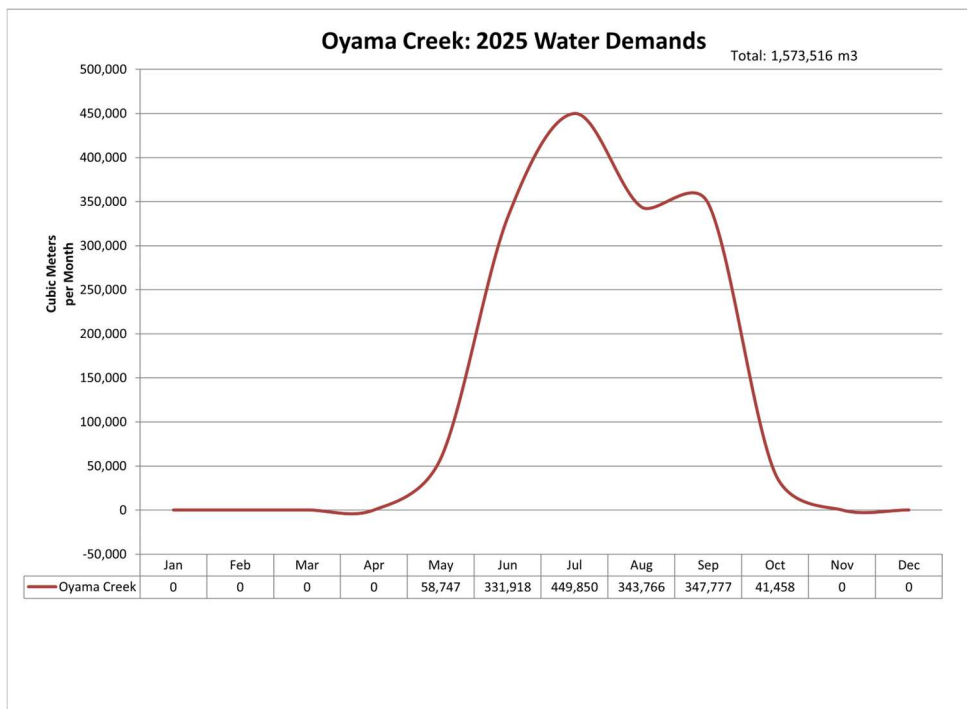
Total water usage in 2025 was 2,367,918 m³ on the Okanagan Lake water system. Okanagan Lake water is used to supplement the Beaver Lake water system during the winter months.

Kalamalka Lake:



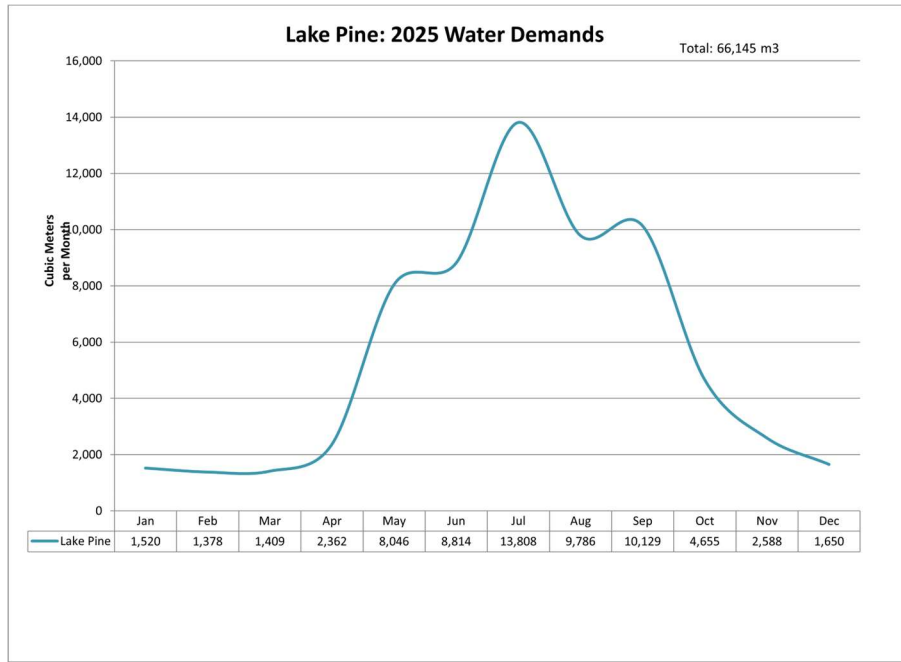
Total water usage in 2025 was 1,309,620 m3 on the Kalamalka water system. Kalamalka Lake water is used to supplement the Oyama Lake Water System during the winter months.

Oyama Creek:



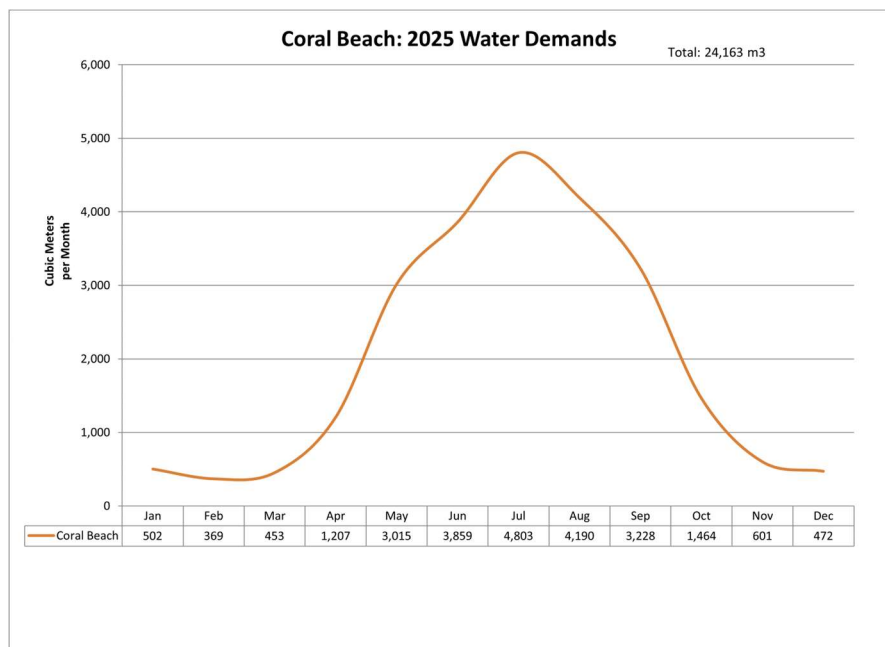
Total water usage in 2025 was 1,573,516 m3 on the Oyama Creek water source. Zero demand months is due to the DLC supplying the Oyama Lake water system with the Kalamalka Lake source during periods of low consumption.

Lake Pine:



Total water usage in 2025 was 66,145 m3 on the Lake Pine water source.

Coral Beach:



Total water usage in 2025 was 24,163 m3 on the Coral Beach water source.

Appendix C: Raw Comprehensive Test Results

Once a year, the District collects raw water samples from all six intakes and analyzes them for a more detailed range of water quality parameters.

