

A photograph of a power line construction site in a snowy mountain landscape. In the foreground, several utility poles are visible with workers in bucket lifts performing maintenance or construction. A large crane arm is positioned on the left side of the frame. The background features a dense forest of evergreen trees covered in snow, with a large, snow-capped mountain peak rising in the distance under a clear blue sky.

Teck Electrification Project

March 2024

Virtual meeting protocol



Microphones have been muted during this presentation.

- If you have a question, please place it in the chat. We're going to try to get to all the questions but if we run out of time, we will do our best to compile them and get back to you.

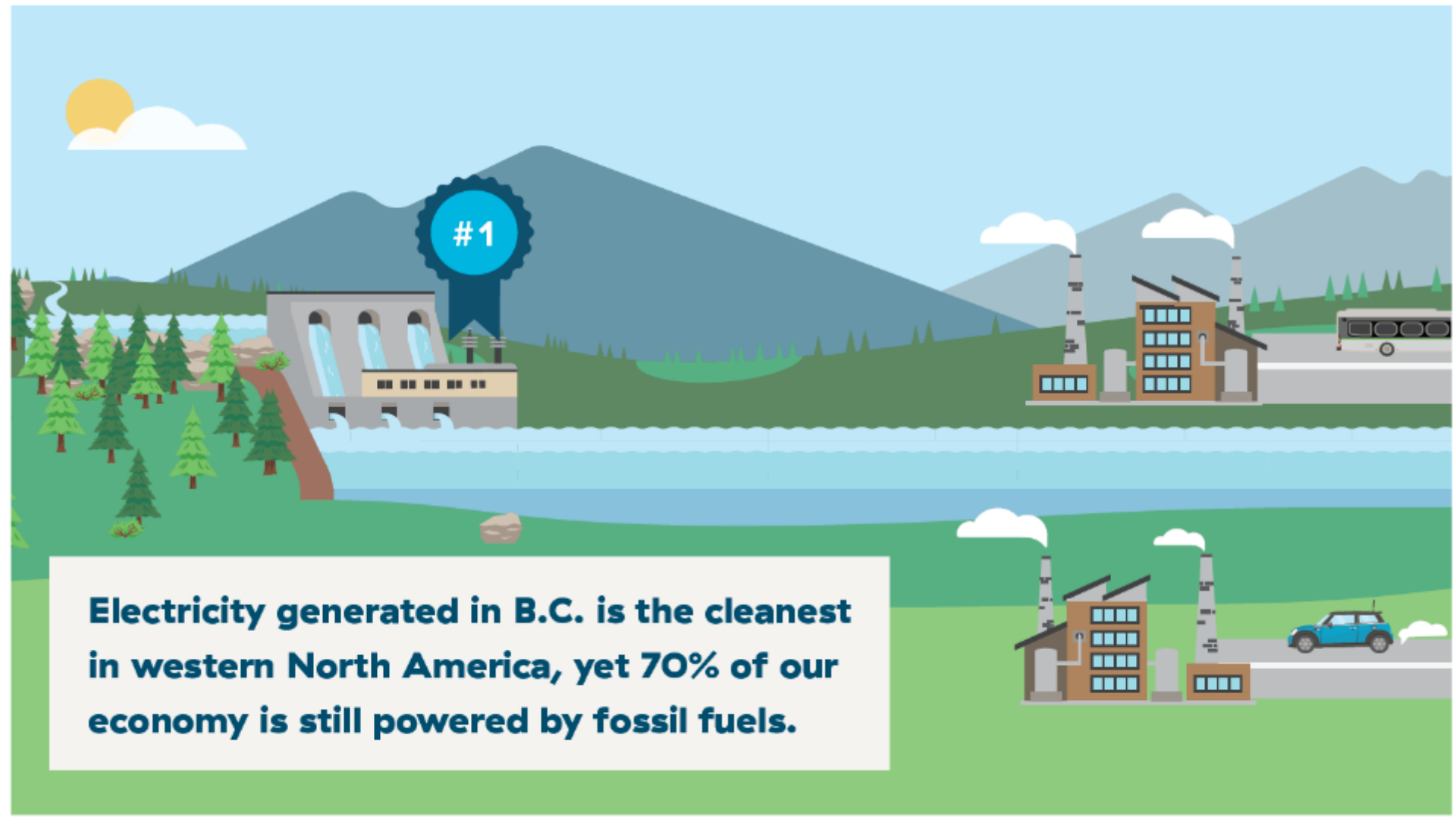
To save bandwidth, cameras have been turned off.

