

Elk Valley Water Quality Plan Progress Update

Spring 2024



Teck works to protect water quality downstream of our operations, improve water use efficiency and engage with communities on watershed management.

About the Elk Valley Water Quality Plan

Teck developed the Elk Valley Water Quality Plan (EVWQP) with input from the public, Indigenous governments, provincial and federal governments, independent technical experts and other stakeholders in both Canada and the US.

The plan aims to:

- Stabilize and reverse the trend of selenium and nitrate, manage calcite formation and protect the ongoing health of the watershed
- Allow for continued sustainable mining in the Elk Valley

- Manage adaptively and adjust to new information and research

It includes water quality limits to stabilize and reduce the trend of selenium and other constituents, and support the ongoing health of the watershed. The plan was approved by the BC Ministry of Environment in 2014 and is updated every three years. You can find the most recent update to the plan [here](#).

Progress implementing the EVWQP

Current water treatment facilities are removing between 95% and 99% of selenium from treated water. Since the creation of the EVWQP, we have invested over \$1.4 billion towards water quality monitoring, management, research and construction of four treatment facilities to date. Teck is investing up to a further \$550 million by the end of 2024.



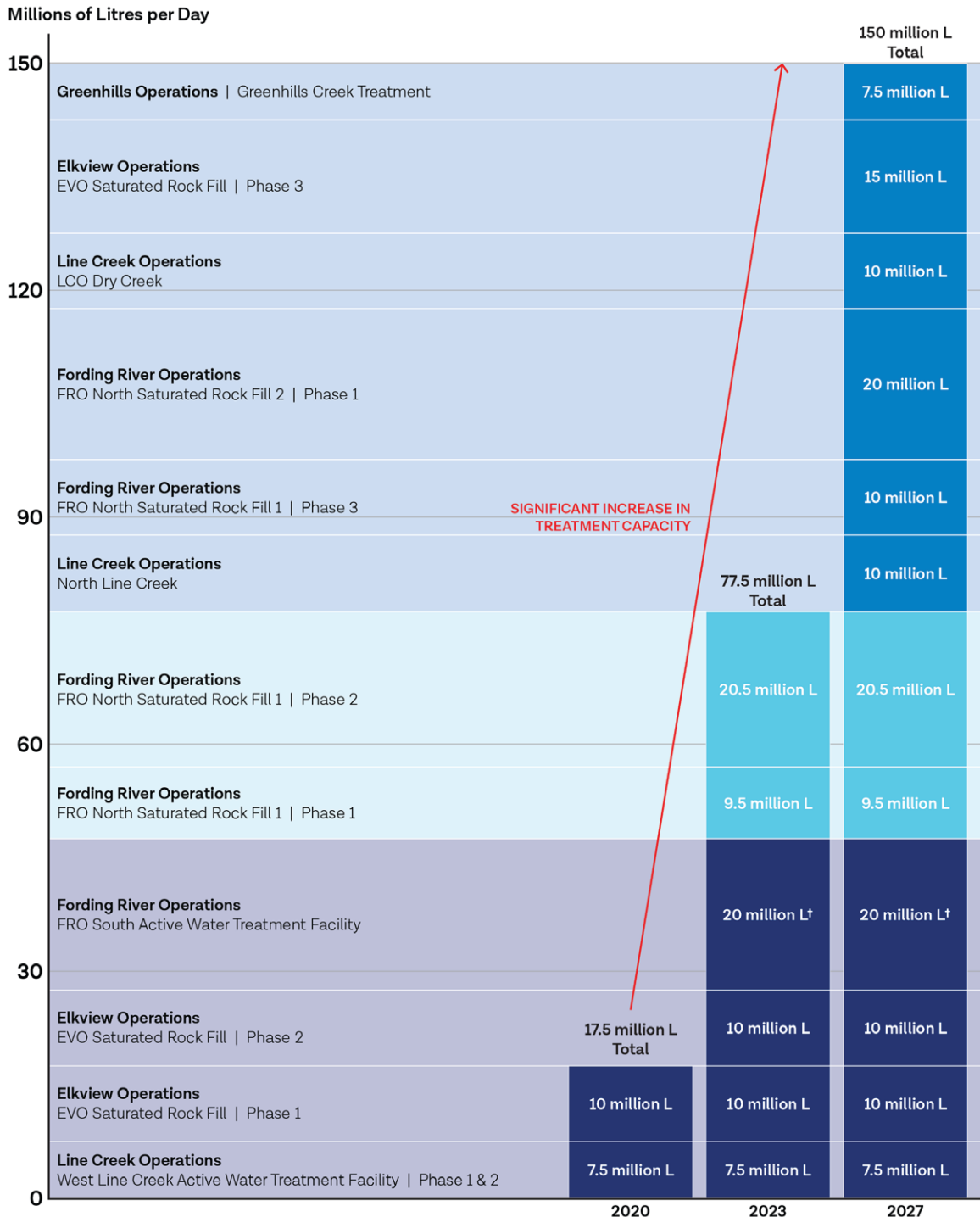
Image: View of the Fording River Operations South Active Water Treatment Facility

