



# Community Connections

## Update from Teck's Elk Valley Operations

### Reaching a Milestone in Water Quality

#### New type of water treatment proving successful

Teck has made significant progress in developing measures to protect water quality in the Elk Valley and remains committed to meeting the objectives of the Elk Valley Water Quality Plan.

The Saturated Rock Fill (SRF) facility at Teck Elkview Operations was commissioned in January 2018 and is now achieving near-complete removal of selenium and nitrate in 10 million litres of mine-affected water per day. SRF is a new form of water treatment that has the potential to augment or replace traditional treatment technology.

"The Saturated Rock Fill is the result of our ongoing investment in leading-edge research and development to find new and better ways to protect water quality in the Elk Valley," said Robin Sheremeta, Senior Vice President, Coal.

"To the best of my knowledge, this is the first facility of its kind in the world," said Dr. M. Jim Hendry of Hendry Geosciences Inc. an aqueous and Environmental Geochemist who worked on the project.

#### How does it work?

The SRF uses naturally-occurring biological processes in water collected in former mining areas to treat and improve water quality. The Elkview SRF was constructed at a total cost of \$41 million, and is now exceeding the 7.5 million litres/day design capacity of Teck's West Line Creek Active Water Treatment Facility.

Going forward, work on the SRF will focus on validating the results of the Elkview facility and working towards potential broader implementation of SRFs.

# Your Community is Our Community

We are deeply saddened to have experienced two worker fatalities at our Elk Valley operations in 2018. These are extremely tragic incidents that impact families, colleagues, and the entire community.

Nothing is more important than the health and safety of our people. For serious safety incidents such as these, we undertake a full investigation to understand what occurred and what steps we can take to prevent it from happening again.

We wish to extend our sincere condolences to all of those impacted by these sad incidents. We remain focused on working hard to improve safety at our operations and working towards our vision of everyone going home safe and healthy every day.

Regards,

Robin Sheremeta  
Senior Vice President, Coal



## Teck in the Community

Our commitment to building proud, vibrant communities in the Elk Valley comes to life through charitable organizations, institutions and grassroots initiatives that strengthen and connect local networks. We too call the Elk Valley home. Investing in our neighbours, local businesses and infrastructure is an initiative we're honored to support and a responsibility we take very seriously.



## Planning a Community Event?

You have probably seen our tents out and about at various events like Wapiti Musical Festival, Coal Miner Days and the Sparwood Fall Food Festival. Did you know that they are available free of charge?

If you are planning a community event and would like to use the tents please contact:

Tammy Ogden  
Community Liaison  
T: 250 425 3333  
E: [tammy.ogden@teck.com](mailto:tammy.ogden@teck.com)



## Fernie Kids Triathlon

Fernie Kids Triathlon is organized by a dedicated group of volunteers. This event attracts participants from far and wide and continues to get better every year. (See photo)

# New Technology Supports Safe Production

Corey Fowler was never a video gamer, but when the Coal Mountain shovel operator had the opportunity to operate Teck's first-ever remote controlled dozer as a potential solution to a geotechnical hazard in one of the pits – this was an opportunity he was not going to pass up.

*“When we started talking about the possibility of using a remote dozer, I’d never heard of anything like that before. I said, ‘I’m not a ‘gamer’, but I’ll try anything once.”*

Corey Fowler, Shovel Operator,  
Coal Mountain Operations

## How it works?

An older shovel cab was set up as the operator's station as it was large enough to house the required monitors, high enough to get a clear view of the dozer, and safe and comfortable for the operator. The dozer itself has four cameras attached to it. In the shovel cab, the operator can see views from all the cameras on the dozer as well as images from two overhead pit cameras. A laptop screen shows the remote dozer's Carlson Grade software displaying cut/fill and position information.

The remote control itself has smaller joysticks to move the dozer.



# Driving Sustainability in the Elk Valley

## Connecting the Kootenays with Electric Vehicle Charging stations

This spring, Teck invested in a Canadian-first initiative: a regional and community-driven strategy to accelerate the adoption of electric vehicles. The Accelerate Kootenays initiative has installed 10 out of the 13 Direct Current Fast Chargers (DCFCs) planned across the region.

