

**DATE:** January 31, 2019**FILE:** 1700-02/2019/300**TO:** Chair and Directors  
Comox Valley Water Committee**FROM:** Russell Dyson  
Chief Administrative OfficerSupported by Russell Dyson  
Chief Administrative Officer**R. Dyson****RE: 2019 – 2023 Financial Plan –Comox Valley Water System– Function 300-301**

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**Purpose**

To provide the Comox Valley Water Committee with the proposed 2019 - 2023 financial plan and work plan highlights for the Comox Valley Water Supply System (CVWS), function 300, and sub-function 301, implementation of the Comox Lake Watershed Protection Plan (WPP); and to consider amending the financial plan to include an additional \$500,000 outlined in the staff report titled *Water Main Leak under Puntledge River*.

**Recommendation from the Chief Administrative Officer:**

THAT the proposed 2019-2023 financial plan for the Comox Valley Water Supply System, function 300 and 301, be amended to include an additional capital project in the amount of \$500,000 to repair a critical leak of the 900mm steel water main under the Puntledge River, and that the repair project be funded by way of a contribution from the capital works reserve.

THAT the proposed 2019 - 2023 financial plan for the Comox Valley Water Supply System, function 300 and 301, be approved as amended.

**Executive Summary**

The CVWS is currently in the process of completing the Comox Valley Water Treatment Project (CVWTP) estimated to cost \$110.6 million. The 2019-2023 financial plan includes the significant capital spending required to complete the CVWTP. The bullets below provide a summary of the 2019-2023 financial plan:

- Increases to the bulk water rate within this five year plan are in line with those approved in the 2018-2022 financial plan. The bulk water rate will increase in 2019 to \$0.80/m<sup>3</sup>, to help fund the CVWTP by increasing reserve contributions prior to construction. Further increases in 2020 (\$0.83/m<sup>3</sup>) and 2021 (\$0.85/m<sup>3</sup>) are planned, with the bulk water rate maintained at the 2021 level into 2022 and 2023.
- With the exception of personnel costs, operating expenses remain largely unchanged for 2018 and show a modest decrease due largely to a reduction in anticipated 'other professional fees'.
- An anomaly has been identified in the allocations used to calculate personnel costs in the proposed financial plan, and an amendment will be brought forward to correct it. The number of operators remains unchanged in 2019. Increases in 2019 personnel costs in the amended financial plan will be attributable solely to changes to the Canada Pension Plan, Employer Health Tax premiums, and wage increases scheduled in the CUPE agreement.
- Operating expenses increase significantly beginning in 2021 with the new CVWTP brought on line that year, including an additional three personnel, and significant increases in power consumption, chemicals and other consumables.

- The only 2018 surpluses booked to date are \$140,000 for 3 carry forwards. The final 2018 surplus will very likely increase once year end is completed.
- Phase two of the CVWTP project is underway and scheduled to be complete in mid-2019, this phase includes procurement of a design build-team. A short-list of design-build teams has been developed and the request for proposals has been issued to the short listed proponents with award of a design-build contractor expected by July 2019.
- Funding for CVWTP and other capital projects will be from a combination of grant funding, capital works reserves, development cost charges (DCCs) reserves and new debt.
- Under this funding strategy the current bulk water rate forecast will accommodate debt servicing for borrowing required for the CVWTP, and will result in an average incremental cost of \$86 per property, per year at project completion, compared to 2017 water rates.
- In parallel with construction of the CVWTP, the Comox Valley Regional District (CVRD) is implementing the WPP.
- A separate report with a more detailed update on implementation of the WPP will be brought forward to the water committee in early spring 2019.

Prepared by:

***K. La Rose***

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Concurrence:

***M. Rutten***

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### **Policy Analysis**

Establishment Bylaw – [www.comoxvalleyrd.ca/currentbudget](http://www.comoxvalleyrd.ca/currentbudget) where the information can be found.


The proposed 2019-2023 CVWS financial plan is closely tied to previous CVRD strategic plan board objectives, including delivery of the CVWTP and implementation of the WPP.

### **Financial Plan Overview**

Table No.1 below summarizes the 2019 proposed budget as compared to the 2018 adopted budget. Access the 2019 - 2023 five year financial plan through the online budget binder at [www.comoxvalleyrd.ca/currentbudget](http://www.comoxvalleyrd.ca/currentbudget)

Significant variances from 2018 adopted budget will be discussed in the financial plan highlights section below.

