

**REPORT TO CAPITAL REGIONAL DISTRICT BOARD  
MEETING OF WEDNESDAY, JANUARY 9, 2019**

---

**SUBJECT     Wastewater Treatment Project (WTP) Financing Strategy**

**ISSUE**

The Capital Regional District (CRD) is in the construction phase of the Core Area Wastewater Treatment Project (WTP). The Project has cash flow needs that are being met and managed through a combination of requisition dollars, grant funding, short-term financing and long-term debt. An analysis optimizing risk and financing costs has been completed, including recommended timing of converting of short-term borrowing to long-term debt.

**BACKGROUND**

On May 25, 2016 the Regional Board of the CRD:

- i) Adopted by resolution the Core Area Wastewater Treatment Project Board Terms of Reference (Project Board Terms of Reference) for the purposes of establishing principles governing the Core Area Wastewater Treatment Project (the Wastewater Treatment Project or the WTP);
- ii) Established the Core Area Wastewater Treatment Project Board (Project Board) under Bylaw 4109 (the CRD Core Area Wastewater Treatment Board Bylaw No. 1, 2016) for the purposes of administering the Core Area Wastewater Treatment Project; and
- iii) Delegated certain of its powers, duties and functions to the Project Board under Bylaw 4110 (the CRD Core Area Wastewater Treatment Project Board Delegation Bylaw No. 1, 2016).

On September 14, 2016 the Regional Board of the CRD:

- i) Received the final report of the Project Board with respect to its recommendation for the WTP, dated September 7, 2016 (the Final Report); and
- ii) Approved the business case attached as Appendix 1 (the Business Case) to the Final Report.

The Business Case established the WTP control budget (the Control Budget) of \$765M.

When completed, the Wastewater Treatment Project will have been funded by a combination of requisition dollars, grant funding and long-term debt.

**WTP Project Funding**

The 2016 Business Case established a Control Budget of \$765M. Both federal and provincial governments are partners in funding the Project. Table 1 summarizes the funding sources and their respective payment terms.

Table 1 – Wastewater Treatment Project Funding Sources

Funding Partner	Payment Terms	Maximum Partner Contribution (in millions)
Building Canada Fund	Released over the course of the Wastewater Treatment Plant (WWTP) construction, upon review and acceptance of progress claims	120
Green Infrastructure Fund	Released over the course of the conveyance construction, upon review and acceptance of progress claims	50
P3 Canada	Released in a single payment upon the Substantial Completion of the Residuals Treatment Facility (RTF)	41
Province of BC	Released in three payments, upon the substantial completion of the WWTP, the RTF, and the Project Commissioning	248
CRD	Contributed over the course of the WTP	306
<b>Total</b>		<b>\$765</b>

The CRD has discretion over its \$306M contribution and its respective financing strategy.

Budget and financing responsibilities

The CRD Core Area Wastewater Treatment Project Board (the Project Board) Bylaw No. 1, 2016 states that the role of the Project Board is to, amongst other things:

- oversee Project scope, schedule and budget as the Project progresses through planning, procurement and implementation phases, with particular attention to risk identification and risk management; and
- work with the Project Director to resolve material issues that may arise over the course of the Project.

The Project Board Terms of Reference require, amongst other things:

- that the Project Board provide the CRD Board with monthly progress reports and a comprehensive quarterly report on the Project.