Eight-fold increase in water treatment by 2027 from 2020 capacity

Teck now has constructed treatment capacity of 77.5 million litres of water per day, a four-fold increase from its treatment capacity in 2020. Our four water treatment facilities are removing between 95% and 99% of selenium from treated water. New treatment capacity is scheduled to come online virtually every year for the next five years,

which will increase total treatment capacity by 2027 to 150 million litres per day, an over eight-fold increase in capacity compared to 2020. We expect further significant reductions of selenium and nitrate as additional facilities come online. With this increased treatment 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.

Water Treatment Facilities to 2027 Millions of Litres per Day



■ Completed ■ Commissioning ■ Future Facility

*Based on 2022 Implementation Plan Adjustment

†Treating water since December 2021, commissioning fully complete as of June 30, 2022

Stabilizing and reducing the selenium trend

Figures 1 and 2 illustrate how treatment is working to improve water quality. Figure 1 shows results in the Fording River downstream of active water treatment facilities at Line Creek and Fording River Operations. Figure 2 shows results in the Elk River downstream of the confluence

of Michel Creek, which also includes treatment from the Saturated Rock Fill at Elkview Operations. Selenium concentrations have stabilized and reduced downstream of treatment, as demonstrated on the figures below. When the Saturated Rock Fill at Fording River Operations (which is already constructed and permitted) is fully operational later this year, selenium concentrations at these locations are projected to be further reduced.

