

**DATE:** December 18, 2018**FILE:** 5330-20/LAZO**TO:** Chair and Directors  
Electoral Areas Services Committee**FROM:** Russell Dyson  
Chief Administrative OfficerSupported by Russell Dyson  
Chief Administrative Officer*R. Dyson***RE: Lazo Creek Watershed drainage improvements - update****Purpose**

The purpose of this report is to provide an update to Electoral Areas Services Committee (EASC) members on the drainage improvement study work underway in the Lazo Creek Watershed.

**Recommendation from the Chief Administrative Officer:**

This report is for information only.

**Executive Summary**

The Queen's Ditch is a constructed drainage channel, partially built within Lazo Creek. The Queen's Ditch catchment area, known as the Lazo Creek Watershed, is approximately 1300 hectares in size. The lowland areas of the Lazo Creek Watershed lie just above sea level, with a drainage gradient of about 0.05 per cent, or nearly flat, and have longstanding issues with flooding that affect local residents. In response to residents' concerns of flooding in the lowland areas, the Comox Valley Regional District (CVRD) committed to undertake a feasibility study to evaluate the viability of a local service area to manage drainage in the lower Lazo Creek Watershed.

The CVRD hired McElhanney Consulting Services Ltd. (MCSL) to complete an options analysis for potential drainage improvements to the lowland areas of the watershed. This analysis is attached as Appendix 'A' to a November 2017 staff report titled '[Lazo Creek Watershed – Drainage Improvements Options Analysis](#)'; the staff report also includes a summary of prior flooding issues and other study work done.

Five options were included in the analysis conducted by MCSL, and the CVRD Board approved the managed retreat/wetland restoration option for further study. CVRD staff with input from the Lazo Creek Watershed Technical Advisory Committee (TAC) and Lower Lazo Watershed Public Advisory Committee (PAC) developed a scope of work for the second phase of study work, and a request for proposals was issued. Out of this process, MCSL was selected to complete Phase 2. This work is being delivered in two phases, Phase 2a and Phase 2b. Phase 2a is expected to be complete by March 2019 and will include the following:

- Hydraulic modelling using recent LiDAR data provided by the Department of National Defence to evaluate the effectiveness of different wetland reconstruction and channel improvement options when current and long term climatic/rainfall conditions and sea level conditions are considered;
- The performance of three preferred options over time, including a consideration of anticipated land-use changes within the watershed;

- Private property impacts for the various options;
- A condition assessment of the Queen’s Ditch outfall, including anticipated costs for replacement and/or improvement;
- A technical memo summarizing the results, and including recommendations to proceed/not proceed with Phase 2b;
- A presentation on the results of Phase 2a to the EASC.

Should an option considered in Phase 2a be considered viable and acceptable, Phase 2b activities will then proceed, including the following:

- Agrologist, biologist and hydrogeologist reviews of the proposed works;
- Summary of required environmental/regulatory approvals;
- Identification of partnership opportunities;
- ‘Class C’ cost estimates for design, construction, land acquisition, approvals and ongoing operations and maintenance of the preferred option;
- A structured decision process to compare consequences of status quo against benefits and impacts of preferred option;
- Identification of options for a local service area boundary;
- Preparation of an implementation plan for the preferred option;
- A final report on findings, costs and expected next steps;
- A presentation on the results to the EASC.

In early 2018, a flow monitoring program was initiated with the install of data loggers at four locations in the lower watershed. This monitoring program will continue through 2019, and will assist in verifying surface water flows and their response to rainfall events.

TAC and PAC engagement will continue throughout this next phase of study work, with meetings for each group scheduled for early 2019. Zinc Communications Inc. is also part of the project team, and will be coordinating public engagement and consultation in Phase 2b. A proposed public engagement strategy will be presented to the EASC with the results of Phase 2a.

### **Policy Analysis**

At the November 28, 2017 meeting of the CVRD Board, the following motion was carried:

*THAT further study work be completed to assess the effectiveness and viability of managed retreat/wetland restoration in improving drainage in the lower Lazo Creek Watershed;*

*AND FURTHER THAT \$27,000 from Service 152, Electoral Area B Feasibility Studies, be allocated to a flow monitoring program for the Lazo Creek Watershed;*

*AND FINALLY THAT the McElhanney report titled “Comox Valley Regional District Queen’s Ditch Lowland Area Drainage Improvements Options Analysis” and dated September 14, 2017 be referred to the Committee of the Whole for information.*

Prepared by:

*V. Van Tongeren*

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Vince Van Tongeren, B.Sc.  
Environmental Analyst

Concurrence:

*D. Monteith*

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Darry Monteith  
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Concurrence:

*M. Rutten*

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**Stakeholder Distribution (Upon Agenda Publication)**

Lazo Creek Watershed PAC	✓
Lazo Creek Watershed TAC	✓
Town of Comox	✓