



**Wastewater
Treatment Project**
Treated for a cleaner future

CRD Wastewater Treatment Project

Monthly Report

Reporting Period: February 2021

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1 Executive Summary

1.1 Introduction

This Monthly Report covers the reporting period of February 2021 and outlines the progress made on the Wastewater Treatment Project over this time.

The Wastewater Treatment Project (the “Project”) includes three main Project Components (the “Project Components”): the McLoughlin Point Wastewater Treatment Plant (the “McLoughlin Point WWTP”), the Residuals Treatment Facility (the “RTF”) and the Conveyance System (which includes upgrades to the conveyance network including the construction of pump stations and pipes). The Project scope is being delivered through a number of contracts with a variety of contracting strategies.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. The Project Team and Project contractors are actively monitoring the status of the COVID-19 public health emergency and are taking additional precautions to protect our staff, contractors, and the public. At each of the remaining Project sites, construction is ongoing in accordance with guidelines established by the Provincial Health Officer.

The McLoughlin Point WWTP Project Component is now in the two year Performance Period, during which time CRD is responsible for operating and maintaining the facility and Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) is responsible for monitoring CRD’s operations, and providing advice and guidance to optimize plant performance. HRP has one test remaining for full acceptance which is a warm weather odour control test that is expected to be completed in summer 2021.

The RTF Project Component is continuing with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing commissioning activities and commencing acceptance testing.

The Conveyance System is being delivered through seven construction contracts: two design-build contracts and five design-bid-build contracts, one of which (the Clover Forcemain) concluded in October 2020.

The two design-build Conveyance System contracts progressed over the reporting period as follows:

- Clover Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed landscaping and commissioning activities over the reporting period including: progression of exterior works in the plaza; and continuing acceptance testing.
- Macaulay Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed landscaping and commissioning activities over the reporting period including: installation and commissioning of screen level indication transmitter; and completion and inspection of pump pedestal work.

The design-bid-build Conveyance System contracts progressed over the reporting period, as follows:

- Residual Solids Conveyance Line (“RSCL”): the RSCL is being delivered through two construction contracts, with work progressing as follows:
 - Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor) continued construction activities over the reporting period associated with the construction of a BC Hydro access road in the Township of Esquimalt, including: completion of grading subbase gravel.
 - Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor) continued construction and commissioning activities including: completion of the Hartland Reservoir tie in to the Saanich water system.
- Arbutus Attenuation Tank (“AAT”): NAC Constructors Ltd. (as the Construction Contractor) continued construction activities including: commencing stripping the shoring for the suspended slab, commenced installation of duct work and heating ventilation and air conditioning system, ongoing installation of electrical and mechanical works within the occupied spaces of the tank, and tied the valve chamber into the sewer system such that the valve chamber is now functioning as part of the East Coast Interceptor Line.
- Trent Forcemain: Jacob Bros. Construction Inc. (as the Construction Contractor) progressed construction activities including: installation of pipe at Dallas Road and Eberts Street and these sections tied in with coupler such that 99% of the Trent Forcemain pipe is now installed, as well as completion of the tie in at Clover Point Pump Station.

1.2 Dashboard

Table 1 indicates the high level status of the Project and each Project Component with regards to the six Key Performance Indicators (“KPI”) that were defined within the Project Charter.

There were no changes made to the KPIs over the reporting period.

The safety KPI for the Project and the conveyance system remains yellow. Over the reporting period no recordable safety incidents occurred and the total recordable incident frequency at the end of the reporting period remained at 1.5 as it was at the end of January 2021.

The Project Team continues to work with and ensure that all of the prime contractor partners maintain safety as their number one priority. The Project Team is also actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors’ compliance with the direction of the government as the situation evolves.

The schedule KPI for the Project overall and the Project components remains green. The COVID-19 public health emergency is impacting the Project. However, construction is ongoing in accordance with provincial guidelines and the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

























The cost KPI for the Project overall and the conveyance system remained red over the reporting period, and are expected to remain red for the duration of the Project, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. As a result of these budget pressures, the Project Team forecast the cost to complete the Project at \$775M, or \$10M over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two main opposing budget drivers:





- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, the Project cost will be within the Project's \$775M budget.

Table 1- Executive Summary Dashboard

Key Performance Indicators		Project Overall	WWTP	RTF	Conveyance System	Comments
Safety	Deliver the Project safely with zero fatalities and a total recordable incident frequency (TRIF) of no more than 1*.					No recordable incidents occurred over the reporting period. The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. The Project Team will continue to monitor and follow the direction of the government during this evolving situation.
Environment	Protect the environment by meeting all legislated environmental requirements and optimizing opportunities for resource recovery and greenhouse gas reduction.					Over the reporting period, there were two minor incidents. One spill of polymer to the ground on Department of National Defence property adjacent to the McLoughlin Point WWTP, and one release of residual solids from a manhole near the Residuals Treatment Facility. Both incidents were reported to Emergency Management BC and in both cases, the material was removed and disposed of at an appropriate facility. There were no adverse effects on the environment as a result of either incident.
Regulatory Requirements	Deliver the Project such that the Core Area complies with provincial and federal wastewater regulations.					In December 2020 the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank: these are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.
Stakeholders	Continue to build and maintain positive relationships with First Nations, local governments, communities, and other stakeholders.					Engagement activities were ongoing over the reporting period. Significant efforts were made to provide accurate and timely information to stakeholders.
Schedule	Deliver the Project by December 31, 2020.					In December 2020 the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank: these are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.
Cost	Deliver the Project within the Control Budget (\$765 million).					<p>The CRD Board approved an increase to the Project's budget by \$10M, to \$775M, based on the Project Team's forecast of the cost to complete the Project. The increase was required primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.</p> <p>Many contractors have advised that there are cost impacts from the COVID-19 public health emergency. It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that the Project cost will be within the Project's \$775M budget.</p>