2025 Water Potability Test (aka Comprehensive Results)							
Distribution Source		Beaver	Oyama	Kal lake	Coral Beach	Lake Pine	Okanagan Lake
Site		VERNON CREEK Intake	OYAMA CREEK Pump House	KALAMALKA Pump House	CORAL BEACH Pump House	LAKEPINE Pump House	OKANAGAN Lake Pump House
Date		08-Aug-25	07-Aug-25	07-Aug-25	05-Aug-25	05-Aug-25	06-Aug-25
Anions							
Chloride	mg/L	1.14	0.29	11.50	6.37	6.10	6.36
Chloride (AO)	mg/L	250	250	250	250	250	250
Fluoride	mg/L	0.13	<0.10	0.18	0.14	0.10	0.14
Fluoride (MAC)	mg/L	1.5	1.5	1.5	1.5	1.5	1.5
Nitrogen, Nitrate as N	mg/L	0.04	0.04	0.03	0.03	0.04	0.06
Nitrate (MAC)	mg/L	10	10	10	10	10	10
Nitrogen, Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrite (MAC)	mg/L	1.0	1.0	1.0	1.0	1.0	1.0
Sulphate	mg/L	3.50	2.10	50.00	27.80	29.90	29.70
Sulphate (AO)	mg/L	500	500	500	500	500	500
General Parameters							
Alkalinity (total)	mg/L	29.90	23.90	151.00	110.00	112.00	109.00
No current guidelines							
True Colour	CU	23.00	27.00	<5.00	<5.00	<5.00	<5.00
True Colour (AO)	CU	15	15	15	15	15	15
Conductivity	uS/cm	73.20	51.90	437.00	304.00	309.00	293.00
No current guidelines							
Cyanide	mg/L	0.0031	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Cyanide (MAC)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2
pH	pH units	6.67	7.67	7.98	7.74	7.70	7.47
pH (OG)	pH units	7 - 10.5	7 - 10.5	7 - 10.5	7 - 10.5	7 - 10.5	7 - 10.5
Turbidity	NTU	0.83	0.37	0.69	0.44	0.35	0.34
Turbidity Guideline	NTU	5.0	5.0	5.0	5.0	5.0	5.0
Trans. 254 nm (unfiltered)	% T	-	-	91.7	86.9	86.6	86.9
No current guidelines. Note the lab did not report for Beaver and Oyama Lake sources							
Calculated Parameters							
Hardness (mg/L as CaCO ₃)	mg/L	31.60	20.80	176.00	130.00	128.00	129.00
No current guidelines see glossary below							
Total Dissolved Solids/TDS	mg/L	37.40	27.50	236.00	162.00	164.00	162.00
TDS (AO)	mg/L	500	500	500	500	500	500

2025 Water Potability Test (aka Comprehensive Results)

Distribution Source		Beaver	Oyama	Kal lake	Coral Beach	Lake Pine	Okanagan Lake
Site		VERNON CREEK Intake	OYAMA CREEK Pump House	KALAMALKA Pump House	CORAL BEACH Pump House	LAKEPINE Pump House	OKANAGAN Lake Pump House
Date		08-Aug-25	07-Aug-25	07-Aug-25	05-Aug-25	05-Aug-25	06-Aug-25
Total Recoverable Metals							
Aluminium (total)	mg/L	0.04	0.07	<0.01	0.01	0.01	0.01
Aluminium (OG)	mg/L	0.1	0.1	0.1	0.1	0.1	0.1
Antimony (total)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Antimony (MAC)	mg/L	0.00600	0.00600	0.00600	0.00600	0.00600	0.00600
Arsenic (total)	mg/L	<0.0005	<0.0005	0.0009	0.0005	0.0005	0.0005
Arsenic (MAC)	mg/L	0.010	0.010	0.010	0.010	0.010	0.010
Barium (total)	mg/L	<0.01	0.01	0.03	0.02	0.02	0.02
Barium (MAC)	mg/L	2.0	2.0	2.0	2.0	2.0	2.0
Boron (total)	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Boron (MAC)	mg/L	5.0	5.0	5.0	5.0	5.0	5.0
Cadmium (total)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Cadmium (MAC)	mg/L	0.007	0.007	0.007	0.007	0.007	0.007
Calcium (total)	mg/L	7.96	5.26	40.20	35.70	34.20	35.20
No current guidelines							
Chromium (total)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chromium (MAC)	mg/L	0.050	0.050	0.050	0.050	0.050	0.050
Cobalt (total)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
No current guidelines							
Copper (total)	mg/L	0.0009	0.0011	0.0021	0.0009	0.0158	0.0007
Copper (MAC)	mg/L	2.000	2.000	2.000	2.000	2.000	2.000
Iron (total)	mg/L	0.10	0.13	<0.01	<0.01	0.01	<0.01
Iron (AO)	mg/L	0.3	0.3	0.3	0.3	0.3	0.3
Lead (total)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00058	<0.00020
Lead (MAC)	mg/L	0.005	0.005	0.005	0.005	0.005	0.005
Magnesium (diss.)	mg/L	2.84	1.86	18.30	9.81	10.50	9.88
No current guidelines							
Manganese (total)	mg/L	0.00732	0.01300	0.00249	0.00103	0.00146	0.00112
Manganese (MAC)	mg/L	0.12	0.12	0.12	0.12	0.12	0.12
Mercury (total)	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Mercury (MAC)	mg/L	0.001	0.001	0.001	0.001	0.001	0.001
Molybdenum (total)	mg/L	0.00024	0.00015	0.00485	0.00349	0.00356	0.00346
No current guidelines							

2025 Water Potability Test (aka Comprehensive Results)							
Distribution Source		Beaver	Oyama	Kal lake	Coral Beach	Lake Pine	Okanagan Lake
Site		VERNON CREEK Intake	OYAMA CREEK Pump House	KALAMALKA Pump House	CORAL BEACH Pump House	LAKEPINE Pump House	OKANAGAN Lake Pump House
Date		08-Aug-25	07-Aug-25	07-Aug-25	05-Aug-25	05-Aug-25	06-Aug-25
Total Recoverable Metals							
Nickel	mg/L	0.0006	0.0011	<0.0004	0.0004	0.0007	<0.0004
No current guidelines							
Potassium (total)	mg/L	0.90	1.05	4.86	2.47	2.56	2.44
No current guidelines							
Selenium (total)	mg/L	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.0005
Selenium (MAC)	mg/L	0.05	0.05	0.05	0.05	0.05	0.05
Sodium (total)	mg/L	2.62	2.23	18.90	12.40	12.30	12.10
Sodium (AO)	mg/L	200	200	200	200	200	200
Strontium (total)	mg/L	0.04	0.04	0.48	0.29	0.29	0.29
Strontium (MAC)	mg/L	7	7	7	7	7	7
Uranium (total)	mg/L	0.000030	0.000054	0.003110	0.002460	0.003030	0.002520
Uranium (MAC)	mg/L	0.020	0.020	0.020	0.020	0.020	0.020
Zinc (total)	mg/L	<0.004	<0.004	<0.004	<0.004	0.021	<0.004
Zinc (AO)	mg/L	3.000	3.000	3.000	3.000	3.000	3.000
Glossary of Terms, GCDWQ:							
<	Less than. Reported when result is less than the reported detection limit						
≤	Less than or equal to. Reported when result is less or equal to the reported detection limit						
AO	Aesthetic objective. Refer to GCDWQ						
MAC	Maximum acceptable concentration. Refer to GCDWQ						
OG	Operational guidance values. Refer to GCDWQ						
TCU	True color unit. Color referenced against a platinum cobalt standard						
NTU	Nephelometric turbidity unit						
uS/cm	Microsiemens per centimeter						
Hardness	The degree of hardness of drinking water may be classified in terms of its calcium carbonate concentration as follows: soft, 0 to <60 mg/L; medium hard, 60 to <120 mg/L; hard, 120 to < 180 mg/L; and very hard, 180 mg/L and above.						

