

Our Commitment to Water Quality

Water quality challenges in the Elk Valley are related to a long history of mining in the region, and Teck has been taking action for years to protect and improve water quality through the Elk Valley Water Quality Plan (EVWQP). Teck is making significant progress towards achieving the objectives in the Plan with the successful operation of three water treatment facilities that are reducing selenium levels downstream and additional facilities coming online in 2022 and beyond.

Fording River Operations South Active Water Treatment Facility is now operating and successfully removing selenium and nitrate from water at Teck's operations in the upper Fording River.



The Challenge

The mining process generates large quantities of leftover rock that contain naturally-occurring substances such as selenium. Water from precipitation and runoff flows through these rock piles and carries selenium and other substances, such as nitrate, into the local watershed. If present in high enough concentrations in the watershed, these substances can adversely affect aquatic health. Our goal is to stabilize and reverse the increasing trend of selenium and other substances to ensure the ongoing health of the watershed, while at the same time allowing for continued sustainable mining in the region.

The Elk Valley Water Quality Plan

In 2014, British Columbia (B.C.) Ministry of Environment approved an area-based management plan—the Elk Valley Water Quality Plan (EVWQP). The Plan was informed by scientific advice received from a Technical Advisory Committee with participation from government, First Nations, an independent scientist and community input received through public consultation.

Elk Valley Water Quality Plan Implementation

- 1. Targets:** Set short, medium, long-term water quality targets that are protective of aquatic and human health.
- 2. Water Management:** Implement water treatment and mitigation actions to achieve targets.
- 3. Monitoring:** Define a monitoring program for water quality and aquatic health.

4. Research & Development: Undertake a Research & Development program to find the most effective ways to ensure water quality.

5. Adaptive Management: Multi-decade plan, adapting implementation based on new information, technology and learnings.

An Environmental Monitoring Committee (EMC), consisting of experts from the B.C. Ministry of Environment, B.C. Ministry of Energy and Mines, the B.C. Interior Health Authority, the Ktunaxa Nation Council, an independent scientist and Teck provides input on implementation of the plan. Each year, the EMC hosts a public open house and releases a public report EMC reports and all monitoring reports related to the Elk Valley Water Quality Plan can be found at: teck.com/elkvalley

Water Treatment Progress

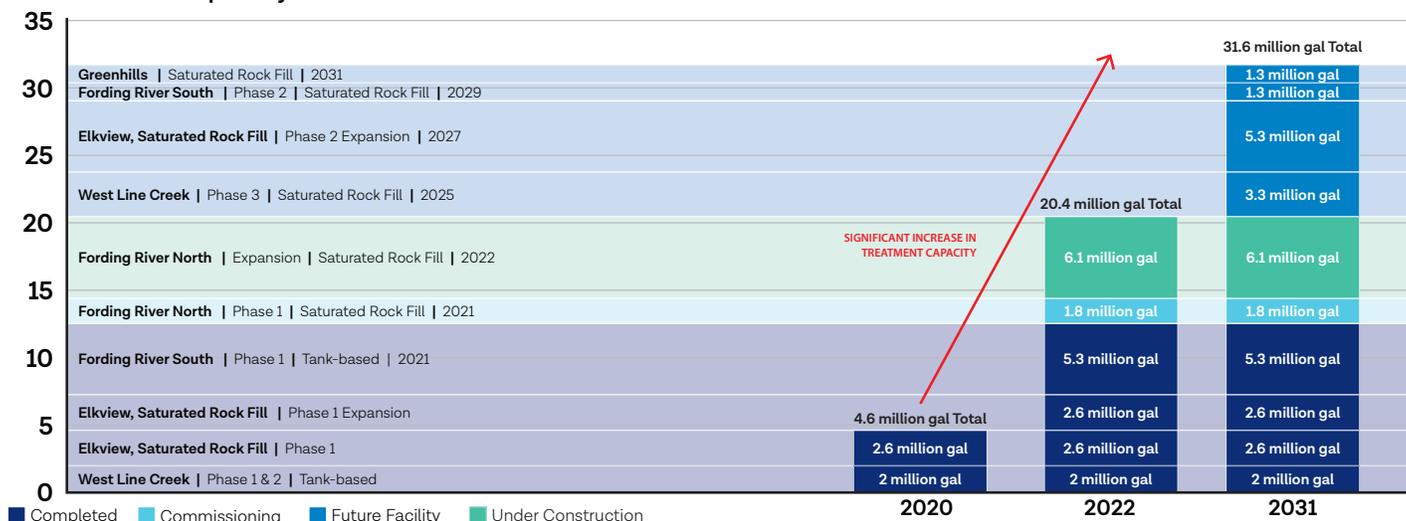
Teck has made significant progress implementing the Elk Valley Water Quality Plan. Water treatment facilities are operating now that are successfully improving water quality with more facilities planned and under construction.

Teck has made significant progress with water treatment facilities achieving approximately 95% removal of selenium and nitrate from treated water. We expect further significant reductions of selenium and nitrate as additional facilities come online.

Teck now has up to 12.5 million gallons per day of water treatment capacity in the Elk Valley with three treatment facilities operating.

Water Treatment Facilities to 2031

Millions of Gallons per Day



Next Steps

- Teck has completed construction of the first phase of its fourth water treatment facility in the region, Fording River North Saturated Rock Fill (FRO-N SRF), with commissioning now underway. Construction has also started on the expansion of this facility.
- After completion of the FRO-N SRF water treatment facility later this year, Teck will have capacity to treat more than 20 million gallons of water per day, a four-fold increase from its treatment capacity in 2020.
- With the additional capacity, Teck expects to achieve one of the primary objectives of the Elk Valley Water Quality Plan: **stabilizing and reducing the selenium trend in the Elk Valley.**
- Teck has spent more than CAD\$1.2 billion so far to implement the Elk Valley Water Quality Plan; between 2022 and 2024 we plan to invest up to a further CAD\$750 million in work to protect the watershed.

Research and Development

Teck has more than 25 research and development projects underway, including the advancement of smaller, in-situ water treatment facilities that can be built closer to where treatment is needed.

R&D Success: Nitrate Prevention Technique

The R&D program led to the development of Teck's nitrate prevention technique that uses liners that prevent explosives with nitrate from coming in contact with water.

Using this technique, the majority of blast holes contain a liner that reduces release of nitrate by greater than 90% and helps to protect water quality.

Water Quality in Kooconusa Reservoir

Teck completes surface water monitoring at the Canadian side of the Kooconusa Reservoir as outlined by Teck's BC Ministry of Environment and Climate Change Strategy, Environmental Management Act Permit 107517, inclusive of selenium, cadmium, nitrate, and sulphate.

Teck is also a member of the Kooconusa Transboundary Monitoring Task Group along with the Montana Department of Environmental Quality, Montana Fish, Wildlife and Parks; U.S. Environmental Protection Agency; and BC Ministry of Environment and Climate Change Strategy. Data collected under the program is uploaded to the US EPA's Water Quality Data Portal, which is a publicly accessible database.

Site: RG_Border—Kooconusa Reservoir South of the Elk River

Monthly Average Total Selenium Concentrations at Monitoring Station RG_BORDER

