

Existing Environment and Planned Studies

Fording River Extension Project



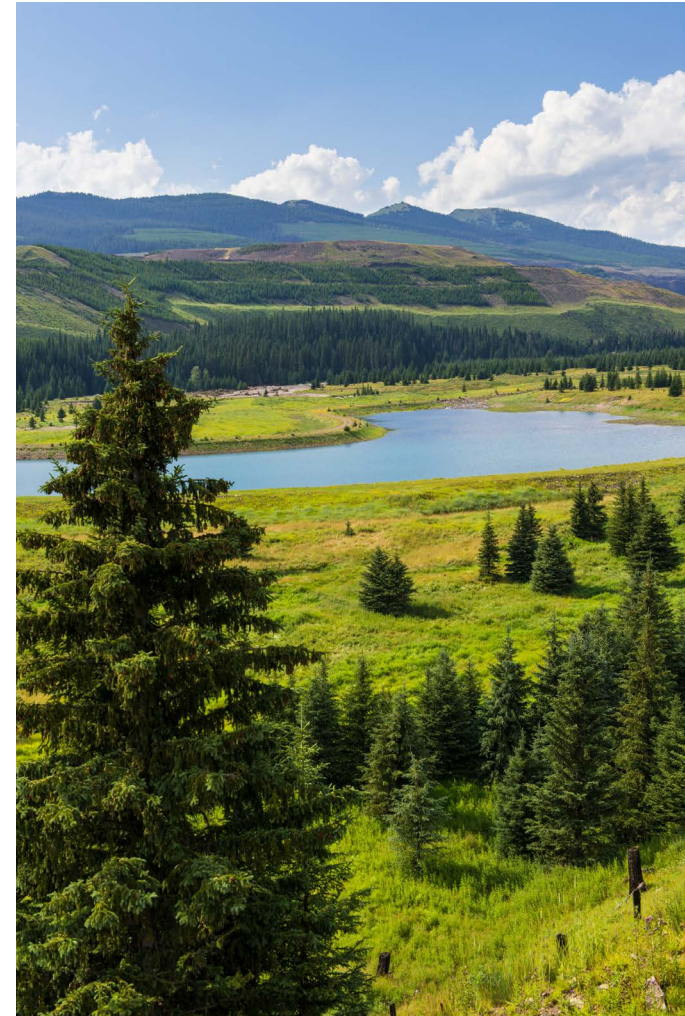
Existing Environment

Stretching 200 km through the East Kootenays, the Elk Valley is at the heart of the Canadian Rocky Mountains. The economy and local livelihoods are closely tied to the region's environment and natural resources, including strong tourism, outdoor recreation, and natural resource development sectors.

The Fording River Extension (FRX) would be located immediately adjacent to Teck's Fording River Operations, and is within the range of noise and air emissions from the existing mining activities. Streams and creeks in the area flow towards the Fording River. Working with Indigenous Peoples and other partners, Teck has made significant progress towards achieving the objectives of the Elk Valley Water Quality Plan (EVWQP), a long-term approach to address the management of selenium and other substances released by mining activities in the Elk Valley. Our goal is to stabilize and reverse the 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 Fording River Extension Project is located upstream of Josephine Falls, which prevents fish from moving upstream from lower reaches of the Fording River. Westslope cutthroat trout are the only known fish species upstream of Josephine Falls. Teck is working on regional initiatives to protect and support this important fish population in the upper Fording River, and we recognize that Chauncey Creek is regionally important tributary habitat.

Vegetation in the area includes spruce and fir trees, grasslands, and Whitebark pine. The region is rich in wildlife, home to one of North America's largest bighorn sheep populations as well as abundant mountain goat, elk, bear, cougars, eagles, and many kinds of songbirds. Past forestry and mining activities—as well as urban and rural development, hunting, and regional infrastructure—have all affected the presence and distribution of wildlife species over time.



