



TELKWA COAL
LIMITED

TENAS PROJECT
Environmental Assessment Certificate Application
Virtual Information Session

JUNE 8th, 2022



Telkwa Coal Limited



Telkwa Coal Limited is a joint venture partnership of Allegiance Coal Limited and the Itochu Corporation, and is headquartered in Telkwa, British Columbia.

Telkwa Coal Limited is proposing to develop the Tenas Project, a steelmaking (or metallurgical) coal mine.

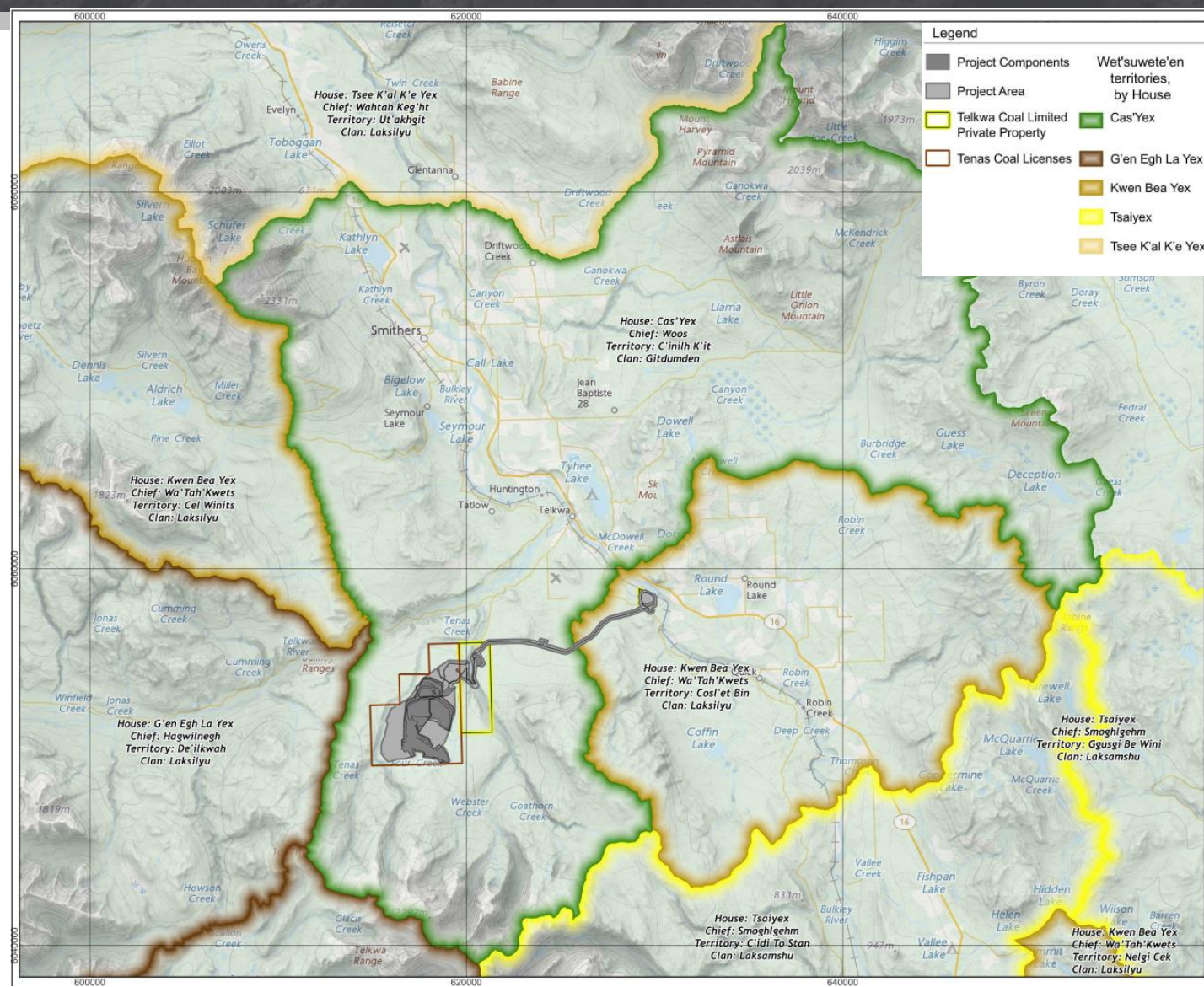
The Tenas Project is located 25 km south of Smithers and 7 km southeast of Telkwa, BC.