* A TRIF of no more than 1 means that there is 1 or fewer recordable incidents (being a work-related injury or illness that requires medical treatment beyond first aid or causes death, days away from work, restricted work or transfer to another job, or loss of consciousness) for every 200,000 person-hours of work

Status	Description
	KPI unlikely to be met
	KPI at risk unless correction action is taken
	KPI at risk but corrective action has been identified/is being implemented
	Good progress against KPI

2 Wastewater Treatment Project Progress

2.1 Safety

Safety information for the reporting period and cumulative for the Project from January 1, 2017 is summarized in Table 3.

The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness.

All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors' compliance with the direction of the government during this evolving situation.

Site safety tours and weekly safety inspections were carried out by Project Management Office ("PMO") construction and safety personnel over the reporting period at all active worksites: RTF, Macaulay Point Pump Station, Clover Point Pump Station, Residuals Solids Pump Stations, BC Hydro Access Road, Arbutus Attenuation Tank and Trent Forcemain.

Over the reporting period (February 2021) two report only safety incidents occurred, as summarized in Table 2.

Table 2: Safety Incidents over the Reporting Period

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
February 4, 2021	Trent Forcemain	Report Only	Flagging person came into contact with a dog while at the laydown area.	Dog's teeth came in contact with the flag person while playing. No first aid was required.	Dog belonged to one of the workers and was removed from the laydown area. Flag person was reminded to be cautious at all times.
February 25, 2021	Arbutus Attenuation Tank	Report Only	Prime Contractor observed 2 workers standing on a raised platform without fall protection.	Work was immediately stopped and a safety stand-down occurred.	Workers were sent home for the rest of the day for the failure to use fall protection. All workers on site completed a fall protection refresher course.

Key safety activities conducted during February included:

- bi-weekly project update meetings with prime contractors: Knappett, NAC, HRMG, Kenaidan, and Jacobs Brothers;
- reviewed site specific safety plans and high risk tasks;
- arranged safety tour of RTF site for CRD Corporate Safety;
- Safety Manager conducting regular site inspections at all active Project work sites;
- respiratory protection fit testing at McLoughlin Point Wastewater Treatment Plant; and
- reviewed daily progress reports and contacting Primes of any safety observations contained within those reports.

Table 3: WTP Safety Information

	Reporting Period (February 2021)	Project Totals
Person Hours		
PMO	2310	171,264
Project Contractor	19,580	2,364,950
Total Person Hours	21,898	2,536,222
PMO	19	
Project Contractors (& Project Consultants) working on Project Sites	90	
Total Number of Employees	109	
Near Miss Reports	0	49
High Potential Near Miss Reports	0	7
Report Only	2	190
First Aid	0	69
Medical Aid	0	12
Medical Aid (Modified Duty)	0	2
Lost Time	0	5
Total Recordable Incidents	0	19
		Project Frequency (from January 1, 2017)
First Aid Frequency		5.4
Medical Aid Frequency		1.1
Lost time Frequency		0.4
Total Recordable Incident Frequency		1.5

2.2 Environment and Regulatory Management

2.2.1 Environment

Environmental work progressed as planned over the reporting period. The focus was on environmental monitoring of construction activities.

Over the reporting period, there were two environmental incidents:

- On February 9, residual solids overflowed from a manhole near the Residuals Treatment Facility (RTF) as a result of CRD's Project commissioning activities on the Residual Solids Conveyance Line, downstream of the RTF. HRMG (the RTF contractor) notified Emergency Management BC and initiated clean up immediately. Hydro-vac trucks were used to remove the discharged material – which was small in volume and contained on-site. There were no adverse effects to the environment from the incident.
- On February 19, HRP (McLoughlin Point WWTP contractor) experienced a spill of polymer to the ground on DND property adjacent to the McLoughlin Point WWTP. The spill was reported to DND and Emergency Management BC and the spilled material was removed and disposed of at an appropriate facility. There were no adverse effects to the environment from the spill.

2.2.2 Regulatory Management

Over the reporting period, the Project Team continued to support or lead the advancement of the few regulatory approvals remaining.

The status of the two remaining key Project permits are summarized in Table 4: the anticipated date for these two remaining leases has been updated to Q2 2021, as discussions to finalise the leases are ongoing. The table is not a list of all required Project permits, but rather a summary of the status of key Project permits.