Table No.1: Financial Plan Highlights

 <b>2019 Proposed Budget</b> <b>#300 Comox Valley Water Supply System</b>			
Operating	2018 Budget	2019 Proposed Budget	Increase (Decrease)
<b>Revenue</b>			
Senior Government Grants	50,000		(50,000)
<b>Sale Services User Fees</b>	<b>6,679,233</b>	<b>7,209,129</b>	<b>629,896</b>
<b>Other Revenue/Recoveries</b>	<b>48,389</b>	<b>98,873</b>	<b>50,304</b>
<b>Prior Years Surplus</b>	<b>683,465</b>	<b>140,000</b>	<b>(423,465)</b>
	<b>\$ 7,241,087</b>	<b>\$ 7,447,802</b>	<b>\$ 206,735</b>
<b>Expenditures</b>			
<b>Personnel Costs</b>	<b>919,058</b>	<b>979,954</b>	<b>60,896</b>
<b>Operating</b>	<b>2,027,703</b>	<b>1,914,162</b>	<b>(113,661)</b>
<b>Contribution to Reserve</b>	<b>3,208,482</b>	<b>3,444,860</b>	<b>236,388</b>
<b>Transfer to Other Functions</b>		<b>23,000</b>	<b>23,000</b>
<b>Debt Charges</b>	<b>1,085,848</b>	<b>1,085,848</b>	<b>-</b>
	<b>\$ 7,241,087</b>	<b>\$ 7,447,802</b>	<b>\$ 206,735</b>
<b>Capital</b>			
<b>Funding Sources</b>			
<b>Senior Government Grants</b>	<b>2,973,198</b>	<b>8,820,197</b>	<b>5,846,999</b>
<b>Other Revenue/Recoveries</b>		<b>76,240</b>	
<b>Transfer from Reserve</b>	<b>3,273,243</b>	<b>8,762,101</b>	<b>6,478,868</b>
	<b>\$ 6,246,441</b>	<b>\$ 17,647,638</b>	<b>\$ 11,401,097</b>
<b>Funding Applied</b>			
<b>Capital Projects &amp; Equip</b>	<b>6,246,441</b>	<b>17,647,638</b>	<b>11,401,097</b>
	<b>\$ 6,246,441</b>	<b>\$ 17,647,638</b>	<b>\$ 11,401,097</b>

Highlights of the 2019 - 2023 proposed financial plan for CVWS, function 300 include:

#### *Revenue Sources*

The CVWS is funded through the sale of bulk water to its customers and as such revenue for the service is directly related to the amount of water consumed. Increases to the bulk water rate bylaw were approved by the water committee in 2016, including an increase from \$0.71/m<sup>3</sup> to \$0.75/m<sup>3</sup> in 2018 and an increase to \$0.80/m<sup>3</sup> in 2019. The approved 2018 to 2022 financial plan included further increases in 2020 (\$0.83/m<sup>3</sup>) and 2021 (\$0.85/m<sup>3</sup>). The proposed 2019 to 2023 financial plan holds the bulk water rate steady at \$0.85/m<sup>3</sup> until the end of the plan period. The sale of bulk water and subsequent revenue projections for the CVWS are detailed in the bullets below:

- Consumption projections for the City of Courtenay and Town of Comox are provided by municipal staff.
- CVRD Water Local Service Area consumption projections are based on historical consumption and projected future consumption increase of 0.3 per cent per year.

- The projected increases to the bulk water rate will result in an average incremental cost per property of approximately \$86 per year at project completion, compared to annual costs in 2017.

#### *Personnel*

An anomaly has been identified in the allocations used to allocate personnel costs between water services and an amendment will be brought forward to correct it. The number of operators remains unchanged in 2019. Increases in personnel costs are attributable solely to changes to the Canada Pension Plan, Employer Health Tax premiums, and wage increases scheduled in the CUPE agreement.

With completion of the CVWTP scheduled for mid-2021, a water treatment operator IV will be hired in 2020 to participate in the latter stages of construction, and two water treatment operators will be hired in 2021 prior to facility commissioning.