Regional Considerations

Mining is the backbone of the Elk Valley economy and, through its four steelmaking coal operations, Teck is the major employer in the area. Over the past century, mining, forestry, agriculture and other activities have had an effect on the environment. Teck is committed to working to address regional environmental issues and we are adapting our practices to reduce the effects of current and future mining.

Planning and design of the Fording River Extension (FRX) will also consider these challenges and work to minimize environmental effects. These efforts will also be aligned with regional initiatives involving Indigenous Peoples and other partners.

Water Quality

Teck has made significant progress towards achieving the objectives of the Elk Valley Water Quality Plan. This Plan aims to stabilize and reduce selenium and nitrate levels in the watershed.

What are we doing:

- Using new, innovative liners to prevent nitrate from explosives from coming in contact with water. This first-of-its kind technology developed by Teck is predicted to reduce release of nitrate by more than 90%.
- Treating up to 10 million litres of mine-affected water per day at our Elkview Operations using our first Saturated Rock Fill facility. This treatment is achieving near-complete removal of selenium and nitrate and we are seeing downstream reductions in selenium concentrations.
- Treating up to 7.5 million litres of water per day at our first water treatment facility at Line Creek Operations. This is the first in a series of facilities that will reduce downstream selenium concentrations.

High Elevation Grasslands

These grasslands are an important ecosystem in B.C., and may be affected by the mine footprint.

What are we doing:

- Including Teck's High Elevation Grasslands Management Plan in the design considerations for the Project.
- Continuing research and reclamation work that restores high-elevation grasslands.
- Proposing to offset loss of these habitats, where needed.

Whitebark Pine

Whitebark pine trees in the region are rare and under stress due to disease and other factors. Mine development may affect Whitebark pine habitat.

What are we doing:

- Including the Whitebark Pine Management Plan in the design considerations for the Project.
- Supporting research into Whitebark pine habitat.
- Gathering disease-resistant seeds and planting new Whitebark pine trees in reclaimed mining areas.

Terrestrial Habitat

Regional development over the years has led to a cumulative loss of habitat for wildlife including grizzly bear and bighorn sheep.

What are we doing:

- Investing in research on habitat restoration and reclamation.
- Considering how adjustments to mine design and reclamation planning can avoid or reduce habitat effects.
- Considering how impacts may be offset or enhanced in other areas.
- Advancing operational and planning efforts to avoid or minimize impacts

Westslope Cutthroat Trout

Westslope cutthroat trout is an isolated, genetically pure fish population upstream of Josephine Falls which is listed as a Species of Special Concern federally and is blue-listed in B.C. Fish monitoring data in 2019 showed a decline in fish counts compared to 2017.

What are we doing:

- Evaluating possible causes for the decline. Teck has established a team of 18 external experts to consider the issue and deliver a report later this year. This team is working with the Ktunaxa Nation Council, government regulators, the Environmental Monitoring Committee, and the Elk Valley Fish and Fish Habitat committee to gather more information, evaluate possible causes, and address ongoing protection of fish.
- Taking precautionary measures to limit handling and sampling of fish, and to limit water use at our operations during low-flow periods.
- Continuing our commitment to support the Province and work collaboratively with Ktunaxa Nation Council to develop fish recovery strategies.
- Additional and ongoing monitoring of the westslope cutthroat trout population (monitoring began in 2012).
- Including westslope cutthroat trout as a key consideration in Project design and planning.

Baseline Studies for the Fording River Extension

As the Fording River Extension (FRX) prepares for an environmental assessment, it is important to have a strong understanding of the current state of the environment. Baseline study programs for the Project began in 2018 and will continue through 2020. These studies build on many years of knowledge from Fording River Operations. With input from communities and Indigenous Knowledge, these programs provide an informed basis for the prediction of environmental effects, and also provides a reference to monitor future changes.

Further detail about baseline studies and potential environmental and social effects of FRX will be the subject of future engagement under the B.C. environmental assessment process.