Table 4- Key Permits Status

<i>Permit/Licence</i>	<i>Anticipated Date</i>	<i>Status</i>	<i>Party Responsible for Obtaining Permitting</i>
McLoughlin Point Harbour Crossing			
Transport Canada Lease	Q2 2021	On track	CRD
McLoughlin Point Outfall			
Transport Canada Lease	Q2 2021	On track	CRD

2.3 First Nations

First Nations communication and engagement was ongoing over the reporting period. Meetings with the Esquimalt and Songhees' liaisons continued, as did meetings with the WSÁNEC Leadership Council's (WLC) liaison. The meetings are a forum for covering both Project-related issues with the potential to impact First Nations, as well as an opportunity for broader discussion of CRD-related issues.

Key activities in February included:

- During archaeological monitoring of construction along the Trent Forcemain, human remains were discovered. Construction moved to a different location while the remains were recovered. Recovery was completed as per the protocol developed by the

Songhees and Esquimalt Nations for the Wastewater Treatment Project. These ancestors will be reinterred with other ancestors encountered on the Project following a burning ceremony in March.

2.4 Stakeholder Engagement

The Project maintained its ongoing two-way Communications and Engagement Plan to provide Project information to stakeholders, communities and the public and to respond to public inquiries. The key focus of the communications and engagement activities over the period was to keep residents and stakeholders informed of Project plans, progress and construction information, and to receive and respond to questions and concerns raised by the community. A variety of communications tools and engagement activities were utilized to support the implementation of the plan, including stakeholder meetings, Project website updates and notifications of construction through notices and a public inquiry program, among other methods.

Construction Communications

One letter was issued to stakeholders in the reporting period:

- Trent Forcemain: Eberts and Bushby Kiosk (February 26, 2021) (Appendix A)

A letter informing residents about a new kiosk which is being installed on the corner of Eberts and Bushby street as part of the work for the Trent Forcemain was hand delivered to 25 residences, near the kiosk location. In addition, as part of ongoing construction communications, residents affected by localized, temporary disruptions, such as driveway impacts, were notified by hand delivery of notices.

Project Website

Over the reporting period the Project website, wastewaterproject.ca, was updated with information about the Project.

Community Meetings

Over the reporting period, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- Victoria Round Table Club;
- Esquimalt Liaison Committee;
- City of Victoria Technical Working Group; and
- District of Saanich Technical Working Group.

Public Inquiries

Public inquiry numbers from the Project email address and 24/7 information phone line (1 844 815-6132) are noted in Table 5.

Table 5 – Project Inquiries- February 2021

Inquiry Source	Contacts for February 2021
Information phone line inquiries	18
Email inquiries responded to	22

Key themes of the public inquiries were as follows:

- questions regarding vibrations caused by Trent Forcemain work;
- questions regarding timing for the remaining work for the Clover Point Pump Station and the Trent Forcemain; and
- operational interest in the McLoughlin Point Wastewater Treatment Plant regarding noise, lighting and future tours of the facility.

2.5 Resolutions from Other Governments

There were no resolutions related to the Project passed by other governments during the reporting period.

2.6 Schedule

Progress over the reporting period is summarized in Section 2.9.