We aren't recording this session, and kindly ask that others do not record.

Technical issues? Send a note in the chat.

Agenda

- Introductions
- Electrification overview
- Teck's decarbonization plan
- Working in partnership with First Nations and Indigenous communities
- New substation
- New transmission line & route corridor options
- Environmental studies
- Next steps and Q&A

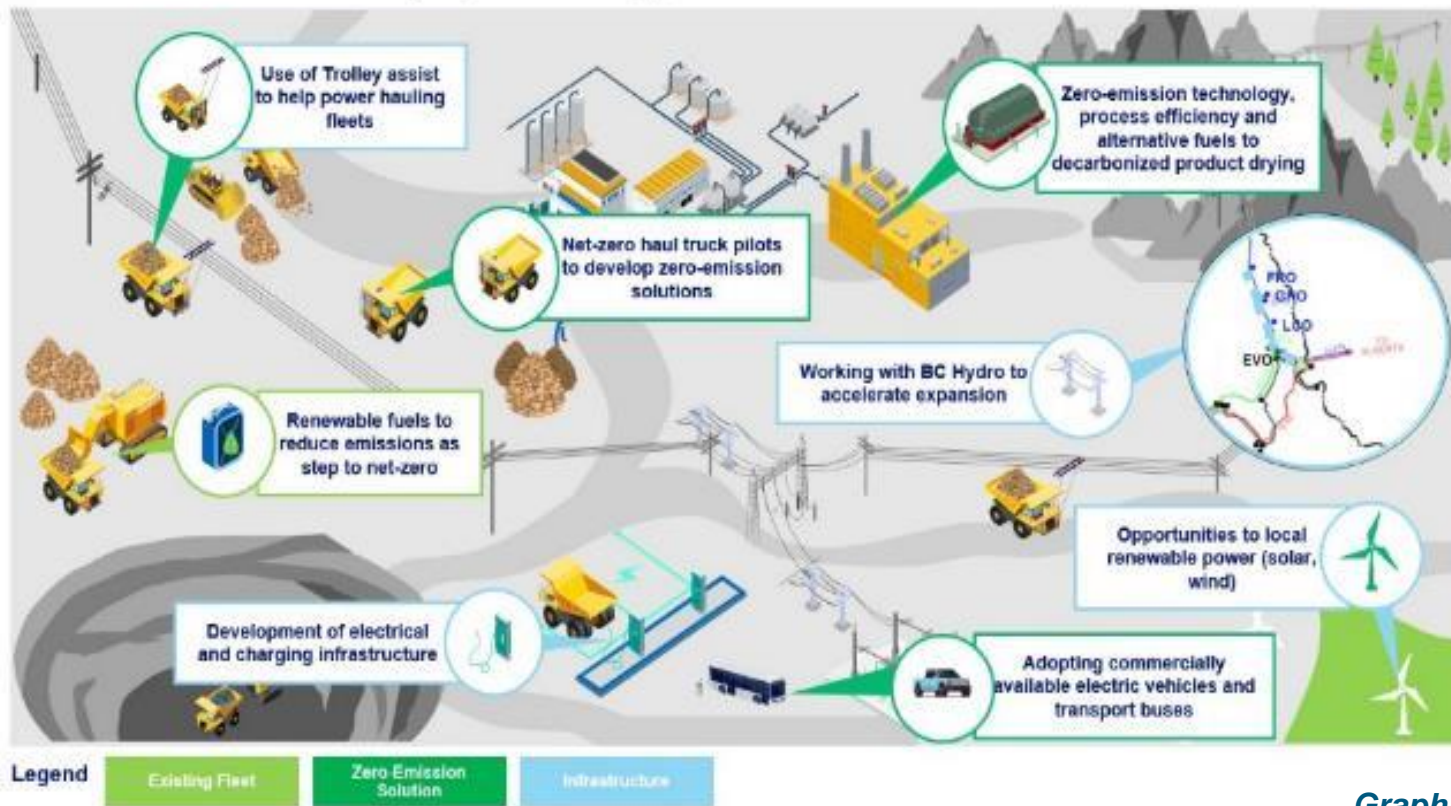


#1

Electricity generated in B.C. is the cleanest in western North America, yet 70% of our economy is still powered by fossil fuels.