Tenas Project

- The Project is within Wet'suwet'en traditional territory, specifically the Gitdumden and Laksilyu clans.
- The area was mined historically between 1918 and 1985.
- The Project will produce approximately 775,000 – 825,000 tonnes of steelmaking coal annually, with a mine life of approximately 26.5 years.
- The steelmaking coal would be shipped on the CN rail line to Prince Rupert's Ridley Terminal for export to steel mills – most likely in Asia.





Our Commitments

Indigenous Peoples

- Telkwa Coal acknowledges and respects the unceded rights, title, interests, culture, and aspirations of the Wet'suwet'en to 22,000 km² of traditional territory, where the Project is located.
- In April 2017, we signed a Communications and Engagement Agreement as an initial, formal step in our commitment to the Wet'suwet'en. In August 2021, we signed a Project Assessment Agreement to allow the Wet'suwet'en to complete their own independent assessment of the Project.

Community

- We will continue to engage with the community with the aim of ensuring socio-economic priorities and goals are understood and addressed. TCL has donated \$60,000+ to date to various organizations and groups.





Community Input

We heard you...

...we've reflected your input into our Project

- ✓ Bypass Road
- ✓ Production Level
- ✓ Paused EA process for the Wet'suwet'en

Telkwa Coal led Open Houses:

1. May 2018
2. November 2018
3. November 2019

EAO led Open Houses:

1. June 2020 (two virtual sessions)
2. June 2022 (in-person and virtual)

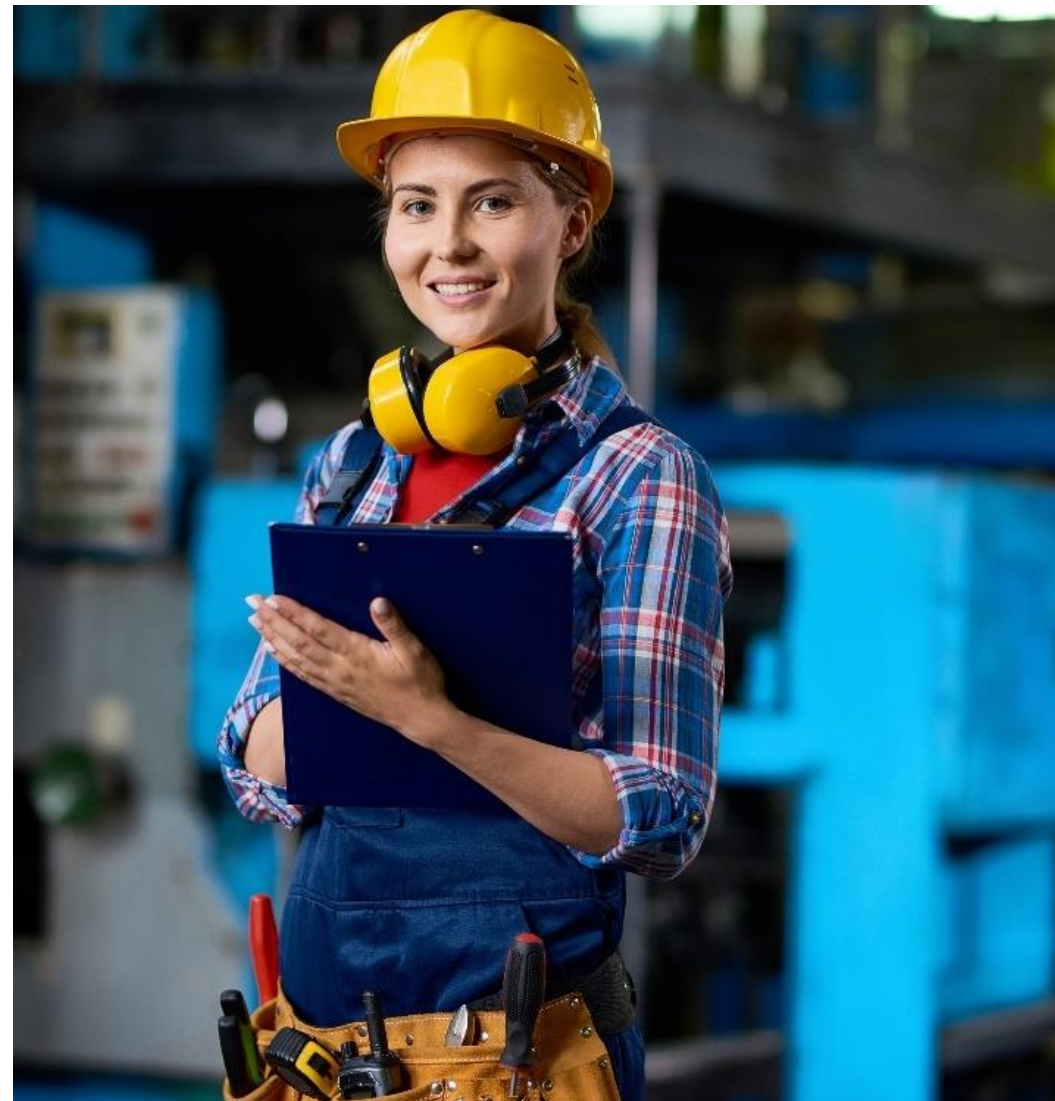




Project Benefits

- Government revenue:
 - ~\$ 250 Million Canadian dollars.
 - Revenues for federal, provincial, and local governments; and
 - To support community services and infrastructure, including social programs, education, and health care.
- Local and regional economy:
 - ~150 construction jobs (at peak).
 - ~160 operations jobs (at peak).
 - ~255 indirect jobs (at peak operations).Over the approximately 26.5 year mine life.

Telkwa Coal has retained many local experts for environmental, socio-economic, cultural, and exploration programs, spending over \$4.5 million to date.





About Coal

Metallurgical Coal and the Production of Steel

- Coal is a **key** ingredient for the production of steel.
 - No commercial substitute for coal to produce additional steel production.
 - Renewable energy, infrastructure, transportation, health, sanitation, and food manufacturing depend on it.
 - Wind turbines require 142 tonnes of steelmaking coal.

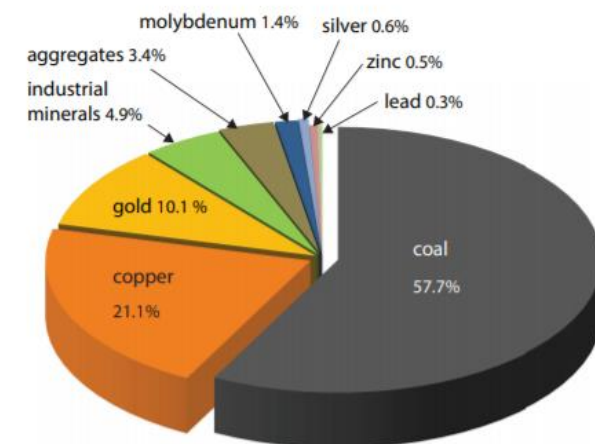


Coal and steel
are
fundamental to
our daily lives



Steelmaking Coal in Canada and BC:

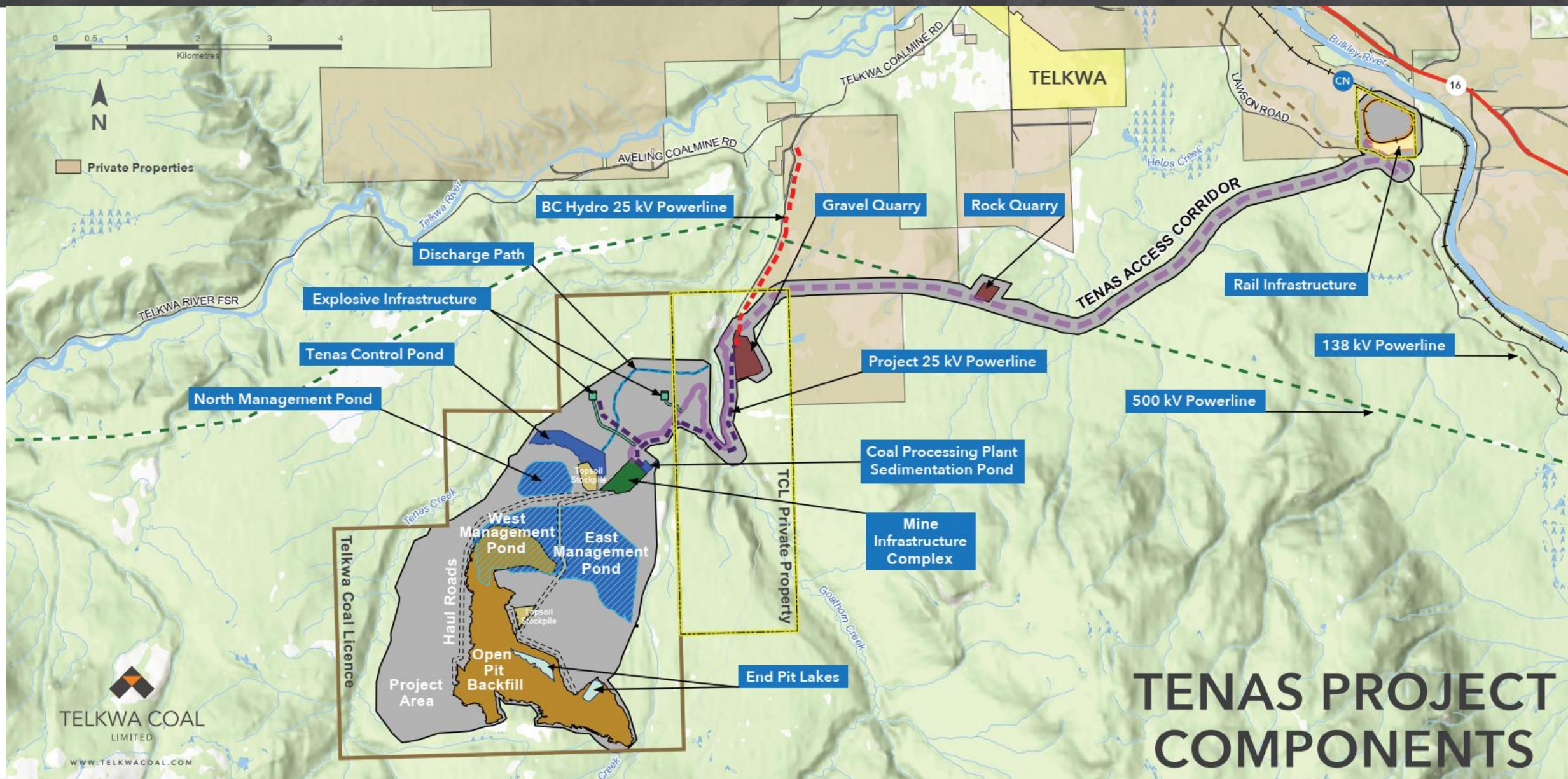
- Canada is the 3rd largest exporter of metallurgical coal, after Australia and US.
- Canada's steelmaking coal is in high demand.
- Coal mining is an important part of BC's economy, generating billions in revenues & supporting thousands of jobs.
- ~90% of BC's coal production is steelmaking coal.



2019 forecast value of BC's mineral production by commodity



Project Components





Atmospheric Environment - Air Quality

Existing Conditions:

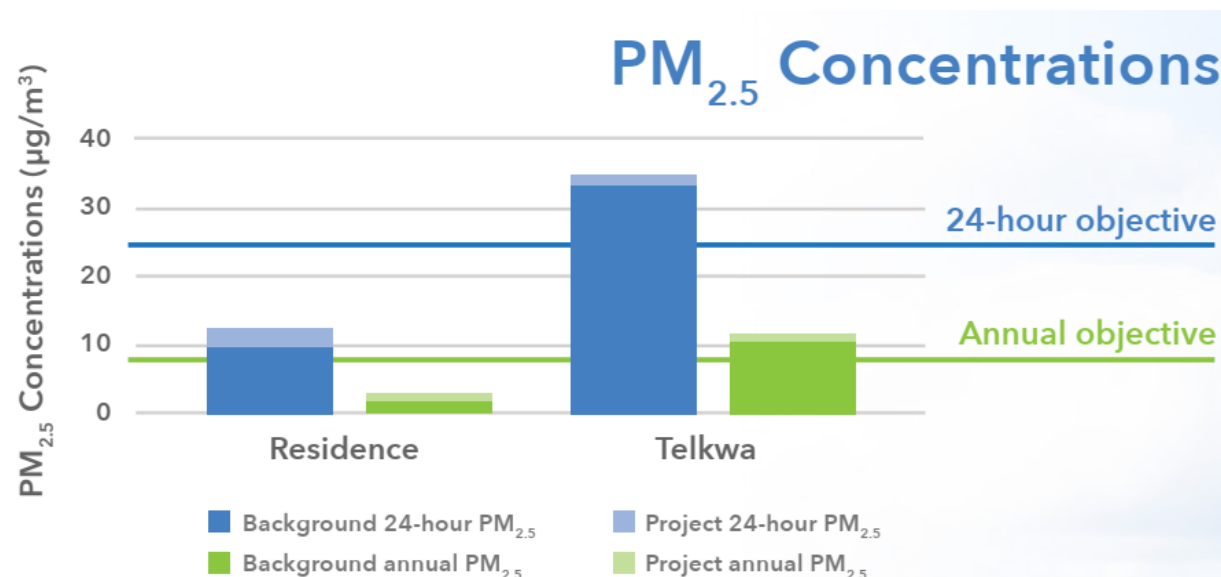
- Air quality in the Local and Regional Study Areas are affected by natural air emissions (e.g., wind-blown dust), residential emissions (e.g., wood burning), forestry activity, vehicle traffic, and road dust.
- Particulate Matter (PM) represents the main air quality concern in the study area, with existing PM concentrations within populated areas exceeding the relevant BC air quality objectives up to 8% of the time.
- Dustfall deposition rates near unpaved roads also tend to be high, occasionally exceeding the rescinded BC provincial objectives.