#### *Operations*

The majority of the budgeted 2019 operating expenses remained unchanged from 2018 amounts. A modest decrease to the overall operating budget is expected primarily due to a decrease in anticipated 'other professional fees'. See Appendix A for a table highlighting the significant operating expense variances.

Sub-function 301 has been created to facilitate tracking of expenditures for the WPP. Implementation of the WPP will allow for compliance with Island Health's drinking water policy, minimize operations and maintenance costs of the CVWS, and ensure the ongoing safe reliable supply of drinking water for the community.

Implementation of the WPP progressed significantly in 2018, including installation of additional water quality monitoring stations within the watershed, hydrodynamic modeling of the lake, a climate change impact assessment, a shoreline erosion study, installation of a high altitude weather station in the Perseverance Creek watershed, initiation of a proper functioning condition (PFC) assessment program for the watershed, acquisition of a large piece of property on the east end of Comox Lake, and development of a multi-year education and outreach program. Implementation of the WPP will continue in 2019 and includes continuing the PFC assessment program, further developing emergency spill response resources, and implementation of the education and outreach program.

#### *Capital*

The primary driver for the significant capital spending over the next four years is the CVWTP, which is mandated by regulations, will bring the CVRD in line with other jurisdictions across BC and is vital to provide safe, secure water to the Comox Valley. See Appendix B for a detailed list of budgeted capital projects.

Revenue for capital projects will be funded through a combination of capital works reserves, DCC reserves, long term debt and grant funding. All capital in 2019 is funded by reserves and grant funding and no new debt is expected until 2020.

Capital project works completed or initiated in 2018 include:

- CVWTP
  - Completion of an alternate approval process to secure approval for the borrowing of up to \$29 million.

- Completion of a value planning exercise to ensure project value for money is maximized.
- Procurement of legal, commercial and fairness advisory services for the development of the CVWTP technical specifications and procurement of a design-build team was completed in late 2017 and early 2018. The CVWTP procurement process was initiated in November 2018 with selection of a short-list of design-build proponents through a request for qualifications process, and subsequent release of a request for proposals to the short-listed proponents. Award of a contract to the successful proponent is expected in July 2019.
- Installation of temporary ultraviolet equipment at the existing water chlorination facility, providing the CVWS with two forms of water treatment, increasing the threshold for boil water notices and decreasing the number of days on turbidity related boil water notices.

The CVWTP has successfully achieved 50 per cent grant funding. The project is budgeted at \$110.6 million dollars, described below is the funding strategy:

- \$55.8 million in grant funding has been received for the project, with phase one and two of the project receiving 83 per cent grant funding through the Clean Water and Wastewater Fund and the final phases receiving funding through the ICIP.
- Even with 50 per cent grant funding, required borrowing is calculated at \$29 million.
- The remainder of project will be funded through reserves and is calculated at \$26 million.

The CVWTP capital budget for 2019 is \$16.8 million, and will include the following:

- Selection of a design-build team and award of the contract.
- Finalize all required permits, including the Environmental Assessment Office and Ministry of Forests, Lands, Natural Resource Operations and Rural Development permitting requirements.
- Finalize land and water use agreements.
- Start detailed design and construction.

In addition a major leak was identified within the transmission system in late 2018, the actual repair costs for this leak are unknown at this time but staff are recommending including \$500,000 within the financial plan through a budget amendment in anticipation of the necessary work that will be required to repair the leak. Monthly update reports will be brought to the water committee until the leak is repaired.

It should be noted that the CVRD's delegation of purchasing authority bylaw and procurement policy delegates the authority to staff for the award of contracts that are approved and funded in the financial plan. If the Board wishes to specifically review certain projects or initiatives identified on Appendix B prior to contract award, it should highlight those projects during the financial planning process. Updates on the CVWTP will continue to be brought forward to the water committee as project milestones are met.

#### *Reserves*

The 2019-2023 proposed financial plan optimizes use of available capital works and DCC reserves, to help fund the significant capital costs associated with delivering the CVWTP, but leaving the reserves in good shape by the end of the proposed financial planning period.