Appendix D: Nutrient Sampling Upland Drinking Water Reservoirs

Annual sampling of Oyama Lake and Beaver Lake were conducted in July 2025 for anions, metals, and other general parameters.

2025 Nutrients				
Site		OYAMA	DAMER	BEAVER
Date		31-Jul-25	31-Jul-25	30-Jul-25
Anions				
Nitrogen (Nitrate as N)	mg/L	<0.01	0.01	<0.01
Nitrate (MAC)	mg/L	10	10	10
Nitrogen (Nitrite as N)	mg/L	<0.01	<0.01	<0.01
Nitrite (MAC)	mg/L	1	1	1
Phosphate (as P)	mg/L			
No current guidelines				
Sulfate	mg/L	2.10	3.50	3.10
Sulfate (AO)	mg/L	500	500	500
General Parameters				
Alkalinity, Total (as CaCO ₃)	mg/L	20.20	26.30	23.80
No current guidelines				
Alkalinity, Phenolphthalein (as CaCO ₃)	mg/L	<1.00	<1.00	<1.00
No current guidelines				
Alkalinity, Bicarbonate (as CaCO ₃)	mg/L	23.90	26.30	29.90
No current guidelines				
Alkalinity, Carbonate (as CaCO ₃)	mg/L	<1.00	<1.00	<1.00
No current guidelines				
Alkalinity, Hydroxide (as CaCO ₃)	mg/L	<1.00	<1.00	<1.00
No current guidelines				
Ammonia (as N)	mg/L	<0.05	0.09	<0.05
No current guidelines				
Total Organic Carbon	mg/L	10.60	18.20	9.19
No current guidelines				
Chlorophyll-a	ug/L	2.35	2.61	1.06
No current guidelines				
Colour, True	CU	30.00	96.00	34.00
No current guidelines				
Nitrogen, Total Kjeldahl	mg/L	0.41	0.61	0.39
No current guidelines				
Phosphorus, Total (as P)	mg/L	<0.0050	<0.0050	<0.0050
No current guidelines				
Phosphorus, Dissolved Reactive	mg/L	0.02	0.03	0.02
No current guidelines				
TDS	mg/L			
TDS (AO)	mg/L	500	500	500
TSS	mg/L	<4.00	<4.00	<2.00
No current guidelines				
Calculated Parameters				
Hardness, Total (as CaCO ₃)	mg/L	18.80	29.20	23.60
No current guidelines				
Nitrate+ Nitrite (as N)	mg/L	<0.0100	0.0111	<0.0100
No current guidelines				

Total Nitrogen	mg/L	0.41	0.62	0.39
No current guidelines				
Organic Nitrogen	mg/L	0.41	0.52	0.39
No current guidelines				

2025 Nutrients				
Site		OYAMA	DAMER	BEAVER
Date		31-Jul-25	31-Jul-25	30-Jul-25
Metals				
Total Dissolved Aluminium	mg/L	0.01	0.07	0.02
Total Recoverable Aluminium	mg/L	0.02	0.08	0.03
Aluminium (OG)	mg/L	0.1	0.1	0.1
Total Dissolved Antimony	mg/L	<0.0002	<0.0002	<0.0002
Total Recoverable Antimony	mg/L	<0.0002	<0.0002	<0.0002
Antimony (MAC)	mg/L	0.006	0.006	0.006
Total Dissolved Arsenic	mg/L	<0.0005	<0.0005	<0.0005
Total Recoverable Arsenic	mg/L	<0.0005	<0.0005	<0.0005
Arsenic (MAC)	mg/L	0.01	0.01	0.01
Total Dissolved Barium	mg/L	0.0064	0.0104	0.0051
Total Recoverable Barium	mg/L	0.0061	0.0106	0.0057
Barium (MAC)	mg/L	2	2	2
Total Dissolved Beryllium	mg/L	<0.00010	<0.00010	<0.00010
Total Recoverable Beryllium	mg/L	<0.00010	<0.00010	<0.00010
No current guidelines				
Total Dissolved Bismuth	mg/L	<0.00010	<0.00010	<0.00010
Total Recoverable Bismuth	mg/L	<0.00010	<0.00010	<0.00010
No current guidelines				
Total Dissolved Boron	mg/L	<0.05	<0.05	<0.05
Total Recoverable Boron	mg/L	<0.05	<0.05	<0.05
Boron (MAC)	mg/L	5	5	5
Total Dissolved Cadmium	mg/L	<0.000010	<0.000010	<0.000010
Total Recoverable Cadmium	mg/L	<0.000010	<0.000010	<0.000010
Cadmium (MAC)	mg/L	0.005	0.005	0.005
Total Dissolved Calcium	mg/L	4.79	6.85	6.47
Total Recoverable Calcium	mg/L	4.83	7.01	6.44
No current guidelines				
Total Dissolved Chromium	mg/L	<0.00050	<0.00050	<0.00050
Total Recoverable Chromium	mg/L	<0.00050	<0.00050	<0.00050
Chromium (MAC)	mg/L	0.05	0.05	0.05
Total Dissolved Cobalt	mg/L	<0.00010	0.00014	<0.00010
Total Recoverable Cobalt	mg/L	<0.00010	0.00015	<0.00010
No current guidelines				
Total Dissolved Copper	mg/L	0.00088	0.00262	0.00283
Total Recoverable Copper	mg/L	0.00108	0.00203	0.00084
Copper (AO)	mg/L	2	2	2
Total Dissolved Iron	mg/L	0.05	0.30	0.07
Total Recoverable Iron	mg/L	0.07	0.34	0.10
Iron (AO)	mg/L	0.3	0.3	0.3
Total Dissolved Lead	mg/L	<0.00020	<0.00020	<0.00020
Total Recoverable Lead	mg/L	<0.00020	<0.00020	<0.00020
Lead (MAC)	mg/L	0.005	0.005	0.005
Total Dissolved Lithium	mg/L	0.00060	0.00132	0.00056
Total Recoverable Lithium	mg/L	0.00059	0.00146	0.00050