Teck Coal Decarbonization Roadmap

Zero-emission fleet, trolley assist, zero emission infrastructure, renewable fuels and zero-emission drying technology



2030 Emissions Abatement Potential:

920ktpa CO₂e

Existing Fleet

Pursuing near term diesel displacement opportunities with renewable fuels, trolley-assist deployments, and light & medium duty vehicle replacements

Future Fleet

Partnerships with OEMs and peers to accelerate deployment of the zero-emission haul truck fleet and supporting trolley solutions

Graphic provided by Teck

Working in partnership with First Nations and Indigenous communities

- We're working to implement the BC Government's commitment to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
- We're building economic relationships with Indigenous peoples, including:
 - Procurement
 - Deeper Indigenous involvement in decision-making
 - Employment and training opportunities
- We're thinking differently about how we do our business, and this new approach is an example of our work to advance reconciliation with First Nations and Indigenous communities.

New infrastructure

Transmission line from Sparwood to Elkford

A new 230kV transmission line between Sparwood and Elkford – about 85km long – to connect Teck's mines to our substations

Alexander Creek Substation

A new substation east of Sparwood, close to the B.C./Alberta border

Switching substations

Two new tap switching stations to connect Teck's mines to the new transmission line

Power lingo

Substation: brings together power lines of varying voltages; contains equipment that can change the voltages of these lines and safely control the flow of power.



Switching station: segments a transmission line path into sections that make the system more reliable and easier to maintain.

Power lingo

Transmission lines: move electricity from one point to another via numerous towers; lines vary in size with those carrying more electricity requiring larger towers



Passive reflector: a structure usually installed on a high elevation location; looks like a large billboard and allows microwave antenna towers at two different locations to communicate with each other.

New substation

Alexander Creek
Substation

Sparwood Fish and
Wildlife Rifle Range

Sparwood CVSE
Inspection Station

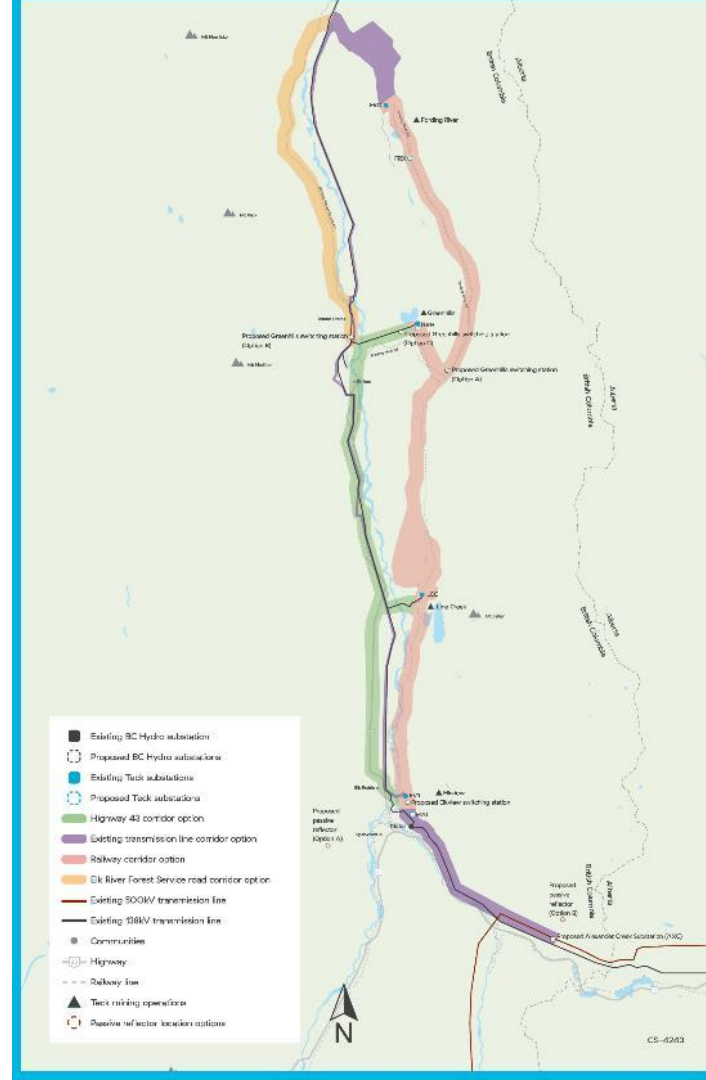
Crowsnest
Provincial
Park

WCSB Power Crowsnest

Google

New transmission line

- New transmission line from Alexander Creek Substation to Fording River
- Approximately 85km long
- We're studying four corridor options for the new transmission line route to meet Teck's request for power
- Expected to follow the highway, an existing transmission line, the railway, or a forestry road
- Will connect to Elkview, Greenhills and Fording River mining operations



Identifying transmission line options

To decide on a line route option, we'll work to identify an option that best balances:

- feedback from First Nations
- feedback from landowners, communities, authorization holders, other interested parties, the public, and specialists in various fields
- impacts on the natural and human environments
- overall schedule including planning, permitting and construction
- reliability, and safety risk
- project cost including maintenance

We expect to select a leading route option in summer 2024.