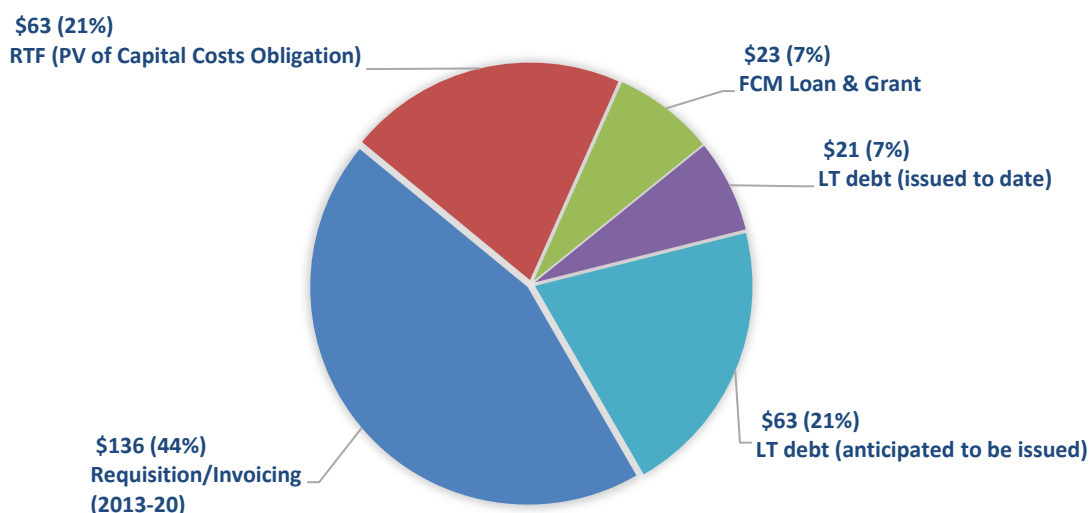
The CRD Board is responsible for the WTP financing strategy and to ensure that funding and cash flow requirements are met.

## DISCUSSION

### **CRD Funding**

Figure 1 summarizes the anticipated combination of funding sources for CRD's share of \$306M to the WTP.

Figure 1- CRD Funding Sources (in millions)



With respect to each of the contributing funding sources:

#### Requisition/invoicing (2013-20)

Requisition/invoicing from Core Area Municipalities started in 2013 and increase annually in \$5M increments. Through 2018 the District has cumulatively requisitioned \$90M from participants and anticipates requisitioning the following annual amounts:

- 2019: \$30M
- 2020: \$35M
- 2021: \$40M and;
- maintaining the requisition level at \$40M/year plus annual inflation into future years to fund operating costs, debt serving and, asset replacement / maintenance reserves for the wastewater treatment system.

The annual WTP requisition is reduced by operating expenses incurred in the year, with the net requisition transferred to fund capital costs for the project. Operating expenses include payments on existing debt and WWTP pre-operating costs including; Integrated Water Services (IWS) support services, CRD corporate allocations, chemical and utility costs. The total cumulative WTP requisition for the period of 2013-20 is \$155M and the anticipated cumulative transfer to capital is \$135.5M or 87%.

#### RTF Present Value of Capital Cost Obligation

The CRD entered into a Public Private Partnership (P3) agreement in which 50% of the capital costs for the Residual Treatment Facility (RTF) is paid at substantial completion and 50% is paid over the first 20 years of operation. It is projected that the future obligation be paid directly from requisition rather than being debt serviced.

Federation of Canadian Municipalities (FCM) Loan & Grant

An opportunity has been identified with FCM's Green Municipal Fund (GMF), for a \$20M loan and \$3M grant (15% of the loan value). The CRD performed analysis and determined that the \$23M loan and grant yields a better effective interest rate than MFA's present indicative rate. FCM has confirmed that the CRD WTP can bypass the initial-review application process and move directly to the full application stage. CRD intends to submit its application for the loan and grant in early 2019.

Long-term debt - anticipated and issued

To date, the CRD has issued \$21M of long-term debt; \$6M in 2014 and \$15M in 2018. An additional \$63M of long-term debt is estimated to be required, to meet CRD's total WTP funding share of \$306M. Although the CRD is estimating an additional \$63M of long-term debt at the end of the project, this estimate includes assumptions related to project completion and close-out costs. To ensure that the CRD does not overcommit to long-term debt, it is recommended that \$60M be included in the 2019 Spring Issue and a final/residual issue be executed at project close-out when the exact value is known.

**WTP Financing Strategy Framework**

The CRD's Financial Services Department considers all viable options with respect to meeting the Project's cash flow requirements. The base case or standard financing methodology is to use short-term financing to fund project cash flows and convert to long-term debt at project completion. An alternative is to convert a portion of short-term borrowing to long-term debt prior to the end of the construction period.

The primary objectives of the WTP financing strategy are to minimize interest expense during construction and to deliver the most cost effective financing structure, with the lowest overall cost of borrowing to participants.