Electric vehicle (EV) drivers now have a fast charging corridor across Highway 3 in the Kootenays, and, by project completion, the Kootenays will have over 1,800 kilometres of connected roadways for electric vehicle travel.

Fast charging infrastructure is owned and operated by BC Hydro and FortisBC, in their respective service areas. Level 2 stations are installed in partnership with local governments in strategic locations that will optimize economic co-benefits in the community.

Larry Davey, Vice President, Planning & Development, Teck: “This charging station is a great example of Sparwood’s focus on sustainability, a commitment shared by the thousands of Teck employees in the region.”

As part of its ongoing commitment to the fostering of EVs in the Kootenays, Teck Elk Valley Social Responsibility Office recently purchased a Mitsubishi Outlander EV to use while travelling around the Elk Valley on company business.

“Teck’s involvement in the Accelerate Kootenays project has helped us connect the Highway 3 corridor with fast charging stations,” says Megan Lohmann, Project Manager, Accelerate Kootenay. “This provides benefits to communities across the corridor, and allows residents and tourist to travel reliably with electric vehicles.”



Did you know that Teck recently purchased a Mitsubishi Outlander Plug-In Hybrid Electric Vehicle for staff to use on local trips between Elk Valley communities reducing CO2 emissions and financial cost.

"The decision to introduce an electric vehicle to their company fleet is exciting and we hope that others will follow Teck's lead. Using an electric

vehicle for company travel can reduce CO2 emissions and fuel costs, as well as making a strong sustainability statement."



## Electric Vehicle Facts

- EVs contribute to a cleaner air environment
- An EV costs approximately \$360 per year to operate compared to \$3,600 for a gas vehicle
- There are more than 450 public charging stations in BC. You can use them free of charge

Visit [pluginbc.ca](http://pluginbc.ca) for more information.



# Elevating Safety with a Bird's Eye View

Drone technology has developed at a fast pace with broad applications across many industries. At Teck, they are becoming an invaluable asset to our blast teams and other groups at our operations.

## Drones and Mining

### Record Blasts

A drone provides a high quality assessment of blast performance by accessing the optimal vantage point for observing each hole shooting.

### Survey

Mapping and photogrammetry is more efficient with a drone. It reduces time to survey large areas and improves the quality of the survey itself, in addition to reducing the risk to the surveyor.

### Thermal Imagery

We are currently trialing thermal imaging via drones with the potential applications including predictive maintenance, mine rescue response and many other possibilities.

### Remote Wireless Gas Monitoring

Another trial currently underway will allow us to monitor fumes post blast and check air quality in mine rescue responses.

### General Site Photo and Video Cataloging

Drones provide different perspectives with qualitative empirical data. Drone operation can access inaccessible locations, monitor construction projects, and assess existing infrastructure in more controlled and safe circumstances.

"Using drones has helped us to improve our safety and efficiency on site. We are always looking for ways to use technology to help make our work place safer."

- Jordan Powell, EVO Elkview Operations

Follow us at [Facebook.com/TeckResources](https://www.facebook.com/TeckResources) to learn more about drones and other technology at our mine.



# Teck has Strong Presence at Mine Rescue Championships

Every two years, Fernie hosts the Western Canadian Mine Rescue Championships. This event draws the top mine rescue teams from the Yukon, NWT, Alberta, Saskatchewan, Montana, Idaho, Washington, and British Columbia. Contestants perform a variety of tasks that mimic potential mine rescue scenarios that test participants' skill, teamwork, and mine safety knowledge.

Beyond the competition, mine rescue team members' training helps keep their co-workers and the community at large safe. Their training prepares them for accidents and hazards that they may come across in their day-to-day lives.

Whether it's being the first on the scene of a traffic accident, or assisting a neighbour with first aid, mine rescue personnel walk amongst us, and are ready and capable of helping their community when needed.

Many of our mine rescue personnel are also your local volunteer firefighters, paramedics and first aiders at community events.

At the recent 2018 B.C. Mine Rescue and First Aid Competition held in Kimberley on June 9, Line Creek won Best Three-Person First Aid and Best Written. Coach Sandra Duncan was awarded the Kathie Lofstrom Memorial Trophy for Best Three-Person Coach.



