

DATE: September 12, 2018

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TO: Chair and Members
Comox Valley Sewage Commission

Supported by Marc Rutten, P.Eng
Acting Chief Administrative Officer

FROM: Marc Rutten, P.Eng
Acting Chief Administrative Officer

M. Rutten

RE: Comox Valley Sewerage Service - Budget for Capital Projects

Purpose

To provide the Comox Valley Sewage Commission with an update on the planned capital projects in 2018 and 2019, the updated costs for these projects, and the changes that are required to the 2018-2022 financial plan.

Recommendations from the Acting Chief Administrative Officer:

1. THAT the Comox Valley Sewage Commission provide approval for short term borrowing of up to \$2,700,000 in 2018, to be repaid within five years, for the completion of the equalization basin project as part of the Comox Valley Water Pollution Control Centre upgrades;
2. THAT the 2018 – 2022 financial plan and capital expenditure program for the Comox Valley Sewerage Service, function number 335 – 338, be amended as follows:
 - In 2019, for the compost facility expansion project (1043), reduce long-term debt revenue by \$3,282,828, increase contributions from the capital works reserve (846) by \$4,200,000, decrease debt issue expense by \$32,828 and increase sewer infrastructure costs (474) by \$950,000;
 - In 2018, for the Comox Valley Water Pollution Control Centre upgrades, equalization basin project (1101), add short-term debt proceeds (140) of \$2,700,000 and increase sewer infrastructure costs (474) by \$2,700,000;
 - In 2018, for the Greenwood Trunk project (1074), reduce contributions from the capital works reserves (846) by \$2,500,000 and reduce sewer infrastructure costs (474) by \$2,500,000;
 - In 2018, for the sewer conveyance project (1045), reduce contributions from DCC reserves (896) by \$200,000 and reduce sewer infrastructure costs (474) by \$200,000; and finally
 - In 2018, for the liquid waste management plan, add transfers from reserve (145) in the operating fund of \$200,000 and increase costs for professional fees (387) by \$200,000.

Executive Summary

2018 marks a very busy year for capital projects under the sewer service:

- The HMCS Quadra project is now complete;
- The Hudson Trunk project is now complete;
- The Greenwood Trunk project is under construction and expected to be completed by November 2018;
- The odour control project at the Comox Valley Water Pollution Control Centre (CVWPCC) is under construction with commissioning of the new activated carbon polisher complete, and installation of the permanent primary clarifier covers expected to be complete by the end of September 2018;
- Construction of the biosolids compost facility expansion is now underway with completion expected in spring 2019.

As these projects have progressed through design and into construction, an improved understanding of the costs associated with each project has been developed. At this time, the HMCS Quadra, Hudson Trunk, Greenwood Trunk, and odour control project are all estimated to be completed within the budgeted amounts.

There are two additional projects included within the 2018-2022 financial plan that were scheduled to begin in 2018 and be completed in 2019, these projects being:

- The equalization basin project, to buffer the CVWPCC and outfall from storm surges; and
- The biosolids composting project to increase the capacity of the existing facility.

The total budget for the Greenwood Trunk within the 2018-2022 financial plan is \$6.037 million, this estimate was based on an updated cost estimate from the detailed design. Tender bids for the project were significantly lower than the estimated project cost and the Greenwood Trunk is expected to cost \$3.5 million to \$2.5 million less than what was budgeted within the 2018-2022 financial plan.

With the cost savings incurred on the Greenwood Trunk project, the equalization basin and compost facility expansion projects can proceed, however financial plan amendments are required for each of the above projects to ensure successful project delivery and completion in 2019. Below describes the current project status and required amendments to complete each project.