The financing strategy objectives were balanced with restraints, including but not limited to:

- current and future requisition capacity;
- timing of receipt of grant revenue from Federal and Provincial funding partners;
- timing of receipt of the FCM loan and grant;
- project cash flow needs and the final anticipated long-term debt commitment;
- interest rate trends and overall rate risk.

With respect to each of the above, the CRD has considered the following:

Requisition/invoicing capacity

The annual requisition/invoicing in 2018 is \$25M, with incremental increases of \$5M/year to a maximum of \$40M in 2021 and sustaining into future years. The requisition in 2020 will be funding WWTP operations, RTF operating and capital costs, debt servicing, and asset replacement / maintenance reserves. Debt servicing costs cannot exceed a certain limit to afford appropriate capacity for the other expenses.

Timing of receipt of grant revenue, FCM loan and grant

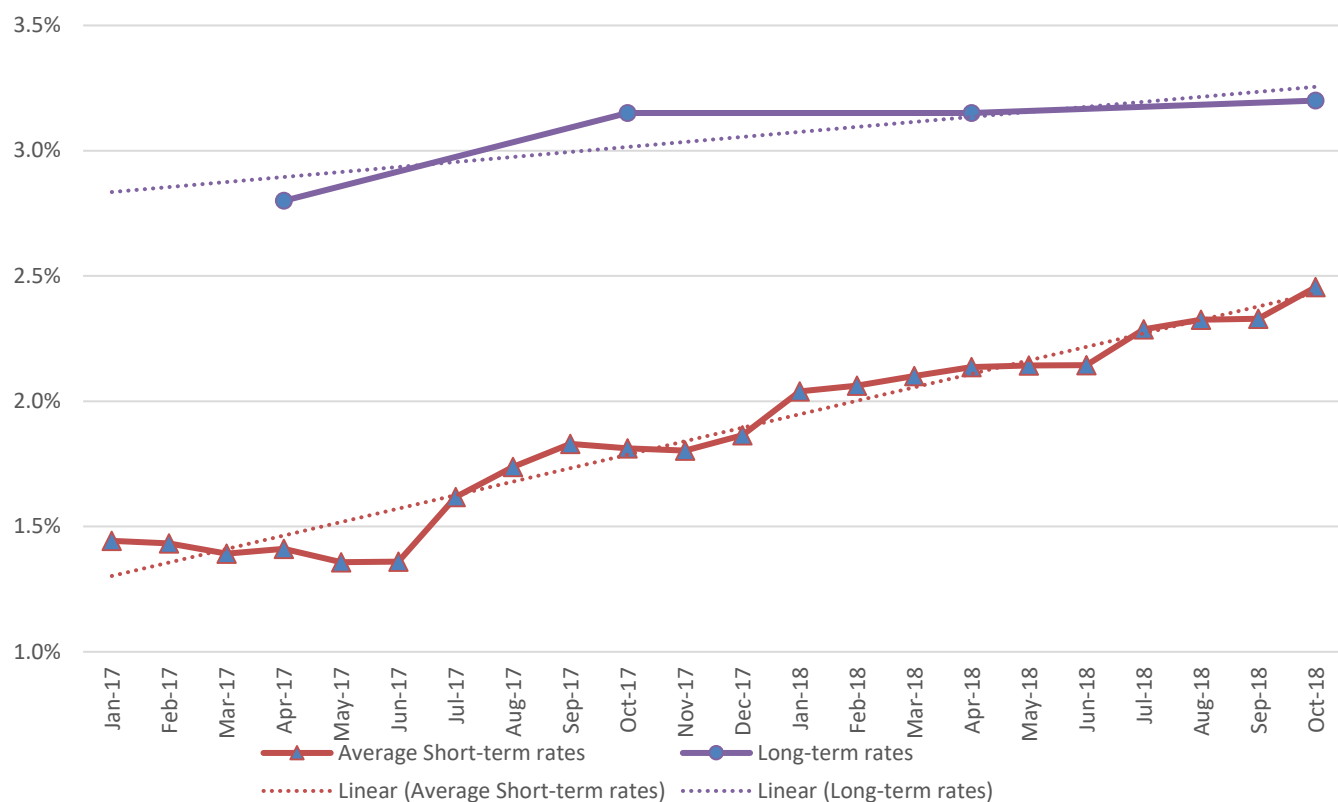
The Provincial and P3 Canada contributions (up to \$289M) are received at substantial completion, however, the CRD is responsible for the interim financing to meet cash flow requirements. As a result, the CRD will fund the timing difference with short-term financing that will accumulate for the duration of the project. This balance will be repaid upon receipt of grant funding and cannot be converted to long-term debt.

