

**REPORT TO REGIONAL PARKS COMMITTEE  
MEETING OF WEDNESDAY, JANUARY 26, 2022**

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**SUBJECT Elk/Beaver Lake Remediation – Project Update**

**ISSUE SUMMARY**

To provide an update on the Elk/Beaver Lake Remediation Project to the committee.

**BACKGROUND**

Water quality issues at Elk and Beaver Lake were identified in the 1980s and studies indicate that high phosphorous loading has had a significant impact on the environmental and recreational values of the lake system.

In May 2019, a preliminary design to address the issue for both lakes was estimated to be \$1.4 million. In March 2021, the CRD was awarded a provincial grant of \$750,000 from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, with a completion date of March 31, 2022.

Following a Request for Proposals process, a detailed design contract was signed in July 2021 with Arcadis Canada Inc., which has a technical expert on the design team with vast experience in this specialized field. A design memo was received in November 2021 that recommended a more cost effective technology solution; however, more comprehensive sampling was also necessary to complete the design. This additional sampling work is underway and expected to be completed by the end of February.

Arcadis identified that the current plan to install treatment systems simultaneously in both Elk and Beaver lakes is not the recommended approach. The oxygen deficiency of Beaver Lake has been found to be just 5% of that for Elk Lake. As Elk Lake and Beaver Lake are connected water bodies, it is anticipated that an oxygenation system installed in Elk Lake may have a positive impact on Beaver Lake. As a result, the size of the Beaver Lake remediation system could be reduced if it were to be designed following installation and operation of the Elk Lake system.

The project is approximately three months behind the original schedule due to the availability of the consultants and the additional sampling that has been required. Based on current progress, the timelines to acquire the required permits and to procure the supply and installation of the equipment cannot be completed by the grant deadline of March 2022.

**IMPLICATIONS**

*Financial Implications*

The design consultant has indicated that the existing budget is not sufficient to cover the cost of a system for Elk Lake and a system for Beaver Lake. The project will proceed with a focus on Elk Lake within the existing project budget, and when the Elk Lake system is fully evaluated, staff will work with consultants to determine the most appropriate solution for Beaver Lake. Additional funding for this second phase will be identified at that time.

## **CONCLUSION**

The Elk/Beaver Lake remediation project is approximately three months behind the original schedule. A 12-month extension of the Ministry of Forest, Lands, Natural Resource Operations and Rural Development project agreement associated with a \$750,000 grant has been secured. The project will proceed with implementation of remediation equipment in Elk Lake. Successful implementation of the Elk Lake system will provide the information required to properly size the system for Beaver Lake, to be delivered as a second future phase.

## **RECOMMENDATION**

The Regional Parks Committee recommends to the Capital Regional District Board:  
That the CRD Regional Parks Elk/Beaver Lake Remediation Update be received for information.

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