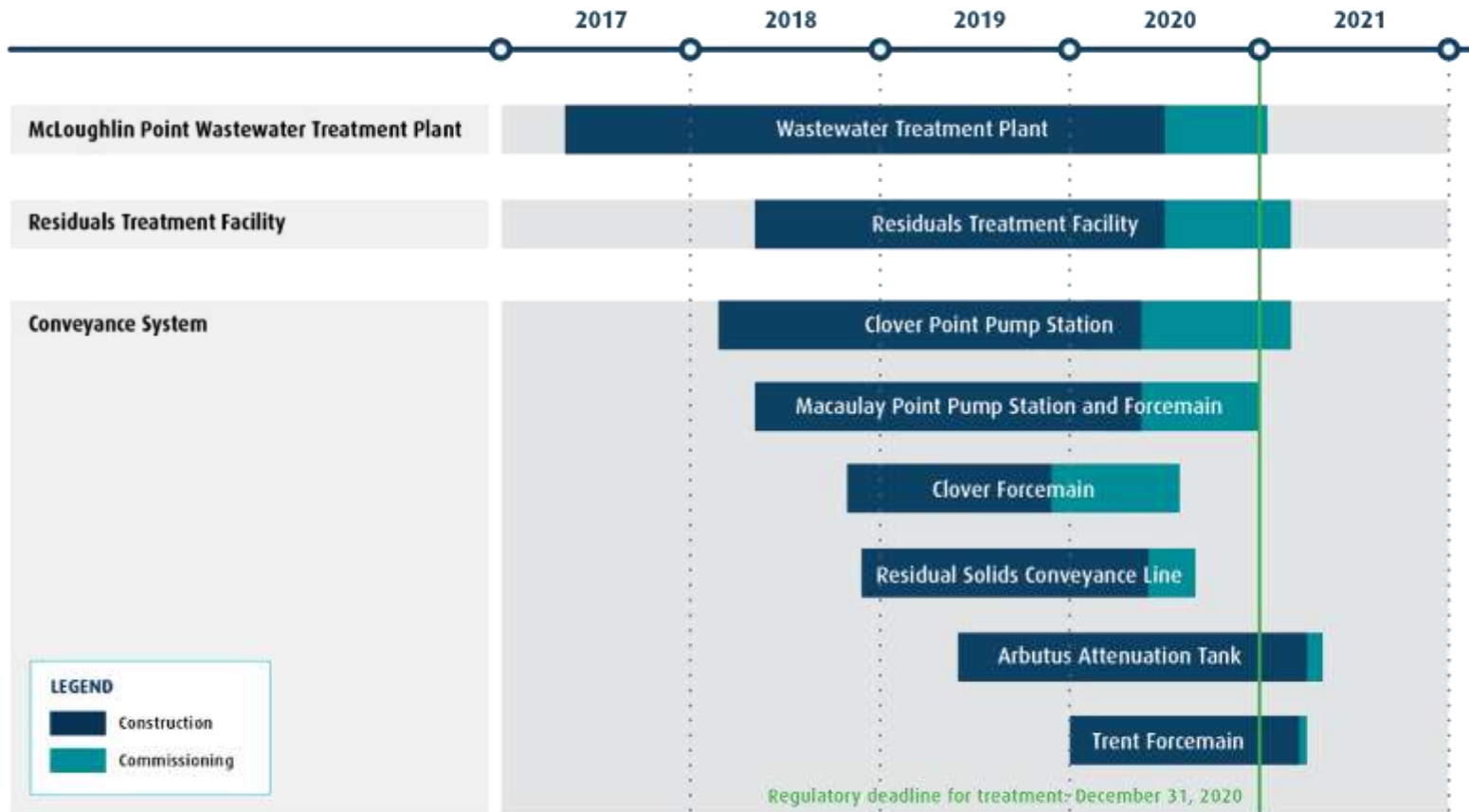
Figure 1 shows the high-level Project schedule. This schedule is unchanged from that shown in the January 2021 Monthly Report.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. However, on December 15, 2020, the Government of Canada, the Government of British Columbia, and the Capital Regional District (CRD) announced that the Wastewater Treatment Project is treating wastewater and is exceeding regulatory requirements. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank. These are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.

Figure 1- High-Level Project Schedule

Wastewater Treatment Project Schedule*

Construction + Commissioning



*Schedule subject to updates as Project planning progresses.

2.6.1 30 day look ahead

Key activities and milestones for the next 30 days (March) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites;
- review Daily Progress reports and contact prime contractors of any safety notations or observations;
- WTP Safety Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- Environmental monitoring and restoration planning as warranted.

First Nations

- Songhees and Esquimalt to host a ceremonial burning to honour the ancestors that were encountered during Project construction prior to their reburial; and
- Final Project meeting with the Esquimalt and Songhees' liaisons.

Stakeholder Engagement

- support operational communications; and
- ongoing construction communications with stakeholders as required.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule; and
- participate in the CRD 2020 Financial Statement Audit.

Construction

Clover Point Pump Station

- complete installation of asphalt walkways, and concrete curbs; and
- install public art.

Macaulay Point Pump Station

- Complete landscaping.

Residual Solids Pump Stations

- continue to work with contractor to finalize project turnover documentation;
- optimisation of odour control units; and
- site restoration, including paving and line painting.

Arbutus Attenuation Tank (AAT)

- install power and controls to pumps;
- install heating ventilation and air conditioning (HVAC) and ductwork in tank entrance room;

- install permanent overflow for attenuation tank;
- install lighting, gas detection and fire alarm system;
- install sump pumps;
- install manholes and pipework;
- install air intake and ducting;
- install electrical duct banks; and
- landscaping.

Trent Forcemain

- complete tie in connection on St. Charles Street;
- continue restoration along Ross Bay seawall including masonry slope against Clover Point Pump Station; and
- continue final paving on Dallas Road and St. Charles Street post tie in.

2.6.2 60 day look ahead

Key activities and milestones for the next 60 days (April) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- Environmental monitoring and restoration activities as warranted at Arbutus and along the BC Hydro access road.

First Nations

- Bi-weekly meeting with the W̱SÁNEĆ Leadership Council's (WLC) liaison.

Stakeholder Engagement

- ongoing construction communications with stakeholders.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule; and
- complete funding claim submissions.

Construction

Clover Point Pump Station

- pathways;
- inlet channel modifications;
- storm outfall improvements; and
- standby Generator Room modifications.

Macaulay Point Pump Station

- public art foundations and installation.

Residual Solids Pump Stations

- final commissioning of Hartland pump station;
- decommissioning and demolition of existing Hartland reservoir;
- optimisation of odour control units; and
- site restoration, including paving and line painting.

Arbutus Attenuation Tank (AAT)

- electrical equipment enclosure installation;
- electrical yard works;
- valve chamber mechanical & electrical works;
- attenuation mechanical & electrical works;
- start commissioning; and
- commence landscaping.