Interest rate trends

Interest rates have significant impact on financing costs. Short-term rates impact the capital project budget via interim financing, while long-term rates impact the operating budget with debt servicing costs and repayment terms. To date, interest rates have shown consistent increases from 2016 onwards.

Figure 2 illustrates interest rate trends since the end of 2016. Specifically, short-term rates with the Municipal Finance Authority (MFA) have increased from 1.34% (Jan 2017) to 2.65% (Dec 2018); long-term (10 year) rates have increased from 2.8% (2017 Spring Issue) to 3.2% (2018 Fall Issue). As of December 4, 2018, the MFA's posted indicative rate for long-term (10 year) borrowing is 3.23%.

Figure 2 – MFA short and long-term interest rates



Debt issuance to date

On March 27, 2013, the CRD Board approved borrowing bylaw No.3887 authorizing the borrowing of \$100M for the estimated cost of works related to the WTP. To date \$21M of this facility has been used; \$6M issued in 2014 and \$15M issued in 2018. On April 10, 2013, upon expiry of the quashing period for bylaw No.3887, temporary borrowing Bylaw No. 3888 in the amount of \$100M was approved; \$66M of this short-term facility has been used to date with the balance anticipated to be used by early 2019.

On September 13, 2017 the CRD Board approved loan authorization Bylaw No. 4204, in the amount of \$665M. On July 11, 2018, upon expiry of the quashing period, a temporary borrowing bylaw No.4252 of \$300M was approved to fund interim cash flow requirements for the Project. To date, no debt has been applied against this loan authorization.

The total cumulative long-term debt anticipated at the close of the Project is \$104M (issued in the amounts of \$6M+\$15M+\$60M+\$23M).

#### 2019 Debt Issue

Staff are recommending that \$60M for the WTP be included in the security issuing bylaw and approved by the Board for the 2019 Spring Issue. By funding the WTP with long-term debt, risk of interest rate fluctuation can be mitigated and the capital costs of the project will be spread over current and future users.

The Municipal Finance Authority's (MFA) Spring Issue is generally funded in April; the anticipated short-term financing balance as at December 21, 2018 is \$32M and is estimated to be \$50M by April 2019.

When the issue is funded, the long-term debt proceeds will be used to eliminate the short-term financing balance and provide sufficient funds to cash flow the project for approximately one month. Subsequently, the project will rebuild its short-term financing to meet cash flow requirements and provide interim financing for the timing difference in grant funding receipts. The advantage of securing long-term debt and extinguishing the current short-term financing balance is that the CRD will not pay compounding interest charges on the \$60M for the duration of the project (estimated to be \$3.5M at a short-term financing rate of 3.0%).

