



COMOX VALLEY WATER TREATMENT PROJECT UPDATE

Water Treatment Project on the Final Sprint to Completion

Two more significant construction milestones are in the works to be completed this month – bringing construction of the new water treatment system to 88 per cent complete.

Installation of the five-kilometre long treated water transmission main, which will move drinking water from the treatment plant to distribution systems in the Comox Valley, is now complete and undergoing testing (see page 2 for more details).

This month, crews are also finalizing installation of the marine pipeline and water intake at Comox Lake (see photo right). This infrastructure will pull water from the lake and transport it to the pump station.

By end of April, all mechanical equipment is expected to be installed and testing is planned to start at the raw water pump station. Commissioning of the new system will begin this spring and it is planned to be completely operational by this summer.

What's Happening Now

Transmission Mains



Final testing – Installation of all pipelines for the new system were completed this month, with pressure testing of the treated water transmission main now underway.

Raw Water Pump Station Site



Intake – Completing installation and undertaking testing of the submerged marine intake/pipeline at Comox Lake.



Pump station – Finishing work on the valve chamber, installing the raw water pumps and energizing the electrical building.

Water Treatment Plant Site



Construction – Wall installation and window framing are happening in the admin building. Crews are also installing the roof membrane throughout the facility.



Installation – Inside the water treatment building, pipe fitting, HVAC ducting, electrical installation and connecting cables to equipment are still underway. Chemical tanks are now in place and chemical systems are being installed.



Project milestone: sinking a section of the marine pipeline at Comox Lake.

Project Construction: By the Numbers

As of mid-March crews have:



poured **+ 10,000 m³** of concrete



installed **+ 1,450,000 kg** of rebar



excavated **+ 70,000 m³** of material



Bringing an End to Boil Water Notices in the Comox Valley

While early 2021 brought a number of construction achievements, it also brought intense snow/rainfall, and ultimately a turbidity-related boil water notice. This was a difficult but important reminder about the critical need for a new water treatment system.

We'd like to thank all Comox Valley Water System users for their understanding during this event, which occurred from Jan. 2-6. We can look forward to the elimination of turbidity-related boil water notices once the new system is in operation.

For more information about what to do after a boil water notice has been lifted visit:

www.comoxvalleyrd.ca/boil



What's Next?

Here's what crews are working on through April:

- Testing of the marine pipeline and intake at Comox Lake.
- Landscaping along the treated water transmission main corridor.
- Connecting sites to BC Hydro power.
- Installing communication cable between new and existing infrastructure.
- Testing Cell 2 at the clearwell.
- Hydro-testing the large flocculation and filter concrete tanks, together these tanks form the first stage of treatment.
- Continuing to ensure COVID-19 safety precautions are in place so that construction can continue safely.

Transporting Treated Water to Our Taps

This month, with the installation of the treated water transmission main complete, we're one step closer to moving drinking water through the new system to homes in the Comox Valley.

The treated water transmission main will transport drinking water by gravity, from the treatment plant to existing distribution systems. It is approx. five kilometres and runs alongside the BC Hydro penstock.

Pressure testing of the new main is underway now. This involves filling the pipe with treated water from the existing system, all the way into the clearwell at the plant.



March 2021: One of three isolation valves along the length of the treated water transmission main.

New Videos



Charlie Gore
Capital Projects Manager, CVRD

Looking for updates on the project?

Watch the CVRD's Facebook page for regular video updates from Project Manager, Charlie Gore. Plus – catch monthly timelapse videos showing progress at the water treatment plant.

The clearwell – the reservoir at the treatment plant where treated water is stored before it enters the treated water transmission main – is also now complete. It is made up of two cells and can hold up to 10 million litres of treated water. Cell 1, half of the clearwell, is now full of treated water and undergoing hydrotesting.



December 2020: A birdseye view of the clearwell with Cell 1 complete, and before completion of Cell 2. Inside the clearwell are the internal baffles, which provide a long travel path and contact time for the water after chlorine disinfection, ensuring it is safe to drink.

For more information

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