Compost Facility Expansion:

- The compost facility expansion and the building relocation portions of the project have both been awarded to Knappett Industries, with the project scheduled to be complete in spring 2019.
- The 2018-2022 financial plan budgeted \$6.48 million for the project over 2018 and 2019.
- Based on the bid prices for both project contracts, the construction cost for the project is estimated at \$6.15 million.
- To ensure construction is not delayed and the project can continue throughout the winter months prior to approval of the 2019-2023 financial plan a financial plan amendment is required.
- The total cost for the project, including engineering and other forecast indirect costs is \$7.4 million.
- Additionally, an amendment is required to replace the \$3.28 million of long term debt with a \$4.2 million transfer from reserves for 2019, the change in project funding for this project is in part facilitated from the cost savings experienced from the Greenwood Trunk, resulting in

an additional \$2.5 million being available from reserves. No change to the project funding for 2018 is required.

Equalization Basin Project:

- The equalization basin is not specifically identified on the budget. This project, along with the odour control project, make up the 2018 portion of the budget for the CVWPCC phase one upgrades, totalling \$7.178 million in 2018.
- The 2019 portion of the budget for the CVWPCC phase one upgrades encompasses the effluent quality upgrades, which are now being included as part of the liquid waste management planning process and are not expected to be completed in 2019 as previously budgeted.
- The 2018 CVWPCC upgrades were intended to be completely funded from reserves. The odour control upgrades are projected to be completed on budget at \$2.2 million, leaving the remaining reserves in the current budget available to complete the equalization basin scope.
- Detailed design of the equalization basin is nearing completion and an updated cost estimate has been provided. The expected cost of this project is now \$7.4 million.
- Even with optimization of the design of the equalization basin, the rise in price reflects the significant change in contractor prices due to market conditions. Staff are recommending that the total budgeted for the equalization basin project in the financial plan be increased to \$7.4 million to ensure sufficient funds are held for this critical project.
- In review of the 2019 capital project requirements \$4.7 million is still remaining in reserves for this project and to fund the shortfall staff are recommending utilizing short term borrowing of up to \$2.7 million for this project.
- Receiving approval to borrow for the project now will allow release of the tender in 2018 with construction being able to start in the first quarter of 2019, ensuring that the project will begin prior to the busy construction season and will be completed prior to wet winter months when the equalization basin will be needed.

Eliminating the long term borrowing of \$3.3 million for the compost facility expansion in 2019 and replacing with short term borrowing of \$2.7 million results in a significant reduction of the amount of interest being paid. Interest payments for long term borrowing would be approximately \$1.8 million (four per cent interest rate, 20 years borrowing) over the course of the debt, whereas interest payments for the short term borrowing is estimated at \$200,000 (2.7 per cent interest rate, 5 years borrowing). Table No.1 below highlights the changes in project costs from the 2018-2022 financial plan.

Table No.1: Change in project costs due to proposed budget amendments compared to the adopted 2018-2022 Financial Plan

| Project | 2018-2022 Financial Plan Amount | Budget Amendments and Project Cost Changes |
|---|---------------------------------|--|
| Hudson Trunk | \$2,345,991 | \$2,345,991 |
| Greenwood Trunk | \$6,037,000 | \$3,500,000 |
| Compost Facility Expansion | \$6,450,000 | \$7,400,000 |
| CVWPCC Phase 1 Upgrades (2018 Project Costs Only, Odour Control and EQ Basin) | \$7,177,800 | \$9,600,000 |
| Sewer Conveyance Upgrades (LWMP) | \$200,000 | \$200,000 |
| Total for Projects | \$22,210,791 | \$23,045,991 |

As can be seen by Table No.1 above the proposed budget amendment results in a minimal increase to the overall project costs and will not impact the municipal requisition. The budget amendment is required to ensure correct allocation of funds to successfully complete each project in addition to providing the following benefits:

- Ensuring successful completion of the two outstanding critical infrastructure projects by spring 2019.
- Utilizing short term borrowing for the equalization basin project does not require public assent if repaid within five years and will reduce the amount of interest the service pays over the term of the debt.
- The proposed budget amendments will have no impact on the municipal requisition. Results of the liquid waste management planning process and required upgrades may require future changes to the requisition but the short term borrowing beginning in 2019 will not result in a change in the 2019 requisition amount.

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Stakeholder Distribution (Upon Agenda Publication)

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| None | ✓ |
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