Steps in building a transmission line

We are here



Planning

- Identify route corridors
- Identify right-of-way requirements
- High-level environmental review
- Initial engineering and environmental field studies to determine if line can be built in an area
- Route selection

Transmission line design

- Detailed engineering and environmental studies
- Permit applications
- Confirm placement of structures
- Confirm new right-of-way
- Acquire property rights including access

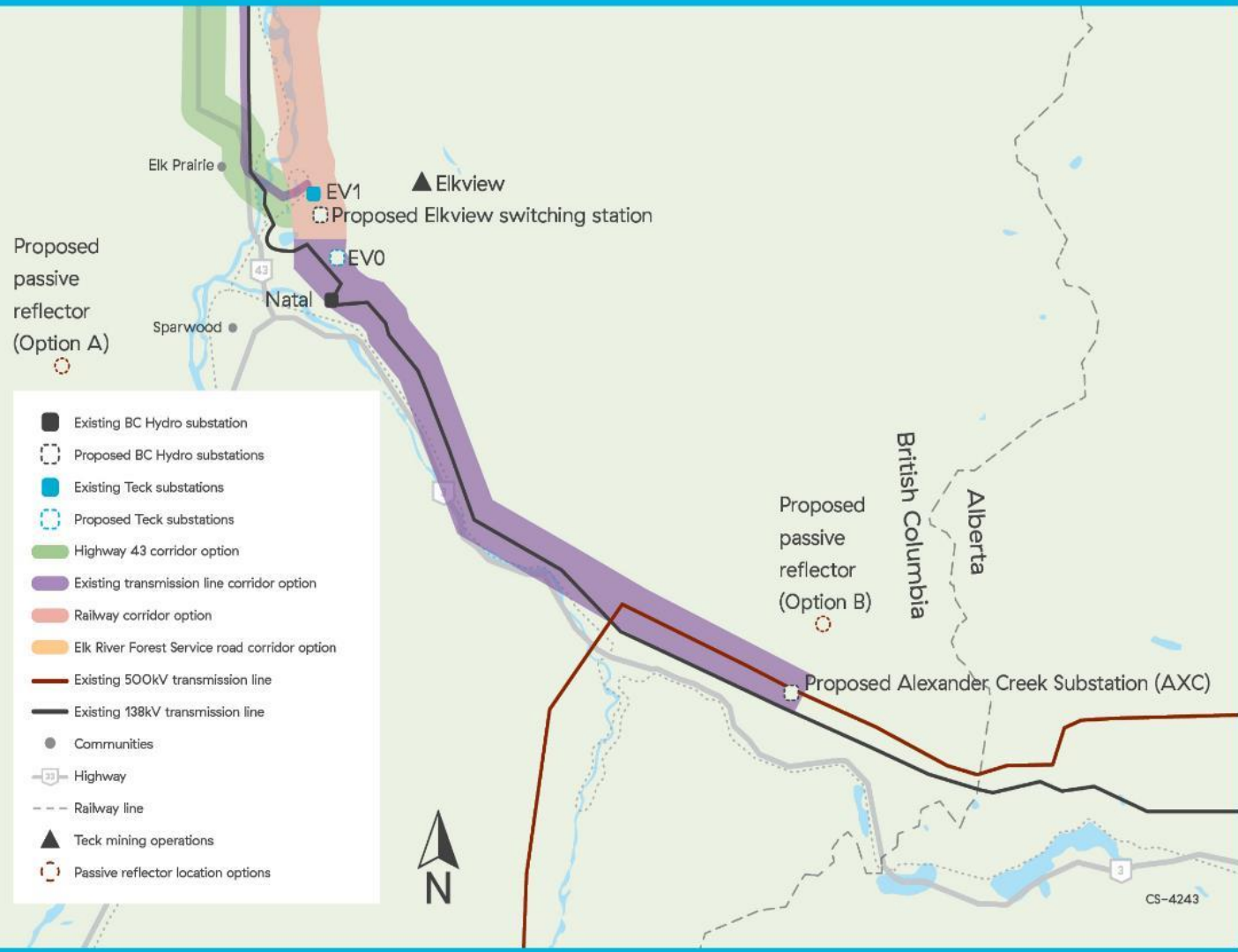
Pre-construction

- Clearing
- Access
- Prepare right-of-way so that foundations and towers can be installed
- Purchase construction materials