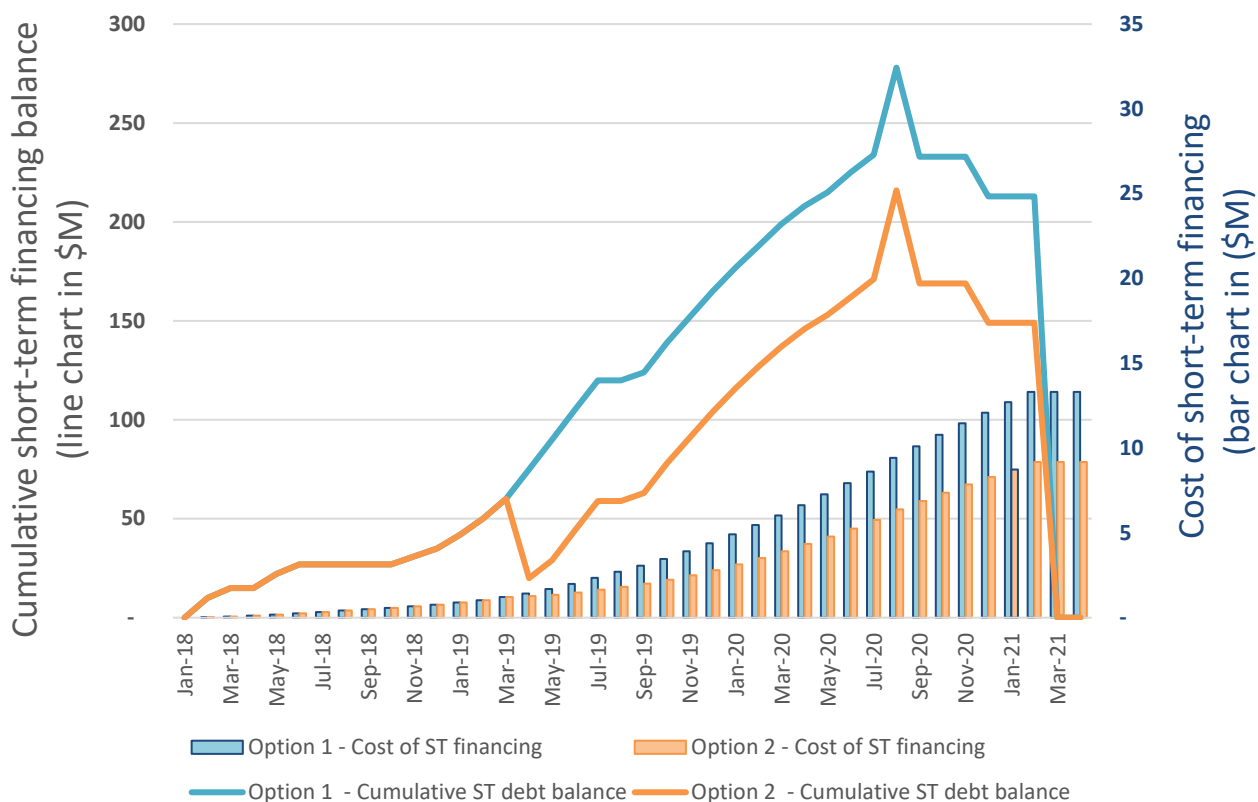
Figure 3 illustrates the variance between:

Option 1 - using short-term financing only, for the duration of the project and;

Option 2 – converting \$60M of short-term financing into long-term debt and then using short-term financing for the balance of the project.

Depicted below, under Option 1 the cumulative short-term financing balance increases to an estimated \$278M at August 2020 and is subsequently repaid upon grant funding receipt and debt issuance; the cumulative cost of interest during construction is estimated to be \$13.3M at April 2021. Alternatively, Option 2 reaches a cumulative short-term financing balance of \$216M and incurs an estimated \$9.2M of interest during construction.

Figure 3 – Short-term financing requirements and cumulative cost of short term financing (in millions).



**ALTERNATIVES**

*Alternative 1*

That this report be received for information and that \$60M for the Wastewater Treatment Project be included in the security issuing bylaw to be approved by the Board for the 2019 Spring issue.

*Alternative 2*

That the report be referred back to staff for more information.