# Coal, Steel and Your Lifestyle

Have you ever wondered where the steel on the edges of your skis come from? Or, the materials that went into building your snowmobile? Steel comes from a process that involves iron ore and metallurgical (steelmaking) coal. It is used not just in the construction of our recreational toys, but also in the manufacturing of the infrastructure that goes into creating many of the objects around us.

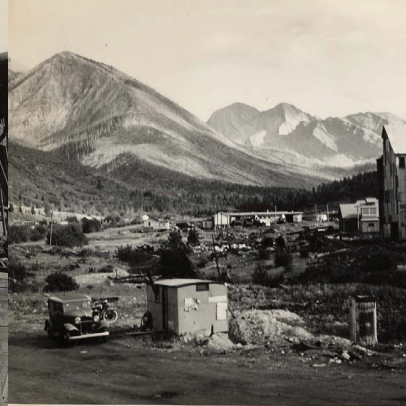
In the Elk Valley, our coal is transported to processing facilities where it is turned into coke for the steelmaking process. In addition to the edges of your skis, steel is used in the production of surgical instruments, wind turbines, heavy machinery and pretty much every single infrastructure component. Without metallurgical coal, much of what we take for granted in our everyday lives would not exist.

## Did You Know?

Approximately 170 tonnes of steelmaking coal is needed to produce the steel in an average wind turbine. Renewable energy systems like wind turbines are dependent on steelmaking coal for their infrastructure needs.







Corbin

# Coal Mountain

## Making Canadian History since 1905

It was July 30th, 1905 when Daniel Chase Corbin gazed upon an 85-yard thick seam of high-grade bituminous coal (steelmaking coal) boldly exposed near the base of one of Mount Taylor's minor peaks. It was shortly thereafter that Corbin Coke and Coal Company (CC&C) mining operations began on what would become known as Coal Mountain.

By 1912, production was gaining momentum but was halted by the No. 1 mine fire of 1913. The Company was forced to seal the mine and adapt to a more modern strip mining technique. No. 3 mine became known as "The Big Showing", and was mined using a steam shovel.

In 1935, a major strike and riot resulted in the shuttering of the CC&C Company and mine, and came to be nationally known as 'Black Wednesday'. The town of Corbin was deserted, and mining operations ceased. However, with World War II depleting steelmaking coal supplies at the Trail smelter, and a need to continue supplying Allied troops with materials, Consolidated Mining and Smelting contracted Frank O'Sullivan of Lethbridge to supply them with coal from Coal Mountain. The mining was dangerous, using Ford trucks to drive up and down the precipitous road to the coal seam in the rugged mountainous terrain. After the war, they did not continue with mining operations; however, the property was maintained as a hedge against rising coal prices.

### 1905

- Coal seam discovered by Daniel Chase Corbin
- Corbin Coke and Coal Company (CC&C Est.)

### 1913

- Fire in No 1 mine led to mine being sealed
- Strip mining commenced on No 3 mine

### 1940

- Mining continued via Consolidated Mining and Smelting to support WWII requirements