Construction

- Foundations
- Pole structures
- Line stringing
- Restoration
















Alexander Creek to Elkview



Alexander Creek to Elkview section

Route length (km)	14.5
Potential new habitat fragmentation (approximate km)	14.5
Potential water crossings	5
Potential old-growth forest interaction	2 km
Potential ungulate winter range interaction	Yes
Vegetation clearing	<input type="radio"/> Extensive clearing along new right-of-way (adjacent to existing) <input type="radio"/> Clearing is on Teck property
Private properties along the corridor (non-Teck)	6
Conservations areas crossed	Alexander Creek

Elkview to Line Creek

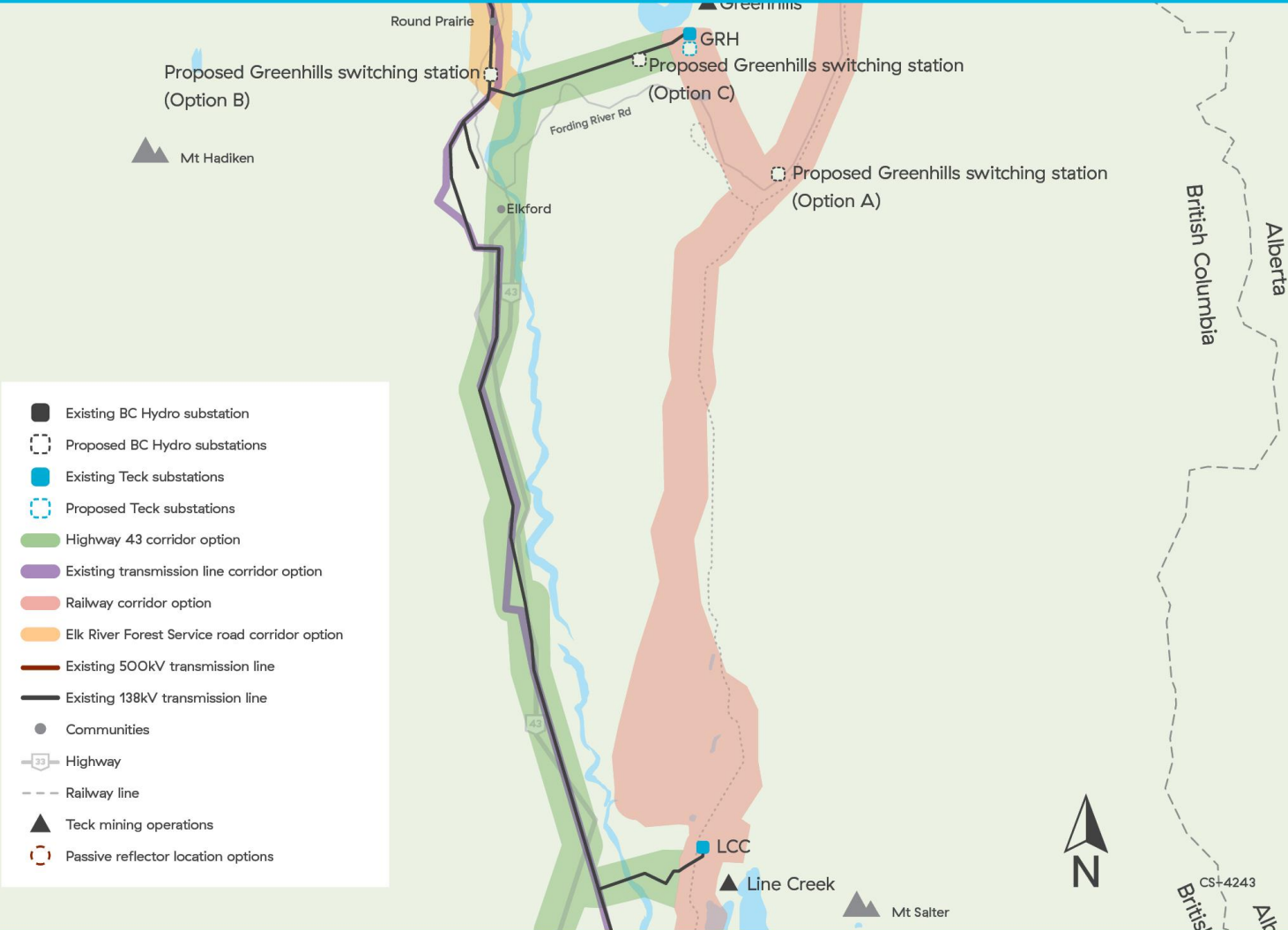
-  Existing BC Hydro substation
-  Proposed BC Hydro substations
-  Existing Teck substations
-  Proposed Teck substations
-  Highway 43 corridor option
-  Existing transmission line corridor option
-  Railway corridor option
-  Elk River Forest Service road corridor option
-  Existing 500kV transmission line
-  Existing 138kV transmission line
-  Communities
-  Highway
-  Railway line
-  Teck mining operations
-  Passive reflector location options