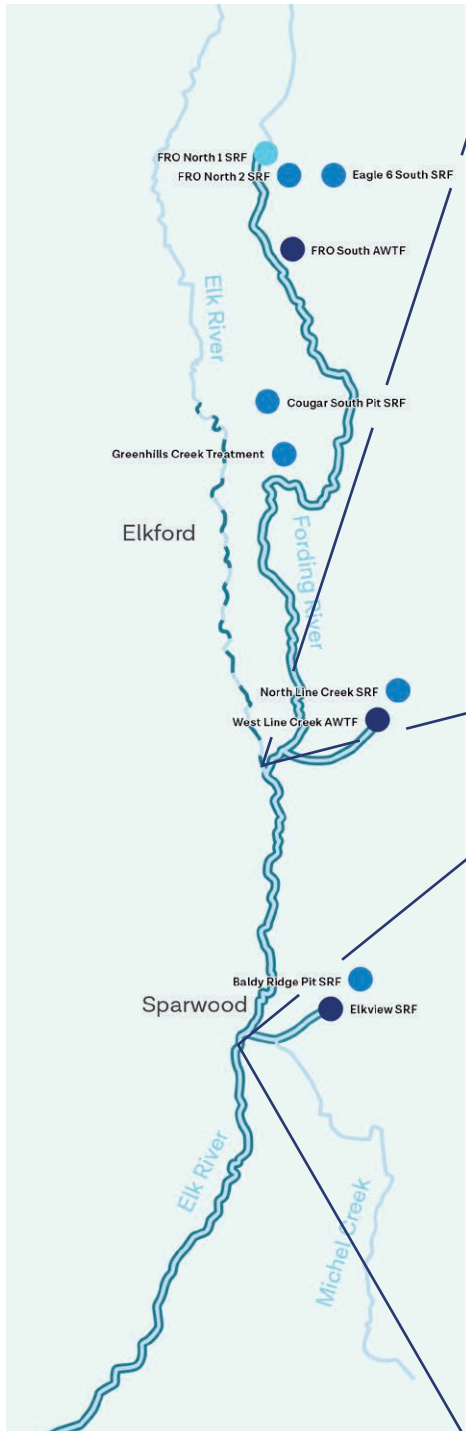


Figure 1: Fording River Downstream of Line Creek, Provincial Monitoring Station Results and Selenium Projections for the Order Station LC_LC5

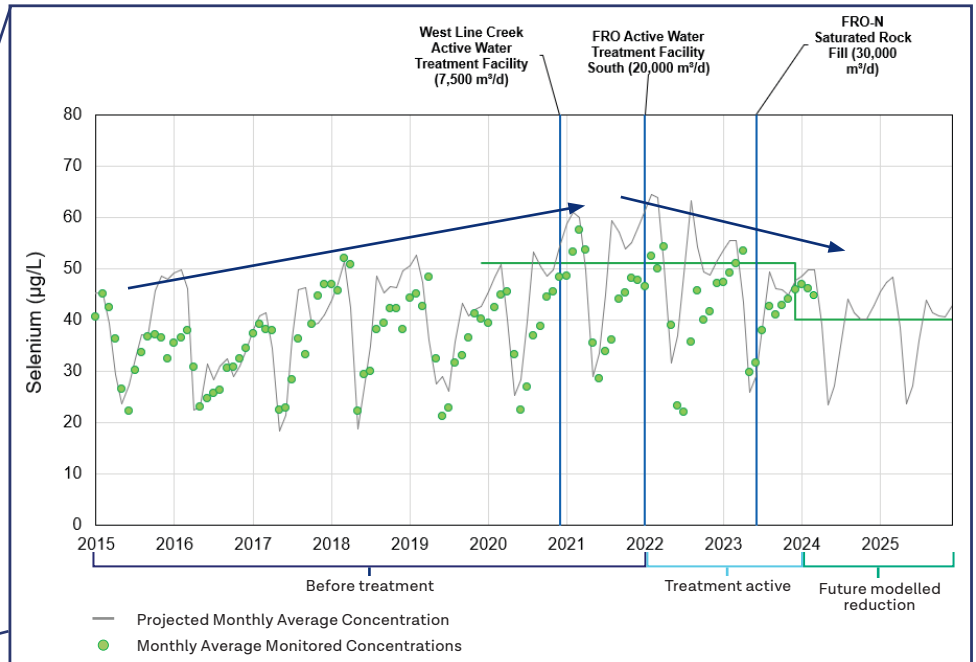
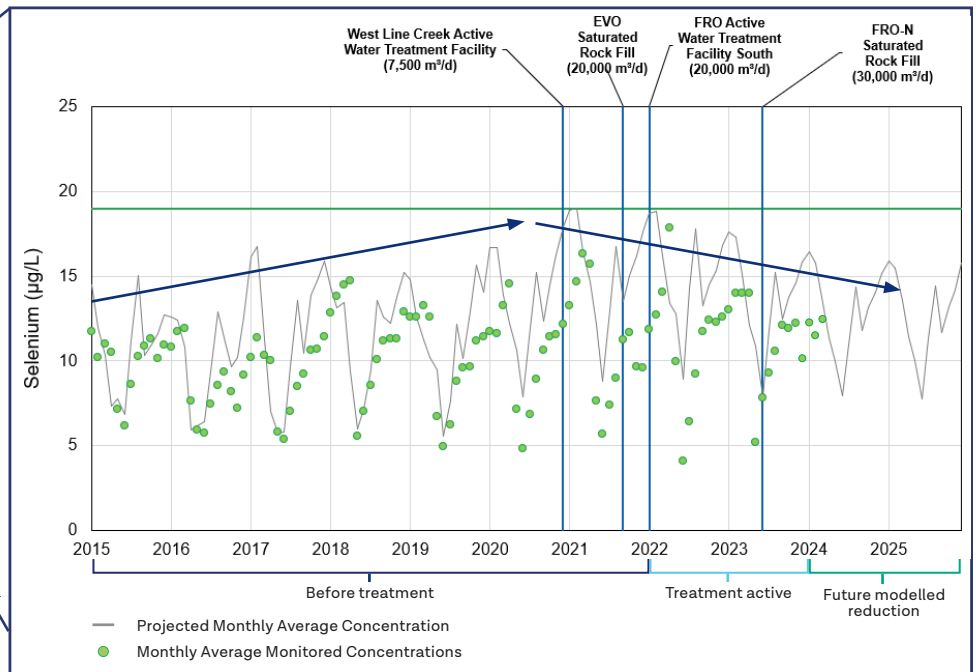


