

REPORT TO LYALL HARBOUR/BOOT COVE WATER LOCAL SERVICE COMMITTEE MEETING OF TUESDAY, JUNE 10, 2025

SUBJECT **Capital Projects and Operational Update – June 2025**

ISSUE SUMMARY

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

BACKGROUND

The Lyall Harbour/Boot Cove 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 Lyall Harbour / Boot Cove Water System is overseen by the CRD Water Quality division.

CAPITAL PROJECT UPDATE

19-04 | Alternative Approval / Petition Process

Project Description: Conduct public consultation and complete an Alternative Approval Process (AAP) or petition to assess public willingness to utilize debt to fund necessary capital upgrades for the water service.

Project Rationale: Multiple projects, including dam improvements and a future ground well suitability study is deemed necessary for the water service and Capital Reserves are insufficient to cover the capital costs.

With several unsuccessful grant funding attempts, an AAP or petition is proposed to obtain approval to take on debt to fund projects that are critical for the water service.

Project Update and Milestones:

- The AAP process has not progressed, however, following the November 20, 2023 budget meeting, it was agreed that staff would initiate the process once some certainty around obtaining use of a well on private land was clear so that this potential water source could be factored into the future planning.
- Progress was made in 2024 regarding access to the private well. CRD has 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) before CRD proceeds to consolidate all the works expected to require debt funding into a single AAP or petition, which is still targeted to commence in 2025.

- Separate staff report proposed outlining staff recommendation for obtaining public approval to secure debt funding.

22-02 | Dam Improvements & Regulatory Requirements

Project Description: Seismic reinforcement of Money Lake Dam based upon the 2016 Dam Safety Review (DSR). Includes seepage pit construction and Dam Safety Review.

Project Rationale: This is a continuation of project 18-03, where seismic reinforcement of the Money Lake Dam will commence. 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:

- Community Works Funds (CWF) were approved in 2021 for design work to start in 2022.
- Consultants engaged for DSR, design and construction services.
- Geotechnical Engineer (Thurber) has conducted more detailed 3D analysis of the dam to better assess seismic risks and are reviewing the results and recommendations with CRD.
- Geotechnical Engineer (Thurber) has drafted a downstream toe filter design memo to summarize recommendations.
- Assessment of constructability of recommendations resulted in concerns over funding availability to perform the complete works. CRD submitted an internal Growing Communities Fund (GCF) grant application for additional funding (in combination with works to develop a future well). At its September 13, 2023 meeting the CRD Board determined this grant to be unsuccessful.
- CRD will continue to pursue other grant opportunities but in the absence of grant funding, debt will need to be secured to carry out this work, as well as future additional work identified within the DSR.
- CRD's 2024 Action Planning memo was provided to commission for information.
- CRD working with Thurber in Q4 2024 into Q1 2025 to further develop the filter blanket design and pipe upgrades so that details are further advanced before proceeding to AAP or petition.

Milestone	Completion Date
CWF 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	Jan 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 & pipe upgrades submitted for review.	Q1 2025

OPERATIONAL UPDATE

This is an operational update reporting period from February through April 2025.

- Chlorine chemical metering feed pump troubleshooting and corrective maintenance completed.
- Emergency response to several power outages requiring 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 hazardous tree near the East Point Pressure Regulating Station to address risk to the water system.
- 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.
- Replacement of the water treatment plant filtration media was completed during this reporting period. continued. Filtration media sourcing challenges has resulted in procurement and expenses to be completed in the first quarter of 2025.

RECOMMENDATION

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

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