**FINANCIAL IMPLICATIONS**

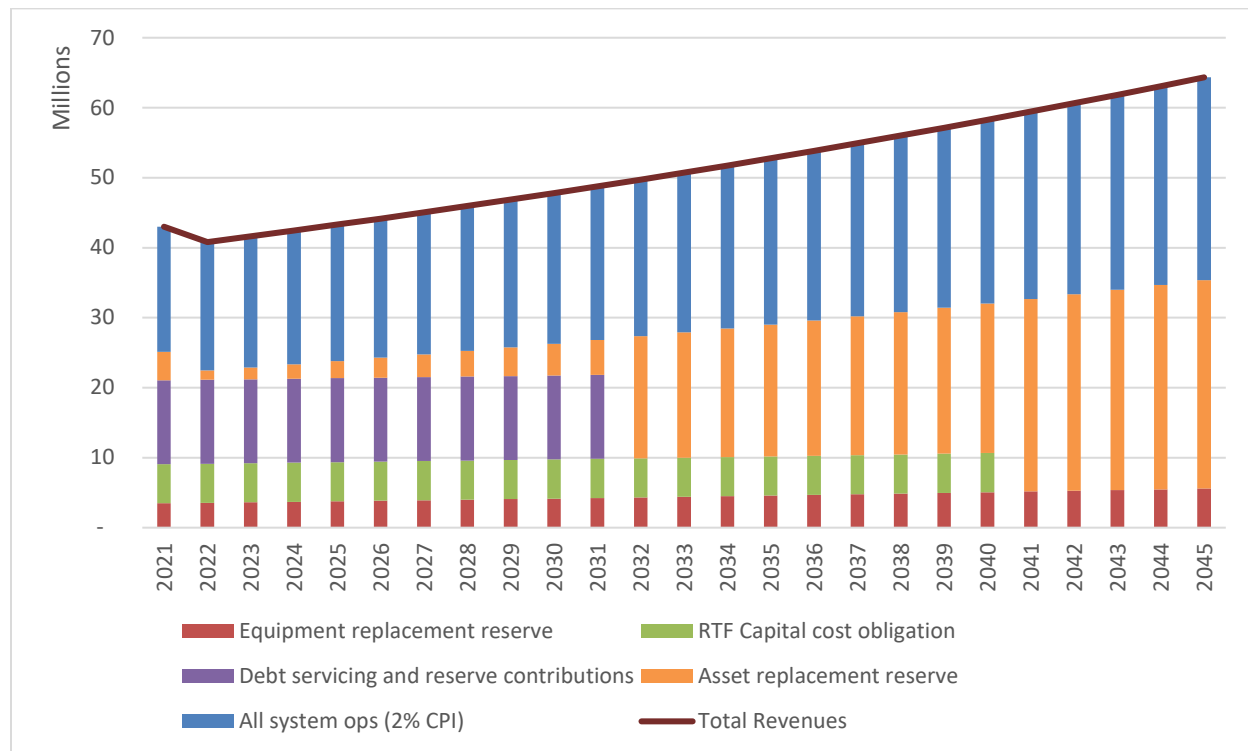
The proposed \$60M long-term debt issuance will facilitate financing requirements for the WTP in alignment with the Board approved WTP Control Budget. By securing \$60M in long-term debt early, and paying down the cumulative short-term financing balance, the CRD will limit its exposure to interest rate fluctuations, reduce its short-term financing interest expense and can commence principal repayment on debt earlier. Applying \$12M of the annual requisition to debt servicing and a debt reserve will make it possible to complete repayment of the \$60M long-term debt at its first renewal in 10-years.

Figure 4 illustrates the long-term financial implications of the overall funding strategy. In summary:

- Requisition levels are maintained at \$40M with annual inflation

- Debt of \$60M is issued in the 2019 Spring Issue (forecasted interest rate of 4%)
- Annual contribution to debt servicing and debt reserve is \$12M, enabling the repayment of the long-term debt at its 10 year renewal
- FCM loan is fixed for a 20 year term
- A final long-term borrowing is completed for residual expenditures at project close out (estimated at \$3M)
- Asset replacement reserve contributions commence in 2021 and accumulate (estimated reserve balance at 2045 is \$352M)

Figure 4 – Long-term view of ongoing requisition/invoicing



After the 2019 Spring Issuance, the WTP will access short-term financing to finance the timing differences in funding and cover project costs as approved in the Control Budget; providing access to low cost funding and the flexibility to borrow and repay in short notice. Short-term financing, unlike long-term debt can be repaid at any time without notice or penalty and are flexible to the construction schedule and to the receipt of grant funding from federal and provincial governments. The short-term financing will allow the CRD to continue to manage financing costs, mitigate timing differences in expenditures and grant receipts and access funds as needed, with long-term debt secured/converted at an optimal period.

**CONCLUSION**

Approval of the \$60M long-term debt issuance is recommended to ensure that the CRD is able to leverage current market conditions, mitigate risk of interest rate fluctuation, minimize short-term financing expense, continue to meet cash flow requirements and optimize on the lowest cost financing structure to its participants.



**RECOMMENDATION(S)**

That this report be received for information and that \$60M for the Wastewater Treatment Project be included in the security issuing bylaw to be approved by the Board for the 2019 Spring issue.

Submitted by:	Agnes Piotrowski, CPA, CA, Manager, Finance, Major Projects
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

AP: nm