Trent Forcemain

- complete St. Charles and Bushby connections;
- complete commissioning;
- finalize record drawings and Operations & Maintenance manuals; and
- site clean-up and demobilization.

2.7 Cost Management and Forecast

The monthly cost report for February is attached as Appendix B. The cost report summarizes Project expenditures and commitments by Project Components and the major cost centres common to the Project Components.

The Project Team has been reporting budget pressures through its monthly reports to the Project Board (and CRD Board) since September 2017, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

The Project Team forecast the cost to complete the Project at \$775M, or \$10M (1.3%) over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M, and on August 14, 2019, the associated amendment to the 2019-2023 Financial Plan was approved.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that the Project cost will be within the Project's \$775M budget.

2.7.1 Commitments

Commitments were made over the reporting period in furtherance of delivering the Project. The net commitments made during the reporting period resulted in an increase in committed costs of \$1.4 million. The significant commitments made in the reporting period include: work on the Trent Forcemain (disposal of chloride contaminated soil and additional work at Fairfield Road); replacement of an existing City of Victoria watermain at the WWTP; work to address existing conditions at the Macaulay Point Pump Station (including the existing inlet channel) and the approval of provisional items in construction contracts and contract change orders.

2.7.2 Expenses and Invoicing

The Project expenditures for the reporting period were as expected and were within the budget allocations for each of the budget areas. The main Project expenditures incurred over the reporting period were associated with construction and commissioning activities and project management office-related costs.

2.7.3 Contingency and Program Reserves

Over the reporting period contingency credits of \$0.12M were added to the Project's contingency and contingency draws of \$0.92M were made as summarised in Table 6. The draws to-date and remaining contingency and program reserve balances are also summarized in Table 6.

Table 6- Contingency and Program Reserve Draw-Down Table

WTP Contingency and Program Reserve Draws and Reallocations	Draw Date	\$ Amount
Contingency and Program Reserve (in Control Budget)		\$ 69,318,051
Net Contingency and Program Reserve draws to January 31, 2021		\$ (56,094,076)
Contingency and Program Reserve balance as at January 31, 2021		\$ 13,223,975
Close of WWTP - CRD Permit	Feb-21	\$ 82,138
Cost to replace existing City of Victoria watermain	Feb-21	\$ (210,685)
OM & A Building Laboratory Equipment and Office Furniture Allowance reconciliation	Feb-21	\$ 36,624
WWTP Total Draw		\$ (91,923)
RTF Total Draw		\$ -
Clover Point Pump Station Design and Supply of Sleeve for Pig Launcher	Feb-21	\$ (131,178)
Clover Point Pump Station Temporary Change of Stormwater Pump Operation	Feb-21	\$ (4,848)
Macaulay Point Pump Station Address Existing Conditions, including rehabilitation of existing inlet	Feb-21	\$ (575,000)
Conveyance Total Draw		\$ (711,026)
PMO Total Draw		\$ -
BC Hydro Total Draw		\$ -
WTP Program Reserve Draw		\$ -
Contingency and Program Reserve credits in the reporting period		\$ 118,762
Contingency and Program Reserve draws in the reporting period		\$ (921,711)
Contingency and Program Reserve balance as at February 28, 2021		\$ 12,421,026

2.7.4 Project Funding

The federal and provincial governments are assisting the Capital Regional District in funding the Project.

The Government of British Columbia will provide \$248 million towards the three components of the Project, while the Government of Canada is contributing:

- \$120 million through the Building Canada Fund Major infrastructure Component towards the McLoughlin Point WWTP;
- \$50 million through the Green Infrastructure Fund towards the conveyance system; and
- up to \$41 million towards the RTF through the P3 Canada Fund.

The Project Team has applied to the Federation of Canadian Municipalities (FCM) for additional funding and has executed a grant agreement for the contribution of up to \$346,900 towards the delineation of the contamination and remediation and risk assessment for the McLoughlin Point Wastewater Treatment Plant.

The status of funding claims is summarised in Table 7. Note that the timing for the provision of Government of British Columbia and Government of Canada's funding differs by funding source. The Project Team will submit claims to the funding partners in accordance with the relevant funding agreements. In accordance with the funding agreements, the remainder of the funding cannot be claimed until relevant Project components are substantially complete.

Table 7- Project Funding Status

Funding Source	Maximum Contribution	Funding Received in the Reporting Period	Funding Received to Date
Government of Canada (Building Canada Fund)	\$120M	-	\$108M
Government of Canada (Green Infrastructure Fund)	\$50M	-	\$45M
Government of Canada (P3 Canada Fund)	\$41M	-	-
Government of British Columbia	\$248M	-	\$186M
Federation of Canadian Municipalities	\$0.3M	-	-
TOTAL	\$459.3M	-	\$339M

2.8 Key Risks and Issues

The Project Team actively identified and managed Project risks over the reporting period. Table 8 summarizes the highest-level risks that were actively managed over the reporting period, as well as the mitigation steps identified and/or undertaken over the reporting period. No changes have been made to the active risks summary since the January 2021 Monthly Report.