No current guidelines				
Total Dissolved Magnesium	mg/L	1.66	2.92	1.87
Total Recoverable Magnesium	mg/L	1.72	2.83	1.81
No current guidelines				

2025 Nutrients				
Site		OYAMA	DAMER	BEAVER
Date		31-Jul-25	31-Jul-25	30-Jul-25
Metals Continued				
Total Dissolved Manganese	mg/L	0.00	0.03	0.00
Total Recoverable Manganese	mg/L	0.01	0.03	0.01
Manganese (MAC)	mg/L	0.12	0.12	0.12
Total Dissolved Mercury	mg/L	<0.000040	<0.000040	<0.000040
Total Recoverable Mercury	mg/L	<0.000010	<0.000010	<0.000040
Mercury (MAC)	mg/L	0.001	0.001	0.001
Total Dissolved Molybdenum	mg/L	0.00011	0.00018	0.00015
Total Recoverable Molybdenum	mg/L	0.00012	0.00021	0.00015
No current guidelines				
Total Dissolved Nickel	mg/L	0.00089	0.00218	0.00060
Total Recoverable Nickel	mg/L	0.00095	0.00220	0.00064
No current guidelines				
Total Dissolved Phosphorus	mg/L	<0.05	<0.05	<0.05
Total Recoverable Phosphorus	mg/L	<0.05	<0.05	<0.05
No current guidelines				
Total Dissolved Potassium	mg/L	0.97	1.48	0.89
Total Recoverable Potassium	mg/L	0.96	1.47	0.84
No current guidelines				
Total Dissolved Selenium	mg/L	<0.00050	<0.00050	<0.00050
Total Recoverable Selenium	mg/L	<0.00050	<0.00050	<0.00050
Selenium (MAC)	mg/L	0.05	0.05	0.05
Total Dissolved Silicon	mg/L	1.90	4.90	2.90
Total Recoverable Silicon	mg/L	1.90	5.00	2.80
No current guidelines				
Total Dissolved Silver	mg/L	<0.000050	<0.000050	<0.000050
Total Recoverable Silver	mg/L	<0.000050	<0.000050	<0.000050
No current guidelines				
Total Dissolved Sodium	mg/L	2.12	2.68	2.55
Total Recoverable Sodium	mg/L	2.17	2.61	1.93
Sodium (AO)	mg/L	200	200	200
Total Dissolved Strontium	mg/L	0.03	0.04	0.04
Total Recoverable Strontium	mg/L	0.03	0.04	0.04
No current guidelines				
Total Dissolved Sulfur	mg/L	<3.00	<3.00	<3.00
Total Recoverable Sulfur	mg/L	<3.00	<3.00	<3.00
No current guidelines				
Total Dissolved Tellurium	mg/L	<0.00050	<0.00050	<0.00050
Total Recoverable Tellurium	mg/L	<0.00050	<0.00050	<0.00050
No current guidelines				
Total Dissolved Thallium	mg/L	<0.000020	<0.000020	<0.000020
Total Recoverable Thallium	mg/L	<0.000020	<0.000020	<0.000020
No current guidelines				

2025 Nutrients				
Site		OYAMA	DAMER	BEAVER
Date		31-Jul-25	31-Jul-25	30-Jul-25
Metals Continued				
Total Dissolved Thorium	mg/L	<0.00010	<0.00010	<0.00010
Total Recoverable Thorium	mg/L	<0.00010	<0.00010	<0.00010
No current guidelines				
Total Dissolved Tin	mg/L	<0.00020	<0.00020	<0.00020
Total Recoverable Tin	mg/L	<0.00020	<0.00020	<0.00020
No current guidelines				
Total Dissolved Titanium	mg/L	<0.01	<0.01	<0.01
Total Recoverable Titanium	mg/L	<0.01	<0.01	<0.01
No current guidelines				
Total Dissolved Uranium	mg/L	0.000028	0.000097	0.000024
Total Recoverable Uranium	mg/L	0.000029	0.000103	0.000027
Uranium (MAC)	mg/L	0.02	0.02	0.02
Total Dissolved Vanadium	mg/L	<0.00500	<0.00500	<0.00500
Total Recoverable Vanadium	mg/L	<0.00500	<0.00500	<0.00500
No current guidelines				
Total Dissolved Zinc	mg/L	<0.0040	0.0198	<0.0040
Total Recoverable Zinc	mg/L	<0.0040	0.0131	<0.0040
Zinc (AO)	mg/L	5	5	5
Total Dissolved Zirconium	mg/L	0.00037	0.00147	0.00042
Total Recoverable Zirconium	mg/L	0.00039	0.00138	0.00042
Zirconium (MAC)	mg/L			
Glossary of Terms, GCDWQ:				
<	Less than. Reported when result is less than the reported detection limit			
≤	Less than or equal to. Reported when result is less or equal to the reported detection limit			
AO	Aesthetic objective. Refer to GCDWQ			
MAC	Maximum acceptable concentration. Refer to GCDWQ			
OG	Operational guidance values. Refer to GCDWQ			
TCU	True color unit. Color referenced against a platinum cobalt standard			
NTU	Nephelometric turbidity unit			
uS/cm	Microsiemens per centimeter			
Hardness	The degree of hardness of drinking water may be classified in terms of its calcium carbonate concentration as follows: soft, 0 to <60 mg/L; medium hard, 60 to <120 mg/L; hard, 120 to < 180 mg/L; and very hard, 180 mg/L and above.			

Appendix E: Beaver Lake System

Raw Water Chemistry

2025 Annual Raw Water Chemistry showing minimum, maximum and averages.

Beaver Lake Source: Vernon Creek/Eldorado Reservoir									
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO3	Turbidity NTU	Temp Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100 mL	% of samples Less than 10 E.coli/100mL (N=20) %
MIN		0.65	4	6.6	63	19	190	1	60
MAX		3.70	18	8.0	278	32	6,970	36	
AVG		1.43	14	7.5	78	25	20	Samples	
WQ Guidelines			15	7.0-10.5			<1	<1	
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC	

Beaver Lake Raw Monthly Max Table showing maximum monthly results for water chemistry.

Note: Months without data, Beaver Lake system was being supplied with Okanagan Lake source.

PARAMETER		UNITS	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
BEAVER LAKE (VCK INTAKE)	TOC	mg/L						8.57	7.77	8.00	6.99	6.98		
	DOC	mg/L						8.48	7.29	7.43	6.85	6.95		
	TURBIDITY	NTU						2.03	1.96	1.12	1.01	1.01		
	TSS	mg/L						2.6	2.6	<2.0	<2.0	2.2		
	TRU	Co-Pt						32	27	21	19	22		
	TOTAL COLIFORMS	MPN/100mL						326	4790	6970	2000	876		
E. COLI	MPN/100mL						13	36	14	5	13			

Lead

Lead results shown separately for two different source waters supplying the Beaver Lake system.