### 1912

- 122,000 tons of steelmaking coal had been shipped
- 173 employees

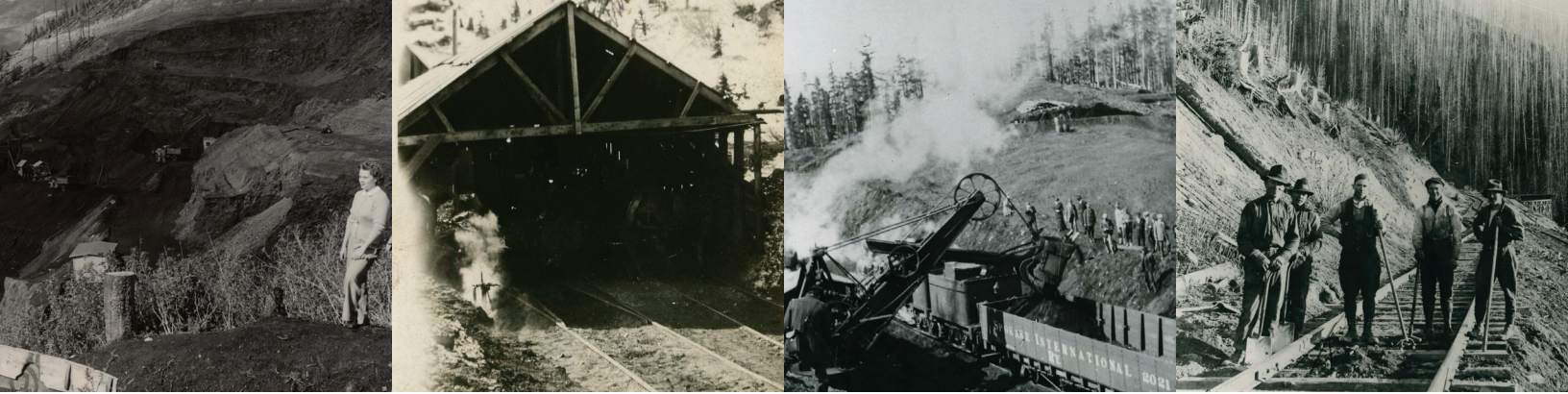
### 1935

- Black Wednesday: Major strike and riot resulted in CC&C Company mine closing
- Mining ceased

### 1946

- After war mining ceased again





*Photos courtesy of the Fernie Museum*

“My family has been here for four generations,” says Glen Hutton, resident of Corbin.

My kids grew up here. I’m looking forward to watching my grandkids enjoy nature and the reclaimed landscape.”

From 1972 to 2004, the ownership of Coal Mountain changed hands several times. Teck Resources bought the coal mine in 2008 when it acquired all of the mines in the Elk Valley. Annual production has since averaged 2.5 million tonnes per year. As 2019 approaches, Teck is in the process of ceasing active mining operations at Coal Mountain, and beginning the transition to care and maintenance including site reclamation activities.

Corbin is currently home to recreational cyclists, ATV and snowmobile users, campers and other outdoor recreational enthusiasts. Over the coming 20 years, the mine site will be reclaimed to a state of ecological diversity that can support a range of biodiversity, social and cultural values.

**1972**

- Byron Creek Collieries buys Coal Mountain
- 800,000 tons of coal per annum supplied to Ontario Hydro

**1994**

Fording Coal Ltd. buys Coal Mountain

**2003**

Elk Valley Coal buys Fording Coal

**2019**

Coal Mountain begins transition from active mining to care and maintenance including site reclamation activity

**1975**

Mine sold to Esso Resources

**2001**

Fording Coal mines 2.5 million tons

**2008**

- Teck Resources purchase Coal Mtn. and all mines in the Elk Valley
- Annual production averaged 2.5m tons per annum





## Supporting Economic Development

As a resident of the Elk Valley, you are likely connected to the mining industry through Teck, a third party supplier, your participation on an advisory board or through family and friends. This is a shared community and we are committed to being good neighbours. We are passionate about supporting the local workforce in the Elk Valley and creating opportunities for growth.

Local hiring and local procurement are a priority at Teck. We employ 55 companies totaling \$270 million in contracts per annum and employ 4,000+ employees in the Valley. We continually seek out opportunities to utilize local suppliers to support our operations.

For example, Tipi Mountain Native Plants Limited is a 100% Aboriginal-owned premier native plant nursery in the Southern Interior/Kootenay Region of British Columbia. We have worked with Tipi Mountain for many years, supporting the growth of the business and skill development for staff.

This ongoing support has meant Tipi Mountain can now reinvest in necessary technology and operational upgrades to improve overall germination and plant quality. As part of our Biodiversity Management Plan, Teck will purchase approximately 250,000 seedlings this year with plans to increase this number in future years.



Living, working and playing in the Valley means, we are encouraging growth in all sectors to deliver prosperity, create jobs, and invest in infrastructure, all while providing resources essential to our modern world that contribute to a lower carbon economy.

In the Elk Valley, we employ 55 companies totaling \$270 million in contracts per annum. We are proud to work with local contractors such as Apex, Stratton, Frontline, Bearspaw MDG and more.