The COVID-19 public health emergency continued to have impacts on the Project over the reporting period. It is anticipated that these impacts may affect several of the Project's risks. The Project Team are currently evaluating the impact of the public health emergency on the Project's risks, and anticipates that changes may be made to several of the risks as the situation evolves. Those risks that the Project Team have identified as potentially impacted, and that are currently under review, are identified in Table 8.

Table 8- Project Active Risks Summary

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Project				
Lack of integration between Project Components.	Planning challenges and system integration between the McLoughlin point WWTP, RTF and Conveyance System components of the Project results in schedule delays and/or additional Project costs.	Physical and schedule interfaces are clearly delineated in all construction contracts along with the requirement for commissioning and control plans. The Project Team has used a single Owner's engineer (Stantec) to develop the indicative design for all critical project components with significant interfaces. Commissioning and control plans are under development	L	No change
Senior government funds issue delayed.	The assessed risk level reflects the Project Team's priority of ensuring Project funding commitments are honoured.	Responsibility for meeting funding commitments has been assigned and is being monitored.	L	No change
Public directly contacting contractors at sites.	Direct contact between the public and contractors could expose both parties to worksite hazards and potential injuries.	Communications and engagement plan and coverage of communications in contractor orientations.	L	No change.
Change in law.	A change in law impacts the scope, cost or schedule of the Project.	Keep apprised of proposed modifications to relevant regulations so as to do the following as appropriate: submit comments on proposed modifications; and/or consider including anticipated modifications in contracts.	H	No change: this risk has been impacted by the COVID-19 public health emergency.
Labour - availability and/or cost escalation.	There is insufficient labour available to construct the Project, and/or there is significant labour cost.	The Project Team will, through the use of competitive selection processes for all construction contracts, ensure that all Project contractors have appropriate experience and therefore understand labour risk.	L	No change.

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Disagreement on contractual obligations of the construction contractors.	There is a disagreement between the Project Team and a contractor regarding the performance of their contractual obligations.	The Project Team takes a proactive management approach to the resolution of any changes, claims and disputes that arise, working expeditiously to achieve resolution with the goal of minimizing any impacts to budget and schedule while ensuring adherence to the terms of the construction contracts.	M	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway).

Risk Level Key - Assessed risk level (based on likelihood and potential impact)			
Low	Medium	High	Closed
L	M	H	C

2.9 Status (Engineering, Procurement and Construction)

2.9.1 Wastewater Treatment Plant (McLoughlin Point WWTP)

The McLoughlin Point WWTP Project Component is now in the two year Performance Period, during which time CRD is responsible for operating and maintaining the facility and Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) is responsible for monitoring CRD’s operations and providing advice and guidance to optimize plant performance. HRP has one test remaining for full acceptance which is a warm weather odour control test that is expected to be completed in summer 2021.

2.9.2 Residuals Treatment Facility

The RTF Project Component continued with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing commissioning activities and commencing acceptance testing.

Photographs of progress over the month of February at the Residuals Treatment Facility are shown in Figures 2 and 3.



Figure 2– Residuals Treatment Facility- Digester building equipment.



Figure 3– Residuals Treatment Facility- Operations Building Boardwalk.

2.9.3 Conveyance System

2.9.3.1 Clover Point Pump Station

The Clover Point Pump Station continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing landscaping and commissioning activities.

Key activities in progress or completed by Kenaidan in February included:

- progressing landscaping and exterior works in plaza; and
- ongoing acceptance testing.

A photograph of progress over the month of February at Clover Point is shown in Figure 4.



Figure 4–Clover Point Pump Station- Generator muffler supports

2.9.3.2 Macaulay Point Pump Station and Forcemain

The Macaulay Point Pump Station and Forcemain continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing landscaping and commissioning activities.

Key activities in progress or completed by Kenaidan in February were as follows:

- installed temporary bin curtain;
- cleaned laydown area and placed topsoil;
- installed and commissioned screen level indication transmitter; and
- completed and inspected pump pedestal work.

2.9.3.3 Residual Solids Conveyance Line

The RSCL is being delivered through two construction contracts:

- Residual Solids Pipes; and
- Residual Solids Pump Stations.

Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor for the Residual Solids Pipes) continued construction activities over the reporting period for the construction of a BC Hydro access road in the Township of Esquimalt.

Key construction activities in progress or completed by Don Mann in February were as follows:

- Completed grading of subbase gravel.

A photograph of construction progress over the month of February on the BC Hydro access road is shown in Figure 5.



Figure 5- View of site looking towards Bewdley Ave facing North East.

Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor for the Residual Solids Pump Stations) continued construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Knappett in February included:

- Hartland Reservoir:
 - completed tie into Saanich water system by District of Saanich; and
 - package booster pump station was relocated and tied into reservoir piping.

Photographs of construction progress over the month of February on the Residual Solids Pump Stations are shown in Figures 6 and 7.