Elkview to Line Creek section

	Highway 43 corridor	Existing transmission line corridor	Railway corridor
Route length (km)	16.5	16.5	16.5
Potential new habitat fragmentation	Lower	Lower	Higher
Potential water crossings	Similar	Similar	Lower
Potential wetland interaction	Similar	Similar	Similar
Potential old-growth forest interaction	Similar	Lower	Similar
Potential ungulate winter range interaction	Similar	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Clearing along new right-of-way ○ Clearing on private property 	<ul style="list-style-type: none"> ○ Clearing along new right-of-way (adjacent to existing) ○ Clearing on private property 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way ○ ~7.5 km follows railway ○ Clearing is on Teck property
Private properties along the corridor (non-Teck)	62	31	9
Conservations areas crossed	Grave Prairie, Big Ranch	Grave Prairie, Big Ranch	Teck Grave Prairie
















Line Creek to Greenhills



Line Creek to Greenhills section

	Highway 43 corridor	Railway corridor
Route length (km)	25–28	22–25
Potential new habitat fragmentation	Lower	Higher
Potential water crossings	Lower	Higher
Potential wetland interaction	Similar	Similar
Potential old-growth forest interaction	Higher	Lower
Potential ungulate winter range interaction	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to existing) ○ ~2.5 km on Teck property ○ Clearing on private property required 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way ○ ~1 km follows railway ○ ~9 km on Teck property ○ ~14 km on Crown land
Private properties along the corridor (non-Teck)	40	3
Conservations areas crossed	Elk River	–

Greenhills to Fording River

-  Existing BC Hydro substation
-  Proposed BC Hydro substations
-  Existing Teck substations
-  Proposed Teck substations
-  Highway 43 corridor option
-  Existing transmission line corridor option
-  Railway corridor option
-  Elk River Forest Service road corridor option
-  Existing 500kV transmission line
-  Existing 138kV transmission line
-  Communities
-  Highway
-  Railway line
-  Teck mining operations
-  Passive reflector location options



Greenhills to Fording River section

	Elk River Forest Service Road corridor	Existing transmission line corridor	Railway corridor
Route length (km)	38–42	36–40	15–18
Potential new habitat fragmentation	Higher	Lower	Medium
Potential water crossings	Lower	Similar	Similar
Potential wetland interaction	Lower	Similar	Similar
Potential old-growth forest interaction	Similar	Similar	Higher
Potential ungulate winter range interaction	Similar	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to forestry road and existing right-of-way) ○ ~6 km on Teck property ○ ~36 km on Crown land 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to existing) ○ ~11 km on Teck property ○ ~29 km on Crown land 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to railway) ○ ~9.5 km on Teck property ○ ~7.5 km on Crown land
Private properties along the corridor (non-Teck)	3	2	0
Conservation areas crossed	–	–	–

Typical structures



Between Sparwood
and Elkford



Between new substation
and Sparwood

Studies

- Wildlife: amphibians, bats, birds, wildlife habitat
- Fish: stream assessments
- Vegetation: Terrestrial Ecosystem Mapping, rare plants
- Archaeology, heritage and cultural resources
- Indigenous traditional knowledge and land use



Next steps

- Advance project planning
- Continue First Nations consultation and stakeholder engagement
- Identify the best location for the new transmission line, switching stations, and passive reflector
- Determine regulatory and environmental requirements
- Acquire property rights
- Complete:
 - Required studies
 - Regulatory/environmental processes
 - Planning design

Questions?

Thank you!

- We'll continue to keep you informed as the project advances.
- Please complete a feedback form.
- For more information, please visit bchydro.com/teckelectrification
- Please contact us toll free at 1 866 647 3334 or projects@bchydro.com with questions or comments.