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REPORT TO LYALL HARBOUR BOOT COVE WATER LOCAL SERVICE COMMITTEE MEETING OF JUNE 18, 2026

SUBJECT **Capital Projects and Operational Update – Mid Year**

ISSUE SUMMARY

To provide the Lyall Harbour/Boot Cove (LHBC) Water Local Service Committee with capital project status reports and operational updates.

BACKGROUND

The LHBC Water System is located on the west side of Saturna Island in the Southern Gulf Islands Electoral Area and provides drinking water to approximately 166 single family equivalents. Capital Regional District (CRD) Infrastructure and Water Services is responsible for the overall operation of the water system with day-to-day operation, maintenance, design, and construction of water system facilities provided by the CRD Infrastructure Planning and Engineering, and Infrastructure Water Operations divisions. The quality of drinking water provided to customers in the LH/BC Water System is overseen by the CRD Water Quality division.

CAPITAL PROJECT UPDATE

Multiple necessary projects, including dam improvements and a ground water well suitability study, are deemed essential for the water service but Capital Reserves were insufficient to cover the capital costs. An Alternative Approval (Petition) Process was conducted in 2025 to seek loan authorization and approval to utilize debt to fund necessary capital upgrades for the water service.

- CRD re-engaged Thurber Engineering and a Civil Engineering sub-consultant to further progress updating the design, quantities, and cost estimate for the dam improvements project (22-02) to better inform debt funding requirements for a single petition in 2025.
- A petition process was undertaken in the second and third quarter (Q2/Q3) of 2025 and was successful. The maximum debt authorized is \$2,000,000.
- The Loan Authorization Bylaw was approved by the Province in late April 2026 and by the CRD Board in May 2026. Staff are proceeding with debt funded works in 2026, as follows:

Debt Funded Projects:

Project Number	Capital Project Title
19-01	Air Valve Replacement – Phase 2
19-03	Standpipe and Valve Replacement
19-05	Autoflush Installation
20-02	Raw Water Turbidity Meter
22-01	Install Larger Supply Line to Tank
22-02	Dam Improvement and Regulatory Requirements
25-01	New Groundwater Well Assessment
27-01	Groundwater Well Improvements
26-01	Storage Tank Condition Assessment and Repair Details

22-02 | Dam Improvements & Regulatory Requirements

Total Project Budget: \$890,000

Project Description: Seismic reinforcement of Money Lake Dam based upon the 2011 Dam Safety Review (DSR), subsequent site investigations, and seismic assessment. Includes seepage pit construction and 2022 Dam Safety Review Audit.

Project Rationale: This is a continuation of project 18-03 for seismic reinforcement of the Money Lake Dam. Funds are required to retain a contractor to undertake the works and retain a consultant to conduct the dam safety review.

Project Update and Milestones: Design work for the filter blanket and pipe upgrades has progressed over the reporting period in support of obtaining the required permits from provincial regulators for the proposed work.

Permitting is anticipated to be completed in Q3 2026. Construction activities are planned for Q3 2027, aligned with seasonal low reservoir levels to facilitate safe and efficient implementation of the works.

Milestone	Completion Date
Community Works Funds Approval	October 10, 2021
Consultant Contract Award	July 27, 2022
Consultant field investigation	August 31, 2022
Draft Dam Safety Review submission and CRD review meeting	January 27, 2023
Dam Safety Review Report - Final	March 15, 2023
Toe Filter Design Memo	March 27, 2023
Seismic Stability Assessment	April 21, 2023
Growing Communities Fund Grant Application – Not Approved	September 13, 2023
Action Planning Memo to address DSR items presented to Commission	June 27, 2024
50% design submission for filter blanket and pipe upgrades submitted for review	Q1 2025
Petition for loan authorization	Q3 2025
Grant application of \$375 000 to the Disaster Resilience and Innovation Funding (DRIF) for replacement of the filter blanket at Money Lake Dam No. 1	Q2 2026 (Approval pending)
Loan Authorization Bylaw Approved	Q2 2026
90% design submission for filter blanket and pipe upgrades, along with Draft Interim Dam Safety Risk Management Plan, Draft Project-Specific Risk Assessment and Draft Instrumentation Record.	Q2 2026
Receive permits from Provincial Dam Safety Office to undertake filter blanket and pipe upgrade work.	Q3 2026 (Forecasted)
Planned construction activities when reservoir levels are naturally drawn down to seasonal lows.	Q3 2027 (Forecasted)

24-01 | Culvert Replacement for the Water Service

Total Project Budget: \$30, 000

Project Description: The Ministry of Transportation and Transit (MoTT) is undertaking culvert replacement work on Harris Road. As part of this coordinated effort, the Capital Regional District (CRD) is providing a financial contribution toward a portion of the culvert installation related to water service infrastructure.

Project Rationale: Installation of a new 1400 mm culvert was required to support adequate drainage conveyance across Harris Road and ensure long-term infrastructure reliability.

Project Update and Milestones: The majority of construction was completed by MoTT in January 2026. Remaining minor works are anticipated to be finalized later in 2026.

25-01 | New Ground Water Well Assessment

Total Project Budget: \$100, 000

Project Description: Complete a groundwater well assessment for an existing well that could potentially be used to supplement the water service. This project will conduct groundwater quality and quantity testing to help support future decision making.

Project Rationale: CRD have recently entered into an agreement that could permit use of an existing water well on private property. This assessment is justified by the potential this source could have in supplementing the existing water supply and to compare its water quality and quantity to the surface water source.

Project Update and Milestones: Loan authorization is in place to support spending on this project. CRD staff pre-emptively obtained a quote for the hydrogeological assessment work and will draft a contract that can now be executed. Testing scheduled for Fall of 2026.

26-01 | Storage Tank Condition Assessment and Repair Details

Total Project Budget: \$100, 000

Project Description: Assessment of existing leaks in the storage tank and development of a repair design to address identified deficiencies.

Project Rationale: Previous repair efforts have not resolved the ongoing leaks. A comprehensive condition assessment is required to better understand the underlying issues and inform a durable, long-term repair solution.

Project Update and Milestones: Loan authorization is in place. Detailed assessment and repair work can now proceed.

OPERATIONAL UPDATE

This is an operational update for the reporting period January through May 2026.

- Assistance with the Harris Road culvert replacement. Existing water lines required adjusting to accommodate the new culvert.
- Emergency repairs of the UV unit A. The UV sensor failed, requiring replacement.
- Corrective maintenance Narvaeze Pressure Control Station. Nonfunctioning isolation valves required replacement.
- Emergency response to a high turbidity alarm at the water treatment plant. The high turbidity incident was a short duration event requiring water treatment plant shut down overnight. This turbidity event coincided with a wet weather storm that impacted raw water quality.
- Preventative maintenance completed on the raw water supply system included the cleaning of the raw water surge tank in preparation for the increased summer flows.
- 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.
- On island operator continued to monitor the leaking water storage tank as part of ongoing weekly standing maintenance. The leak has not increased since first identified over a year ago.

RECOMMENDATION

There is no recommendation. This report is for information only.

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