Figure 6–Residual Solids Pump Stations– Pump removed from the wet well at Pump Station 1 for inspection



Figure 7 –Residual Solids Pump Stations – Working on watermain tie in at the Hartland Reservoir

2.9.3.4 Arbutus Attenuation Tank

NAC Constructors Ltd. (as the Construction Contractor for the Arbutus Attenuation Tank) continued construction activities over the reporting period.

Key construction activities in progress or completed by NAC Constructors Ltd. in February included:

- commenced stripping shoring for suspended slab;
- completed bypass pumping for civil yard works;
- completed piping through west end of the valve chamber;
- completed and pressure tested valve chamber process pipework installation;
- ongoing installation of electrical and mechanical works within the occupied spaces of the tank;
- commenced installation of ductwork and heating, ventilation, and air conditioning; and
- valve chamber is now tied in with the sewer system and the valve chamber is functioning as part of the East Coast Interceptor Line.

Photographs of construction progress during the month of February at the Arbutus Attenuation Tank are shown in Figures 8 and 9.



Figure 8–Arbutus Attenuation Tank- Site view facing north.



Figure 9–Arbutus Attenuation Tank- Electrical Room heating ventilation and air conditioning; and electrical installation

2.9.3.5 Trent Forcemain

Jacob Bros. Construction Inc. (as the Construction Contractor for the Trent Forcemain) progressed construction activities over the reporting period.

Key construction activities in progress or completed by Jacob Bros. in February included:

- installed pipe on Dallas Road at Eberts Street and backfilled in preparation for surface restoration;
- completed installation of pipe from Clover Point Pump Station along Ross Bay Seawall toward Dallas Road and Ebert Street;
- completed tie in at Clover Point Pump Station and backfilled pipe; and
- the total installed pipe length is now 1940m, or 99% of the Trent Forcemain.

Photographs of construction progress during the month of February at the Trent Forcemain are shown in Figures 10 and 11.



Figure 10–Trent Forcemain- Seawall Flange Bolt up



Figure 11–Trent Forcemain- Controlled density fill installation around high density polyethylene pipe.

Appendix A– Trent Forcemain: Eberts and Bushby Kiosk (February 26, 2021)



**Wastewater
Treatment Project**
Treated for a cleaner future

February 26, 2021

Dear Resident,

Re: Kiosk installation at corner of Bushby and Eberts

We are writing to notify you of a kiosk being installed on the corner of Bushby and Eberts streets as part of the Wastewater Treatment Project. The kiosk will be approximately three feet wide and six feet tall and will be located within the City of Victoria's road right-of-way. The kiosk will be covered in an anti-graffiti wrap and will be placed next to, and look similar to, an existing cabinet.

Construction will take place in March.

This new kiosk will be used to transmit real time information about the nearby CRD underground infrastructure to allow for successful operation of the wastewater conveyance system. Once operational, the kiosk will not generate any perceivable noise or odour.

We appreciate your patience while this work is being completed. If you have any questions about this work please email the Project Team at wastewater@crd.bc.ca.

Thank you,

Wastewater Treatment Project Team



Appendix B– Monthly Cost Report (February)