Vernon Creek System (Beaver Lake Source)	
Cooney Drain	
Date	Result (mg/L)
6/16/2025	<0.00020
8/22/2025	<0.00020
10/1/2025	<0.00020
Pow Rd PRV	
Date	Result (mg/L)
6/16/2025	<0.00020
8/22/2025	<0.00020
10/1/2025	<0.00020

Vernon Creek System (Okanagan Lake Source)	
Cooney Drain	
Date	Result (mg/L)
1/21/2025	<0.00020
4/7/2025	<0.00020
11/5/2025	<0.00020
Pow Road	
Date	Result (mg/L)
1/21/2025	<0.00020
4/7/2025	<0.00020
11/5/2025	<0.00020

Disinfection Byproducts – THM and HAA

THM results are shown separately for two different source waters supplying the Beaver Lake system. Quarterly Annual average for Beaver Lake source was slightly above the guidelines though system is on a water quality advisory year-round. Quarterly annual average when using Okanagan Lake Source is below the guidelines.

Vernon Creek System (Beaver Lake Source) THM guideline <0.100mg/L	
Cooney Drain	
Date	TTHM (as CHCL3) mg/L
6/16/2025	0.126
8/22/2025	0.172
10/1/2025	0.15
Quarterly Site Annual Average	
	0.149
Pow Rd PRV	
Date	TTHM (as CHCL3) mg/L
6/16/2025	0.119
8/22/2025	0.145
10/1/2025	0.143
Quarterly Site Annual Average	
	0.136

Vernon Creek System (Okanagan Lake Source) THM guideline <0.100mg/L	
Cooney Drain	
Date	TTHM (as CHCL3) mg/L
1/21/2025	0.1
4/7/2025	0.106
11/5/2025	0.108
Quarterly Site Annual Average	
	0.105
Pow Rd PRV	
Date	TTHM (as CHCL3) mg/L
1/21/2025	0.063
4/7/2025	0.08
11/5/2025	0.084
Quarterly Site Annual Average	
	0.076
Total Quarterly Annual Average*	
	0.062

*Average of all Okanagan Lake source samples

HAA results are shown separately for two different source waters supplying the Beaver Lake system. Quarterly Annual average for Beaver Lake source was slightly above the guidelines though system is on a water quality advisory year-round. Quarterly annual average when using Okanagan Lake Source is below the guidelines.

Vernon Creek System (Beaver Lake Source) HAA guideline <0.080 mg/L	
Cooney Drain	
	HAA5
Date	mg/L
6/16/2025	0.229
8/22/2025	0.169
10/1/2025	0.21
Quarterly Site Annual Average 0.203	
Pow Rd PRV	
	HAA5
Date	mg/L
6/16/2025	0.184
8/22/2025	0.212
10/1/2025	0.184
Quarterly Site Annual Average 0.193	
Total Quarterly Annual Average 0.198	

Vernon Creek System (Okanagan Lake Source) HAA guideline <0.080 mg/L	
Cooney Drain	
	HAA5
Date	mg/L
1/21/2025	0.0593
4/7/2025	0.0621
11/5/2025	0.0942
Quarterly Site Annual Average 0.072	
Pow Rd PRV	
	HAA5
Date	mg/L
1/21/2025	0.041
4/7/2025	0.045
11/5/2025	0.0622
Quarterly Site Annual Average 0.049	
Total Quarterly Annual Average* 0.041	

Appendix F: Okanagan Lake System

Raw Water Chemistry

2025 Annual Raw Water Chemistry showing minimum, maximum and averages.

Okanagan Lake Source: Okanagan Intake										
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO ₃	Turbidity NTU	Temp Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100mL	% of samples Less than 10 E.coli/100mL (N=52) %	UV Transmittance @ 254 nm unfiltered %
MIN	140	0.25	5.10	7.8	265	<5	<1	<1	100	85
MAX	140	0.93	11.50	8.5	297	<5	16	<1		87
AVG	140	0.40	7.07	8.0	278	5	52	Sampl es		86
WQ Guidelines			15	7.0-10.5			<1	<1		
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC		

Okanagan Lake Raw Monthly Max Table showing maximum monthly results for water chemistry.

PARAMETER		UNITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	
OKANAGAN LAKE	TOC	mg/L	4.90	4.32	3.74	4.30	4.40	5.08	4.17	3.71	4.22	5.04	5.11	4.44	
	DOC	mg/L	4.80	4.30	4.21	4.19	4.04	4.84	3.85	3.67	4.16	4.53	4.88	4.30	
	UVT	/cm ⁻¹	85.30	86.60	86.50	86.50	87.10	86.80	87.10	86.90	86.90	84.60	86.40	86.70	
	TURBIDITY	NTU	0.42	0.34	0.42	0.50	0.72	0.45	0.93	0.37	0.44	0.57	0.48	0.33	
	TSS	mg/L	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.8	2.2	<1.8
	TRU	Co-Pt	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	TOTAL COLIFORMS	MPN/100mL	3.00	1.00	3.00	10.00	1.00	13.00	6.00	4.00	5.00	16.00	5.00	2.00	
	E. COLI	MPN/100mL	<1	<1	1	1	<1	<1	<1	1	1	1	<1	<1	

Lead

Lead results for Okanagan Lake System

Okanagan Lake System	
Okanagan Lake Raw	
Date	Result (mg/L)
4/7/2025	<0.00020
Glenmore Booster	
Date	Result (mg/L)
1/21/2025	<0.00020
4/10/2025	<0.00020
8/13/2025	<0.00020
Lake Upper Reservoir	
Date	Result (mg/L)
1/21/2025	0.0003
4/7/2025	0.00025
8/13/2025	0.0005
11/5/2025	0.0007

Disinfection Byproducts – THM and HAA

THM results for Okanagan Lake System. Quarterly Annual average is below the guidelines.

Okanagan Lake Source THM guideline <0.100 mg/L	
Glenmore Booster	
	TTHM (as CHCL3)
Date	mg/L
1/21/2025	0.033
4/7/2025	0.0556
8/13/2025	0.0446
Quarterly Site Annual Average	0.044
Lake Upper Reservoir	
	TTHM (as CHCL3)
Date	mg/L
1/21/2025	0.0754
4/7/2025	0.0916
8/13/2025	0.0804
11/5/2025	0.096
Quarterly Site Annual Average	0.086
Total Quarterly Annual Average	0.065

HAA results for Okanagan Lake System. Quarterly Annual Average is below the guidelines.

Okanagan Lake Source HAA guideline <0.080 mg/L	
Glenmore Booster	
	HAA5
Date	mg/L
1/21/2025	0.0225
4/7/2025	0.0376
8/13/2025	0.0246
Quarterly Site Annual Average	0.028
Lake Upper Reservoir	
	HAA5
Date	mg/L
1/21/2025	0.0556
4/7/2025	0.0584
8/13/2025	0.0454
11/5/2025	0.0588
Quarterly Site Annual Average	0.055
Total Quarterly Annual Average	0.041

Appendix G: Kalamalka Lake System

Raw Water Chemistry

2025 Annual Raw Water Chemistry showing minimum, maximum and averages.

Kalamalka Lake Source: Kalamalka Intake										
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO3	Turbidity NTU	Temp Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100mL	% of samples Less than 10 E.coli/100 mL (N=53) %	UV Transmittance @ 254 nm unfiltered %
MIN	180	0.33	4	7.6	378	2	<1	<1	100	90
MAX	260	2.43	12	8.5	446	5	44	3		93
AVG	207	0.89	8	8.2	397	5	53 Samples			91
WQ Guidelines			15	7.0-10.5			<1	<1		
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC		

Kalamalka Lake Raw Monthly Max Table showing maximum monthly results for water chemistry.