## All B.C. Communities are Mining Communities

The Mining Association of British Columbia and the Mining Suppliers Association of British Columbia reported that mining is foundational to the province by contributing billions (\$) in economic activity, over 30,000 direct and indirect jobs, and millions towards supporting essential public services in B.C..

"These results show that even if you don't live next to a mine, there is a good chance your community is benefiting from B.C. mining operations," said Rodger McLean, Senior Manager, Innovative Solutions at Metric Modular and Chair of the Mining Suppliers Association of B.C. ([mining.bc.ca/news-releases/all-bc-communities-are-mining-communities](http://mining.bc.ca/news-releases/all-bc-communities-are-mining-communities))

## Local Community

We provide \$1 million+ per annum to over 150 community organizations, pay 4,000+ employee salaries and help create indirect economic opportunities for local businesses.

# Proud Moments From 2018

## Sparwood Skatepark

Teck contributed \$150,000 to the Sparwood Skatepark which opened in September this year, and is the premier facility in the region for skateboarding and freestyle BMX. Measuring just shy of 10,000 square feet the park is approximately 190 feet long and 60 feet wide with independent features including a large pool-style bowl, handrails, step ups and ledges. With the growing communities in the Elk Valley the Skatepark was seen as an important project with great longevity.

## College of the Rockies

Qualified tradespeople are essential to our operations at Teck and the operations of the various support service companies that we work with in the Elk Valley. In a competitive staff marketplace it has to be easy for people to train locally and find gainful employment right here.

Our \$1 million donation to the College of the Rockies will provide benefits to students throughout the region through:

- \$800,000 to support the construction of a new trades training facility at College of the Rockies' Cranbrook campus
- \$100,000 for revitalization of the Fernie campus
- \$100,000 to establish a scholarship fund for trades students

## Tobacco Plains Administration and Health Building

We are proud to have supported our community partner the Tobacco Plains Indian Band by investing in the construction of a new administration and health building.

Working with Indigenous communities is part of our everyday operations at Teck and we aim to support the development of resources that have long lasting benefits and help to achieve self-defined community goals.

The new building will allow for improved delivery of services as well as providing a space for community gatherings, health and services for elders, youth and families within the community.

Other partners in the project were First Nations Health Authority, Columbia Basin Trust, Indigenous and Northern Affairs Canada and B.C. Museums Association.

