

DATE: December 3, 2020

FILE: 5330-20/CVWTP

TO: Chair and Directors
Comox Valley Water Committee

FROM: Russell Dyson
Chief Administrative Officer

Supported by Russell Dyson
Chief Administrative Officer

R. Dyson

RE: Comox Valley Water Treatment Project – Dashboard Update

Purpose

To provide an update of key milestones, as well as project metrics to ensure the Comox Valley Water Committee remain apprised of the progress of the Comox Valley Water Treatment Project (CVWTP).

Recommendation from the Chief Administrative Officer:

This report is provided for information.

Executive Summary

Construction is 75 per cent complete and significant construction milestones are starting to be completed. Milestones achieved include:

- Marine pipeline tunnel complete and tunneling machine retrieved from Comox Lake;
- Marine pipeline submerged HDPE section welding complete, ready to sink into place;
- Marine pipeline dredging, to provide firm ground for submerged HDPE section, in process;
- Raw water pump station (RWPS) valve chamber construction commenced;
- RWPS electrical infrastructure is almost complete: generator, unit substation and electrical cabinets are all installed;
- Raw water transmission main is complete and pressure tested. Final landscaping is in process;
- Water treatment plant (WTP) structural concrete is almost complete and architectural steel, mechanical piping and electrical are all in process:
 - All process areas are now closed in, ready for equipment.
 - Electrical room is being fitted with cabinets, generator and unit substation installed.
 - Pipe gallery is advanced with most of the piping installed.
 - Clearwell cell one is complete, ready for testing.
- Treated water transmission main is 95 per cent complete. The crews are tying into the clearwell this week and only have Bevan Creek crossing and the tie-in at Powerhouse to go;
- Marsden Road fibre conduit install is complete.

Upcoming work includes:

- Completion of the marine pipeline and intake – January 2021;
- Completion of the treated water transmission main – January 2021;
- Completion of the WTP structural concrete – January 2021;
- Completion of the RWPS – March 2021;
- Start of commissioning and water flowing through new intake to WTP – April 2021.

A project dashboard is attached as Appendix A, providing project metrics to summarize progress, select project photos are also included to provide a visual to the summary above. Some highlights from, and additional to, the dashboard:

- All community employment benefit targets have been surpassed with AECON forecasting almost double the target hours by the end of the project.

Target Groups	Commitment Hrs.	Cumulative Total	Forecast Hrs.
Indigenous Peoples	10,000	13,634	16,000
Apprentices	15,000	19,119	22,500
Under-represented Populations	10,000	24,155	27,500

- The potential Comox Lake sediment contamination issue has been managed effectively with all samples showing no contamination of lake water. Sampling and mitigation measures will continue until all in-lake work is complete.
- COVID-19 continues to be a risk for the project and AECON have stepped up their protocols to maximise health and safety of all workers on the site. The cost and schedule impacts of the impacts of COVID-19 from spring 2020 are still under analysis and negotiation.
- At this stage, there are no expected changes to project schedule or budget

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Government Partner/Stakeholder Distribution (Upon Agenda Publication)

K'ómoks First Nation	✓
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Attachments: Appendix A – CVWTP Dashboard



COMOX VALLEY WATER TREATMENT PROJECT

Construction progress dashboard

Dec 1, 2020



BUDGET

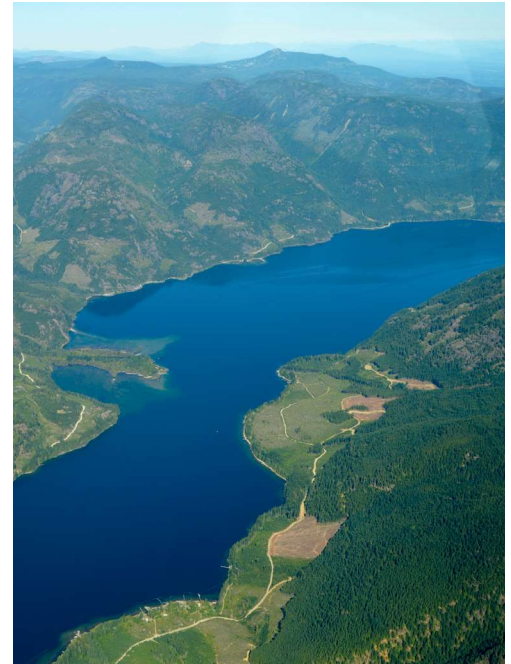
SPENT /
ALLOCATED
TO DATE

FORECAST TO
COMPLETION

VARIANCE TO
APPROVED BUDGET

Project costs before DB award	\$5.7 million	\$5.7 million	n/a
Design-Build Cost	\$83.4 million	\$111.6 million	0%
Cost outside of DB post award	\$1.4 million	\$3 million	0%
Contingency	\$0.2 million *	\$5.7 million	0%
Total Project Cost*	\$90.7 million	\$126.0 million	0%

Notes: * This cost represents contaminated site mitigation in Comox Lake. There is still an outstanding claim due to the first wave of COVID-19 which remains under negotiation. At this time, CVRD are working to understand the costs and what proportion of these costs CVRD are liable for. CVRD will ensure the Water Committee is fully informed of any contingency allocated to COVID-19. At this time there is no indication that COVID-19 will affect the overall approved project budget.



COMMUNITY EMPLOYMENT BENEFITS

COMMITMENT (HRS)

ACTUAL (HRS)

Indigenous Peoples	10,000	13,634
Apprentices	15,000	19,119
Under-represented Populations	10,000	24,155



INCIDENTS

MINOR

MAJOR

Safety Incidents	0	0
Environmental Incidents	1	0



SCHEDULE

BASELINE SCHEDULE

FORECAST SCHEDULE

PROJECTED SCHEDULE VARIANCE

Marine Pipe Tunnel	Summer 2020	COMPLETE	
Clearwell Cell 1	Fall 2020	COMPLETE	
RWPS Foundations Complete	Summer 2020	January 2021	4 months
Transmission Main Completion	Fall 2020	January 2021	2 months
Commissioning Start	March 2021	March 2021 *	0 months
Acceptance Date (in operation)	May 2021	June 2021 *	1 months

Notes: *Due to the impacts of COVID-19 on available workforce and material supply, there may be impacts to the completion date of the project. At this time, the impacts are expected to be minor, a matter of weeks. It is a changing situation, and it is ongoing. CVRD will ensure the Water Committee is fully informed of any change in Acceptance Date for the project. At this time there is no indication that the publicly communicated finish date of Summer 2021 is at risk.



Tunneling machine, sitting in the cradle, retrieved from the lake after completion



Dredging in Comox Lake – preparing lake bed for submerged portion of Marine Pipeline



HDPE portion of Marine Pipeline – welded and ready move and to sink into place



Raw Water Pump Station Electrical Building – MCC Cabinets installed ready to be energized



Water Treatment Plant lobby steel and glue-lam beams being erected



Water Treatment Plant east side – from left to right:
Lobby, Flash Mixing, Chemical Tank Area, Sludge Dewatering, Electrical Room



Inside Water Treatment Plant – Building Mechanical room walls being installed in Flash Mixing area



Water Treatment Plant Chemical Tank Area – ready for tanks and overhead doors



Water Treatment Plant Workshop and Storage Room



Water Treatment Plant Electrical Room



Foreground: Water Treatment Plant Generator and Unit Substation
Background: Clearwell with Backwash Equalization Tank foundation starting on right



Treated Water Transmission Main being connected to Clearwell at WTP