	PARAMETER	UNITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
KALAMALKA LAKE	TOC	mg/L	4.17	4.79	4.09	4.20	4.58	4.01	4.04	4.04	3.75	3.96	5.75	4.13
	DOC	mg/L	4.31	4.17	3.65	3.70	4.38	3.96	3.78	3.69	3.63	3.83	4.10	3.76
	UVT	/cm ⁻¹	90.6	90.8	90.3	90.3	90.8	91.3	90.5	91.7	92.7	91.6	90.5	91.8
	TURBIDITY	NTU	0.37	0.41	0.62	0.53	1.16	0.97	1.90	2.43	1.90	2.00	0.53	0.59
	TSS	mg/L	2.0	2.0	2.0	2.1	2.0		2.0	2.2	2.0	2.4	2.2	1.8
	TRU	Co-Pt	<5	<5	<5	<5	<5	2	5	<5	<5	<5	<5	<5
	TOTAL COLIFORMS	MPN/100mL	1	1	2	1	2	44	44	1	16	38	5	4
	E. COLI	MPN/100mL	1	1	1	1	1	1	1	1	1	1	1	3

Lead

Lead results for Okanagan Lake System

Kalamalka Lake System	
Kal Lake Intake RAW	
Date	Result (mg/L)
1/22/2025	<0.00020
4/9/2025	<0.00020
8/12/2025	<0.00020
11/6/2025	<0.00020
Sheldon/Cornwall	
Date	Result (mg/L)
1/22/2025	0.00026
4/9/2025	<0.00020
8/12/2025	0.00033
11/6/2025	0.00021

Disinfection Byproducts – THM and HAA

THM results for Kalamalka Lake System. Quarterly Annual average is below the guidelines.

Kalamalka Lake Source THM guideline <0.100 mg/L	
Sheldon/Cornwall	
Date	TTHM (as CHCL3) mg/L
1/22/2025	0.0569
4/9/2025	0.0536
8/12/2025	0.0444
11/6/2025	0.064
Quarterly Site Annual Average	0.055

HAA results for Kalamalka Lake System. Quarterly Annual Average is below the guidelines.

Kalamalka Lake Source HAA guideline <0.080 mg/L	
Sheldon/Cornwall	
Date	HAA5 mg/L
1/22/2025	0.0343
4/9/2025	0.0354
8/12/2025	0.024
11/6/2025	0.0426
Quarterly Site Annual Average	0.034

Appendix H: Oyama Creek System

Raw Water Chemistry

2025 Annual Raw Water Chemistry showing minimum, maximum and averages.

Oyama Lake Source: Oyama Creek Intake									
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO3	Turbidity NTU	Temp Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100mL	% of samples Less than 10 E.coli/100mL (N=23) %
MIN	40	0.65	8	7.2	47	26	53	2	35
MAX	40	2.80	17	8.5	62	49	7,890	71	
AVG	40	1.47	13	7.5	52	34	23 Samples		
WQ Guidelines			15	7.0-10.5			<1	<1	
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC	

Oyama Lake Raw Monthly Max Table showing maximum monthly results for water chemistry.

Note: Months without data, Oyama Lake system was being supplied with Kalamalka Lake source

PARAMETER		UNITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
OYAMA LAKE	TOC	mg/L					13.00	9.68	9.39	9.09	8.75	8.64		
	DOC	mg/L					12.90	9.61	9.10	8.61	8.65	8.43		
	TURBIDITY	NTU					0.99	1.34	2.80	2.01	2.11	1.03		
	TSS	mg/L					2.0	2.4	5.8	2.4	3.0	3.4		
	TRU	Co-Pt					49	40	35	29	26	27		
	TOTAL COLIFORMS	MPN/100mL					1	1	1	1	1	1		
	E. COLI	MPN/100mL					22	10	71	50	29	6		

Lead

Lead results shown separately for two different source waters supplying the Oyama Lake system.

Oyama Creek System (Oyama Lake Source)	
Oyama Creek Intake RAW	
Date	Result (mg/L)
6/17/2025	<0.00020
8/12/2025	<0.00020
10/3/2025	<0.00020
Ribbleworth Drain	
Date	Result (mg/L)
1/22/2025	0.00025
6/17/2025	0.00038
8/12/2025	0.00054

Oyama Creek System (Kalamalka Lake Source)	
Ribbleworth Drain	
Date	Result (mg/L)
4/9/2025	<0.00020
11/6/2025	0.00021

10/3/2025	0.00058

Disinfection Byproducts – THM and HAA

THM results are presented separately for the two source waters supplying the Oyama Lake system. The quarterly annual average for the Oyama Lake source was slightly above the guideline; however, this source remains under a water quality advisory year-round. In contrast, the quarterly annual average when using the Kalamalka Lake source was below the guideline. As a result, the combined annual average THM concentration for residents on the Oyama Creek system remains below the Canadian Drinking Water Guidelines.

Oyama Creek System (Oyama Lake Source) THM guideline <0.100 mg/L	
Ribbleworth Drain	
	TTHM (as CHCL3)
Date	mg/L
4/9/2025	0.0642
6/17/2025	0.123
8/12/2025	0.161
10/3/2025	0.138
Quarterly Site Annual Average	0.122

Oyama Creek System (Kalamalka Lake Source) THM guideline <0.100 mg/L	
Ribbleworth Drain	
	TTHM (as CHCL3)
Date	mg/L
1/22/2025	0.0431
4/9/2025	0.0642
11/6/2025	0.0752
Quarterly Site Annual Average	0.061
Total Quarterly Annual Average*	0.058

*Average of all Kalamalka Lake source samples

HAA results are presented separately for the two source waters supplying the Oyama Lake system. The quarterly annual average for the Oyama Lake source was slightly above the guideline; however, this source remains under a water quality advisory year-round. In contrast, the quarterly annual average when using the Kalamalka Lake source was below the guideline.