As of December 31, 2017 the future expenditure reserve fund balance for the CVWS was \$101,837, the capital works reserve fund balance was \$16,085,567, while the DCC reserve fund balance was \$8,627,447. The future expenditure reserve fund is used for liability and exposure expenses, the

capital works reserve fund is used to fund priority capital projects required in the service, while DCC reserves can only be used to fund projects that are identified by the DCC bylaw and increase the capacity of the service. Reserve fund balances at December 31, 2018 will be available following the year end close early in 2019.

**Citizen/Public Relations**

In 2017 the CVRD awarded a contract to Zinc Strategies, a communications consultant, to assist the CVRD with communications for water and wastewater capital projects. Zinc has played a crucial support role to internal CVRD communications in development of educational information in regards to the alternate approval process and the CVWTP in 2018. Zinc will continue to play a critical supporting role to CVRD communications for the CVWTP in 2019.

In spring 2018, a contract was awarded for a four-part outreach, education and communications project to address water efficiency and watershed protection, work is just beginning with significant communications and outreach planned for 2019. The proponents will work with the local municipalities to ensure consistent and coordinated messaging. This comprehensive project will target all residents as well as visitors to the Comox Valley, with the goal of raising awareness about the value of water quality and quantity and how to act responsibly to ensure protection of our water resources into the future.

Attachments: Appendix A – “Operating Expense Variances”  
Appendix B – “Capital Project Summary”

Appendix A- Function 300-301 Operating Expense Variances

Account Code	Description	2018 Budget Value	2019 Proposed Budget
02-2-300-220	<b>Salaries and Wages:</b> Changes to Canada Pension Plan and Employer Health Tax premiums and contractual CUPE increases.	\$666,239	\$710,681
02-2-300-276	<b>Software License/ Maintenance:</b> Increase in licensing fees reflects addition of annual licensing fee for decision support software for water.	\$35,500	\$46,900
02-2-300-354	<b>Education Programs:</b> Doubling of rebates for water efficiency programs to \$100,000.	\$74,000	\$120,000
02-2-300-387	<b>Other Professional Fees (300):</b> Planned professional fees include: <ul style="list-style-type: none"> <li>• Safe work procedures and assessments (CFWD).</li> <li>• Asset management planning (CFWD).</li> <li>• Educational contractor for water.</li> </ul>	\$351,000	\$206,000
02-2-300-495	<b>Transfer to Other Functions:</b> Contribution to asset management software for the service.	\$0	\$23,000
02-2-301-354	<b>Education Programs (301):</b> Shift from development to implementation of the Watershed Protection Plan education and outreach program.	\$80,000	\$50,000
02-2-301-378	<b>Lab Analysis:</b> Adjustment to better reflect actual costs	\$35,000	\$22,000

Appendix B – 2019-2023 Capital Projects - Comox Valley Water Supply System, Function 300-301

Capital	Project Description	2019 Proposed Budget	2020 Financial Plan	2021 Financial Plan	2022 Financial Plan	2023 Financial Plan
Annual Capital Equipment	Annual capital equipment replacements.	\$95,000	\$85,000	\$80,000	\$80,000	\$80,000
Vehicle Capital Purchase	Annual vehicle replacements as required by the CVRD's fleet policy.		\$50,000	\$100,000	\$100,000	\$85,000
Water main condition assessment	Advanced pipeline scanning inspection of Hyprescon water main	\$300,000				
Comox Valley Water Treatment Project	Required for compliance with Island Health and the Drinking Water Treatment Objectives for Surface Water Sources.	\$16,872,538	\$63,880,068	\$21,653,863	\$4,560,000	
Extension of Water Service South	A project to be built and owned by the CVRD but fully funded by K'ómoks First Nation and other users of the new infrastructure.	\$150,000	\$500,000	\$14,150,000		
Maintenance Management System (MMS)	Purchase of MMS software to streamline preventative maintenance of water infrastructure.	\$30,000				
Marsden Reservoir Duplication	Duplication of the Marsden Reservoir to increase capacity of the water system due to growth.			\$1,612,900		
<b>Total</b>		\$17,447,538	\$64,515,068	\$37,596,763	\$4,740,000	\$165,000

**Note:** All projects approved in the financial plan will be procured in accordance with Bylaw No. 510 and the Board approved Procurement Policy. Any project the Board wishes to receive additional information on prior to the procurement and/or contract award should be highlighted at this time.