**MONTHLY COST REPORT
as at February 28, 2021**

Description	BUDGET		COST EXPENDED					COMMITMENTS			FORECAST		VARIANCE	
	Control Budget	Allocated Budget	Expended to January 31, 2021	Expended over reporting period (February 2021)	Expended to February 28, 2021	Expended to February 28, 2021 as a % of Allocated Budget	Remaining (Unexpended) Allocated Budget at February 28, 2021	Total Commitment at February 28, 2021	Unexpended Commitment at February 28, 2021	Uncommitted Allocated Budget at February 28, 2021	Forecast to Complete	Forecast at Completion	Variance at Completion \$	Variance at Completion as a % of Allocated Budget
McLoughlin Point Wastewater Treatment Plant	331.4	329.7	315.7	0.6	316.4	96%	13.3	322.5	6.1	7.2	13.3	329.7	-	0%
Construction	306.7	321.8	315.5	0.6	316.1	98%	5.7	321.8	5.7	0.0	5.7	321.8	-	0%
Contingency	14.9	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Financing	9.8	6.9	0.2	-	0.2	3%	6.7	0.7	0.4	6.2	6.7	6.9	-	0%
Residuals Treatment Facility	159.4	140.9	12.4	0.2	12.6	9%	128.3	139.6	127.0	1.3	128.3	140.9	-	0%
Construction	145.4	139.5	12.4	0.2	12.6	9%	127.0	139.5	127.0	-	127.0	139.5	-	0%
Contingency	12.3	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Financing	1.7	0.4	-	-	-	0%	0.4	0.0	0.0	0.4	0.4	0.4	-	0%
Conveyance System	158.0	213.3	191.3	2.6	193.9	91%	19.4	200.8	6.9	12.5	19.4	213.3	-	0%
Macaulay Point Pump Station	25.4	31.8	30.7	0.1	30.8	97%	1.0	31.8	1.0	0.0	1.0	31.8	-	0%
Macaulay Forcemain	5.6	7.4	7.4	-	7.4	100%	-	7.4	-	-	-	7.4	-	0%
Craigflower Pump Station	12.5	12.4	12.4	-	12.4	100%	-	12.4	-	-	-	12.4	-	0%
Clover Point Pump Station	23.7	27.5	26.2	0.1	26.3	96%	1.2	27.5	1.2	0.0	1.2	27.5	-	0%
Currie Pump Station^	2.8	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Arbutus Attenuation Tank	14.2	24.6	20.4	1.5	21.9	89%	2.6	23.9	2.0	0.7	2.6	24.6	-	0%
Clover Forcemain	14.6	31.9	31.7	-	31.7	99%	0.2	31.9	0.2	0.0	0.2	31.9	-	0%
Currie Forcemain^	3.3	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
Trent Forcemain	9.5	11.3	7.9	0.5	8.4	74%	2.9	9.9	1.5	1.4	2.9	11.3	-	0%
Residual Solids Conveyance Line	19.1	37.0	36.7	0.2	36.9	100%	0.1	37.0	0.1	-	0.1	37.0	-	0%
Residual Solids Pump Stations & Bridge Crossings	4.6	18.0	17.1	0.1	17.3	96%	0.8	18.0	0.7	0.0	0.8	18.0	-	0%
Residual Solids Conveyance Line – Highway Crossing	-	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
Contingency	16.8	6.6	-	-	-	0%	6.6	-	-	6.6	6.6	6.6	-	0%
Financing	5.8	4.1	0.1	-	0.1	3%	3.9	0.3	0.2	3.7	3.9	4.1	-	0%
Project Management Office ("PMO")	75.8	77.9	64.9	0.8	65.8	84%	12.1	71.8	6.0	6.1	12.1	77.9	-	0%
Project costs Aug 2016-Dec 2016	2.2	2.2	2.2	-	2.2	100%	-	2.2	-	-	-	2.2	-	0%
Owner's Engineering	17.2	17.9	16.6	0.3	16.9	95%	1.0	17.9	0.9	0.0	1.0	17.9	-	0%
Conveyance Design	5.0	9.4	8.7	0.1	8.7	92%	0.7	9.4	0.7	0.0	0.7	9.4	-	0%
Advisors & Professional Support	7.0	14.9	11.1	0.1	11.2	75%	3.8	11.9	0.8	3.0	3.8	14.9	-	0%
Project Board	2.0	1.3	1.0	0.0	1.1	85%	0.2	1.1	-	0.2	0.2	1.3	-	0%
Project Board Expenses	0.3	0.1	0.1	-	0.1	64%	0.0	0.1	-	0.0	0.0	0.1	-	0%
Project Team	29.1	23.1	19.3	0.4	19.7	85%	3.4	23.1	3.4	0.0	3.4	23.1	-	0%
Project Leadership Team Expenses	0.7	0.4	0.3	-	0.3	68%	0.1	0.3	-	0.1	0.1	0.4	-	0%
Project Support Team Expenses	0.5	0.2	0.1	-	0.1	80%	0.0	0.1	-	0.0	0.0	0.2	-	0%
CRD Financial Services	1.5	1.4	1.4	-	1.4	100%	-	1.4	-	-	-	1.4	-	0%
CRD Human Resources	0.3	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Corporate Communications	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Real Estate	0.3	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Information Technology	0.4	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Insurance	0.1	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
CRD Operations	0.6	0.6	0.6	-	0.6	100%	-	0.6	-	-	-	0.6	-	0%
CRD Legislative Services	0.1	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
CRD Corporate Safety	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Executive Services	-	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Office Lease	1.9	1.3	1.0	0.0	1.1	81%	0.2	1.2	0.2	0.1	0.2	1.3	-	0%
Office Supplies	0.1	0.2	0.2	-	0.2	92%	0.0	0.2	-	0.0	0.0	0.2	-	0%
Vehicles	0.2	0.2	0.2	-	0.2	95%	-	0.2	-	-	-	0.2	-	0%
Connections Call Center	-	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
Communication support materials	0.5	0.2	0.1	0.0	0.2	65%	0.1	0.2	-	0.1	0.1	0.2	-	0%
Computer Hardware, Software & Training	1.0	0.9	0.7	-	0.7	76%	0.2	0.7	-	-	0.2	0.9	-	0%
Contingency	4.8	2.3	-	-	-	0%	2.3	-	-	2.3	2.3	2.3	-	0%
BC Hydro	12.9	4.2	2.7	-	2.7	64%	1.5	2.7	0.0	1.5	1.5	4.2	-	0%
Third Party Commitments	8.1	8.1	4.4	0.1	4.5	56%	3.6	6.9	2.3	1.3	3.6	8.1	-	0%
Program Reserves	19.2	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Core Area Wastewater Treatment Project	765.0	775.0	591.5	4.3	595.8	77%	179.1	744.1	148.3	30.9	179.1	775.0	-	0%

* Values presented in \$millions, results in minor rounding differences

** Cost report presents approved expenditures

^ Component no longer required, and would not provide any value therefore removed from Project Scope; Costs include Seaterra initiation, planning and design