Oyama Creek System (Oyama Lake Source) HAA guideline <0.080 mg/L	
Ribbleworth Drain	
	HAA5
Date	mg/L
6/17/2025	0.194
8/12/2025	0.072
10/3/2025	0.204
Quarterly Site Annual Average	0.157

Oyama Creek System (Kalamalka Lake Source) HAA guideline <0.080 mg/L	
Ribbleworth Drain	
	HAA5
Date	mg/L
1/22/2025	0.0236
4/9/2025	0.0498
11/6/2025	0.0392
Quarterly Site Annual Average	0.038
Total Quarterly Annual Average*	0.036

*Average of all Kalamalka Lake source samples

Appendix I: Lake Pine System

Raw Water Chemistry

2025 Lake Pine System Raw Water Chemistry Table showing minimum, maximum and averages

Okanagan Lake Source: Lake Pine Intake										
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO3	Turbidity NTU	Temp Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100mL	% of samples Less than 10 E.coli/100mL (N=52) %	UV Transmittance @ 254 nm unfiltered %
MIN	180	0.20	7	7.6	27	<5	<1	<1	100	86
MAX	180	0.87	16	8.5	420	<5	435	2		88
AVG	180	0.40	11	8.0	282	5	52 Samples			87
WQ Guidelines			15	7.0-10.5			<1	<1		
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC		

Lake Pine System Raw Monthly Max Table showing maximum monthly results for water chemistry

PARAMETER		UNITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
LAKE PINE (OKANAGAN LAKE)	TOC	mg/L	3.91	4.02	4.60	4.48	4.62	5.04	4.37	3.66	4.07	4.11	4.12	4.59
	DOC	mg/L	5.45	5.80	3.89	4.49	4.33	4.96	3.82	4.35	3.96	3.93	3.92	4.01
	UVT	/cm^-1	86.5	86.6	86.5	86.1		86.4	86.5	86.6	86.7	87.8	87.5	86.7
	TURBIDITY	NTU	0.31	0.52	0.34	0.50	0.55	0.49	0.87	0.83	0.51	0.34	0.34	0.48
	TSS	mg/L	2.0	2.0	2.0	4.0	2.8	3.3	2.0	2.6	5.6	2.2	1.8	1.8
	TRU	Co-Pt	5	5	5	5	5	5	5	5	5	5	5	5
	TOTAL COLIFORMS	MPN/100mL	1	1	1	1	1	1	1	1	1	1	1	1
	E. COLI	MPN/100mL	1	1	1	1	1	1	1	2	1	1	1	1

Lead

Lead results for Lake Pine System

Lake Pine System (Okanagan Lake)	
LP Intake RAW	
Date	Result (mg/L)
1/23/2025	0.00028

4/8/2025	0.00023
8/11/2025	0.00166
11/4/2025	0.00046
LP PR Station	
Date	Result (mg/L)
1/23/2025	<0.00020
4/8/2025	<0.00020
8/11/2025	<0.00020
11/4/2025	<0.00020

Disinfection Byproducts – THM and HAA

THM results for Lake Pine System. Quarterly Annual Average is below the guidelines.

Lake Pine (Okanagan Lake) THM guideline <0.100 mg/L	
LP PR Station	
	TTHM (as CHCL3)
Date	mg/L
1/23/2025	0.094
4/8/2025	0.086
8/11/2025	0.097
11/4/2025	0.091
Total Quarterly Annual Average	0.092

HAA results for Lake Pine System. Quarterly Annual Average is below the guidelines.

Lake Pine (Okanagan Lake) HAA guideline <0.080 mg/L	
LP PR Station	
	HAA5
Date	mg/L
1/23/2025	0.0863
4/8/2025	0.0565
8/11/2025	0.0526
11/4/2025	0.0554
Total Quarterly Annual Average	0.063

Appendix J: Coral Beach System

Raw Water Chemistry

2025 Annual Raw Water Chemistry showing minimum, maximum and averages.

Okanagan Lake Source: Coral Beach Intake										
Weekly sampling & online water quality equipment verification	Hardness mg/L As CaCO3	Turbidity NTU	Temp p Deg C	pH	Conductivity uS/cm	True Color TCU	Total Coliforms CFU/100mL	E. coli CFU/100mL	% of samples Less than 10 E.coli/100mL (N=51) %	UV Transmittance @ 254 nm unfiltered %
MIN	140	0.23	5	7.3	267	<5	<1	<1	100	86
MAX	180	0.88	15	8.5	301	<5	12	<4		88
AVG	160	0.48	9	8.1	279	5	51 Samples			87
WQ Guidelines			15	7.0-10.5			<1	<1		
Aesthetic Objective (AO) Maximum Allowable Concentration (MAC)	Acceptable	1 (max) ≤5 NTU AO	AO	OG			MAC	MAC		

Coral Beach System Raw Monthly Max Table showing maximum monthly results for water chemistry

	PARAMETER	UNITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
CORAL BEACH (OKANAGAN LAKE)	TOC	mg/L	4.78	4.83	3.89	3.88	4.31	5.29	4.05	4.33	4.06	4.08	4.42	4.38
	DOC	mg/L	4.06	4.15	6.04	3.87	4.26	4.24	3.79	3.65	4.05	3.90	4.00	4.07
	UVT	/cm ⁻¹	86.4	86.9	86.6	87.7	87.3	87.0	88.2	86.9	88.3	87.5	86.7	86.8
	TURBIDITY	NTU	0.34	0.32	0.46	0.66	0.88	0.64	0.70	0.71	0.85	0.48	0.49	0.69
	TSS	mg/L	2.0	2.0	2.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8
	TRU	Co-Pt	5	5	5	5	5	5	5	5	5	5	5	5
	TOTAL COLIFORMS	MPN/100mL	1	1	1	1	1	1	1	1	1	1	1	1
	E. COLI	MPN/100mL	1	1	1	2	1	1	1	1	1	1	4	1

Lead

Lead results for Coral Beach System

Coral Beach System (Okanagan Lake)	
DBP - Intake Raw	
Date	Result (mg/L)
1/23/2025	<0.00020
4/8/2025	<0.00020
8/11/2025	<0.00020
11/4/2025	<0.00020
South End	
Date	Result (mg/L)
1/23/2025	<0.00020
4/8/2025	<0.00020
8/11/2025	0.00026
11/4/2025	<0.00020

Disinfection Byproducts – THM and HAA

THM results for Coral Beach System. Quarterly Annual Average is below the guidelines.

Coral Beach (Okanagan Lake) THM guideline <0.100 mg/L	
South End	
	TTHM (as CHCL3)
Date	mg/L
1/23/2025	0.059
4/8/2025	0.078
8/11/2025	0.052
11/4/2025	0.082
Total Quarterly Annual Average	0.068

HAA results for Coral Beach System. Quarterly Annual Average is below the guidelines.

Coral Beach (Okanagan Lake) HAA guideline <0.080 mg/L	
South End	
	HAA5
Date	mg/L
1/23/2025	0.0398
4/8/2025	0.0453
8/11/2025	0.0331
11/4/2025	0.0461
Quarterly Site Annual Average	0.041

Appendix K: Summary of Positive Bacteriological Results in Distribution

This section summarizes bacteriological sampling results, including the number and type of samples collected for each water source, as well as the locations and dates where positive results were identified. In 2025, this applied to six samples collected from the Beaver Lake, Okanagan Lake, Kalamalka Lake, and Oyama Lake sources. Where total coliforms were detected at a concentration of 1 CFU/100 mL, E. coli was consistently below 1 CFU/100 mL. No positive bacteriological results were identified within the distribution systems for Coral Beach and Lake Pine during 2025.