Figure 2: Elk River Downstream of Michel Creek, Provincial Monitoring Station Results and Selenium Projections for the Order Station EV_ER1



Water Treatment Facilities Legend

- Completed
- Future facility
- Commissioning/Pre-commissioning
- || Downstream reduction in selenium and nitrate
- ! Future downstream reduction in selenium and nitrate

AWTF = Active Water Treatment Facility SRF = Saturated Rock Fill

*Based on 2022 Implementation Plan Adjustment
 †Treating water since December 2021; commissioning fully complete as of June 30, 2022

Water quality monitoring

Teck is required to monitor at over 150 water quality locations and over 100 biological monitoring stations in the Elk Valley and within the Koochanasa Reservoir. The purpose of this monitoring is to evaluate water quality and to allow for the early detection of emerging water quality concerns. Monitoring results are used to inform management decisions for the protection of aquatic and human health.



Image: Teck does extensive studies and monitoring of water quality and aquatic health, including regular water quality sampling at locations across the Elk Valley.

Fish population monitoring

Teck works with external registered professionals to undertake fish population monitoring. The most recent results show a positive fish population trend in the Upper Fording River, located immediately downstream of Teck’s Fording River Operation and Greenhills Operation.



Image: Westslope Cutthroat Trout in an overwintering pond in the Upper Fording River, Feb. 16, 2023.

2022 data shows continued positive trend in fish population in Upper Fording River

	2019	2020	2021	2022	2023
Adult fish estimate	~330	~440	~1,500	~2,000	~10,000 (5,000–20,000)*

Juveniles (1, 2, 3 and some 4-year-olds) estimated at ~11,000 in 2021 and >16,000 in 2023.

Large numbers of juvenile fish observed in the 100mm to 200mm category indicating strong recruitment in the last 3 years, with fish now distributed throughout entire river system in observed patterns pre-dating the 2019 Upper Fording River decline. More information on the Upper Fording River Evaluation of Cause is available [here](#).

Moving forward

Research and development

We will continue to invest in our water treatment with a goal of improving overall fish health and protecting the environment throughout the Elk Valley. We are constantly researching new technology, and have more than 25 research and development projects underway to help reach our water quality goals. Teck also continues to evaluate other source control options that can be incorporated into planning and operations.

Sharing data, working with stakeholders

We are working with government, Indigenous communities and all stakeholders throughout the region. We remain committed to sharing progress and data with rightsholders and stakeholders. Teck works with the Province of B.C. to make monitoring and compliance data accessible. View the most recent data and information on the [British Columbia Elk Valley Water Quality Hub](#). You can find more information on the Elk Valley Water Quality Plan, including Teck’s research and monitoring reports [here](#).

*Starting with 2023, population estimates will be presented along with an estimated range. This better represents that fish populations naturally vary cyclically over time, with wider variations expected in high-elevation streams such as the Upper Fording River.