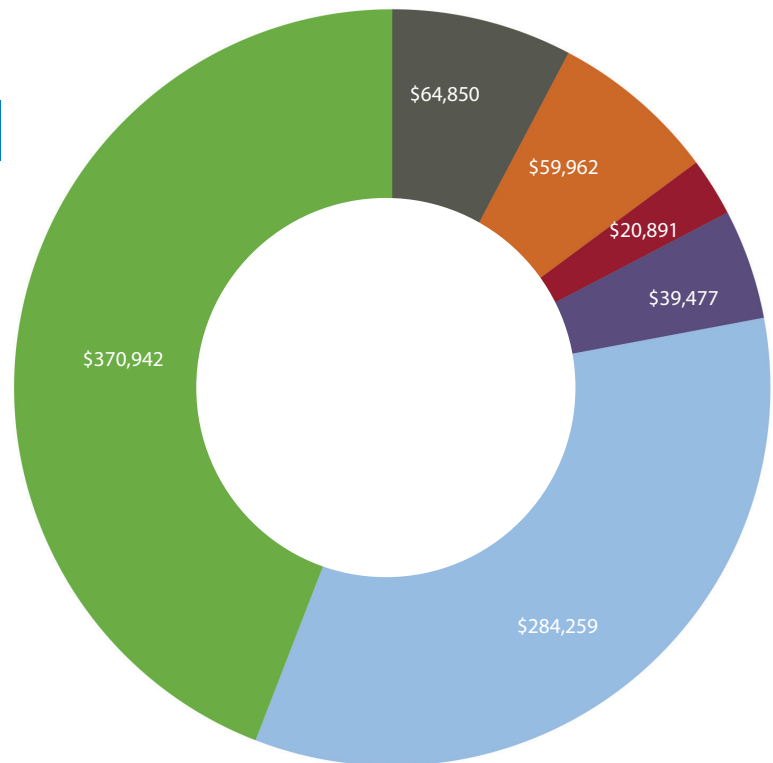
## Avalanche Canada

Since 2011, Teck has supported Avalanche Canada in their development of public-safety initiatives aimed at backcountry users in the Elk Valley. It started with a snowmobile safety forum called Sledhead Thinktank. Eight Sledhead Thinktank sessions were held in Blairmore, Elkford, Sparwood and Fernie, with over 300 snowmobilers attending to discuss and learn about avalanche safety. Teck also provided funding for avalanche safety training courses for Sledhead Thinktank participants. This year was no different. We were happy to continue our support of this incredible organization.

Learn more about their life saving resources by visiting [www.avalanche.ca](http://www.avalanche.ca) before each winter trip into the backcountry.

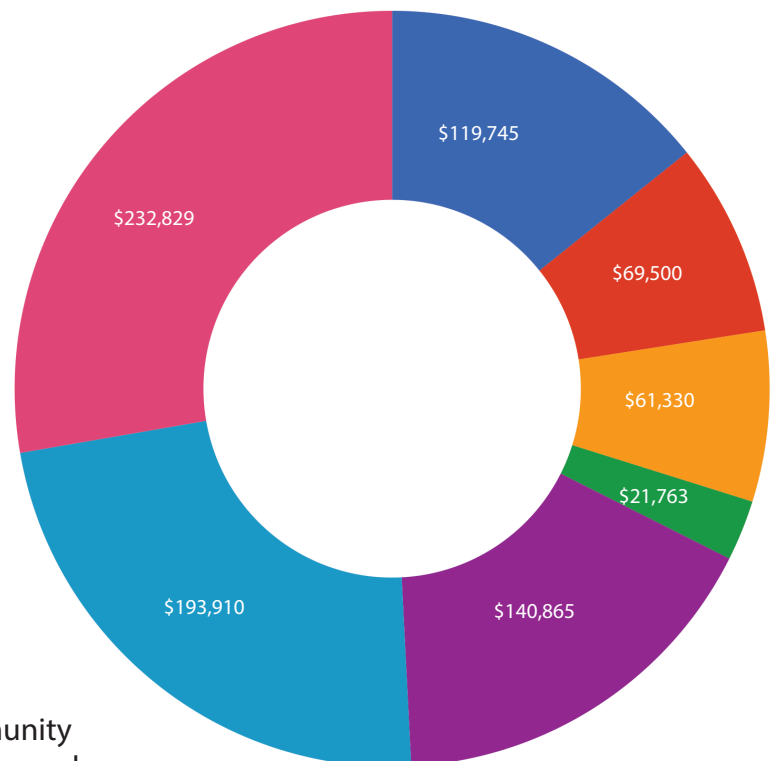
# How We Have Invested in Local Initiatives in 2018

- Environment & Energy
- Arts & Culture
- Economic Development
- Education & Skills
- Health & Wellbeing
- Sports & Recreation



# Where We Have Invested Locally

- Other
- Cranbrook
- Crowsnest
- Elkford
- Fernie
- Sparwood
- Elk Valley Whole



Looking for funding support for your community initiative? Email [Tammy.Ogden@Teck.com](mailto:Tammy.Ogden@Teck.com) to apply.



## *Season's Greetings*

Wishing Everyone  
a Safe and  
Happy Holiday Season

## Improving Fish Habitat on the Fording River

Fording River Operations continues to improve Westslope Cutthroat trout, and aquatic habitat through its fish pond creek offsetting measure. This habitat area has more than doubled and is now home to new spawning nests of Westslope Cutthroat Trout.

## We Want to Hear From You.

We welcome your comments on this publication, or any aspect of Teck's activities.

t. 1.855.806.6854

e. [feedbackteckcoal@teck.com](mailto:feedbackteckcoal@teck.com)

We will respond to all feedback received that includes contact details. Teck's feedback mechanism is anonymous so you can confidently speak up and share your valued opinion without concern.

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