Lake Country Water System & Source	Total Coliforms CFU/100mL	E. Coli CFU/100mL	Presence Absence (Total Coliforms)	Presence Absence (E. Coli)	Number of TC/E.coli Samples	Number of P/A Samples
Beaver Lake Source (WQA)	Positive Total Coliforms: All E. coli non-detect				20	19
<i>Long Road- October 6</i>	1	<1				
Okanagan Lake Source	Positive Total Coliforms: All E. coli non-detect				111	61
<i>McCoubrey- May 9</i>	1	<1				
<i>NightHawk- May 13</i>	1	<1				
<i>Camp Road- May 13</i>	1	<1				
Kalamalka Lake Source	Positive Total Coliforms: All E. coli non-detect				62	47
<i>Kalamalka Pumphouse- October 7</i>	1	<1				
Oyama Lake Source (WQA)	Positive Total Coliforms: All E. coli non-detect				21	17
<i>Oyama Creek Reservoir- October 7</i>	1	<1				
Coral Beach (Okanagan Lake Source)	All Total Coliforms and E. coli non-detect				53	31
Lake Pine (Okanagan Lake Source)	All Total Coliforms and E. coli non-detect				52	28
				Total:	319	203

Appendix L: Sample Sites Per System

Beaver Lake System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	Bact/Water Chemistry	Free Cl2/NTU when required	Frost Free Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Vernon Creek Intake RAW "VCK RAW"	Beaver Lk			x									x				
Eldorado RAW	Beaver Lk			x			x		x								
Eldorado Balancing Reservoir	Beaver Lk			x			x				x						
Eldorado Reservoir chlorination facility (reservoir inlet & outlet)	Beaver Lk						x				x		x	x			
Beacon Hill "Beacon"	Beaver Lk			x							x						x
Camp Road Works Yard "Camp Rd"	Beaver Lk			x												x	
Camp Rd shop inside building	Beaver Lk			x						x						x	
Camp Rd Reservoir (off line)	Beaver Lk			x	x						x					x	
Chase Rd future "CHASE"	Beaver Lk			x	x						x						
Cooney Drain	Beaver Lk	x	x	x								x					x
6th street "6th St."	Beaver Lk			x	x						x					x	
Glenmore Booster Station "GM - VCK"	Beaver Lk			x			x				x				x		
Lakestone Beacon Hill PRV "Beacon"	Beaver Lk			x							x						
Hare Road PRV "Hare PRV"	Beaver Lk			x							x						
Long	Beaver Lk			x				x									x
McCraith	Beaver Lk			x		x											x
Monte Carlo	Beaver Lk			x				x								x	
Nighthawk	Beaver Lk			x		x											x
North View/Chase "Northview"	Beaver Lk			x				x									x
Nygren	Beaver Lk			x				x									x
Pow Rd PRV Stn "POW"	Beaver Lk	x	x	x								x				x	
Williams	Beaver Lk			x		x		x									x

Okanagan Lake System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	Bact/Water Chemistry	Free Cl2/NTU when required	Frost Free Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Ok Lk Intake RAW "OK RAW"	Ok Lk			x							x		x				
Ok Lk Pump Stn/chlorination facility	Ok Lk						x				x		x	x			
UV Treatment Facility	Ok Lk						x										
Arena	Ok Lk																
Copper Hill	Ok Lk			x				x									x
Glenmore Booster Station	Ok Lk		x	x			x				x				x		
Jardine	Ok Lk			x						x						x	
Lakes Lower Reservoir (cell 1)	Ok Lk			x			x				x					x	
Lakes Upper Reservoir	Ok Lk	x	x	x					x								
Lakes Upper Zone (Shoreline Park)	Ok Lk			x													
Lake Stone Benchlands	Ok Lk			x				x									x
McCoubrey	Ok Lk			x				x								x	
McGowan	Ok Lk			x				x								x	
Roberts Road PRV	Ok Lk			x												x	
Oceola PRV	Ok Lk			x							x						x
Ponderosa	Ok Lk			x				x								x	
Ottley Rd (off Stubbs)	Ok Lk			x				x							x		
Ponderosa PRV stn	Ok Lk			x							x					x	
Woodsdale Lift Stn	Ok Lk			x		x											x

Kalamalka Lake System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	BacT/Water Chemistry	Free Cl ₂ /NTU when required	Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Kal Lk Intake RAW "KAL RAW"	Kal			X							X		X				
Irvine B-2 Reservoir	Kal				X				X							X	
Cornwall/ Sheldon "CORNWALL"	Kal	X	X	X				X								X	
Evans	Kal			X				X									X
Kal Pump Stn "KAL PUMP STN"	Kal			X			X				X			X	X		
Sawmill pump station	Kal			X							X					X	
Oyama Creek Chlorination Facility (distribution water from Kal Source i.e. oct - aprilish (Sawmill) to Oyama reservoir) "OY RES KAL"	Kal						X						X	X			

Oyama Creek System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	BacT/Water Chemistry	Free Cl ₂ /NTU when required	Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Oyama Creek Intake RAW "OYCK RAW"	Oyama Lk			X									X				
Easthill	Oyama Lk	X	X	X		X		X								X	
Oyama Rd S "OYS"	Oyama Lk	X		X				X									X
Oyama Lk/Hayton Rd	Oyama Lk				X												X
Todd Rd	Oyama Lk			X		X										X	
Oyama Reservoir "OY RES"	Oyama Lk			X							X			X			
Oyama Creek intake/Chlorination Facility - Chlorinator post reservoir "Oyama Res"	Oyama Lk						X						X	X			
Ribbleworth	Oyama Lk			X				X								X	
5410 Todd Rd. (Oyama: First customer Fall (Sawmill online: Kal) could be either from Sawmill or from reservoir	Oyama Lk			X							X				X	X	X

Lake Pine System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	BacT/Water Chemistry	Free Cl ₂ /NTU when required	Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Lake Pine Intake RAW "LP RAW"	LP Ok Lk			X					X								
Lake Pine chlorination facility	LP Ok Lk		X				X				X			X	X		
Lake Pine Booster/Lower Res "LP PH"	LP Ok Lk		X	X			X				X			X	X		
Lake Pine Lower Zone Eclipse 88	LP Ok Lk		X	X				X								X	
Lake Pine PR Stn. "LP PR STN"	LP Ok Lk	X		X													X
Lake Pine Upper Reservoir "LP UP RES"	LP Ok Lk			X							X					X	

Coral Beach System

MATRIX: Water Quality Sampling Sites, Criteria, Purpose, Type of sample Station	Source	THM	HAA	BacT/Water Chemistry	Free Cl ₂ /NTU when required	Yard Hydrant	Online WQ equipment verification	Eclipse #88	Hose bib	Sink	Stainless port	Galvanised pipe	Continuous run	Point of Disinfection	First Customer	Intermediary	End of line
Coral Beach Intake RAW "CB RAW"	CB Ok Lk			X			X						X				
Coral Beach Pump Stn	CB Ok Lk						X				X			X	X		
Coral Beach Pump Stn (distrib sample site) "CB - pump stn"	CB Ok Lk			X					X					X	X		
Coral Beach South End "CB - S-END"	CB Ok Lk	X	X	X		X											X