Example Mitigation Measures:

- Build, maintain, and use the Tenas Access Corridor (TAC) for hauling processed coal to the Rail Infrastructure.
- Use dust suppression agents on rail cars.
- Cover super B-train trucks when hauling processed coal from Coal Processing Plant to Rail Infrastructure.
- Fund a program to assist personnel to replace their wood or oil burning stoves with alternative lower emission or higher efficiency heating systems.

Residual Effects:

- Changes in ambient Criteria Air Contaminants concentrations due to the Project will not result in any new exceedances of the BC ambient air quality objectives.





Atmospheric Environment - Noise

Existing Conditions:

- Baseline noise levels are highest in the populated area of Telkwa and lowest in remote locations, primarily from vehicle traffic along Highway 16 and rail traffic along the existing rail line.
- Livestock and local vehicle traffic including logging trucks contribute to the measured noise levels at the outlying residential subdivisions.

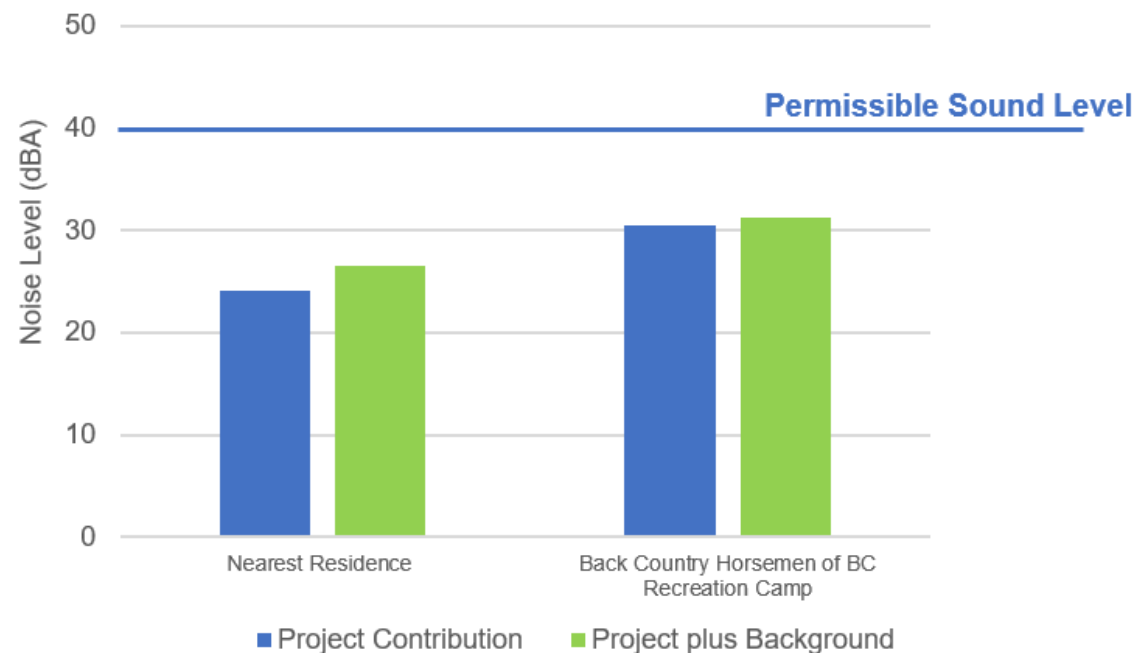
Example Mitigation Measures:

- Build, maintain, and use the Tenas Access Corridor for hauling processed coal to the Rail Infrastructure.
- Monitor actual blast results and implement improvements as required as per the adaptive management process.
- Use electronic detonators and use noiseless lead lines on the surface.
- Use privately controlled Rail Infrastructure so that there are no train whistles generated from Rail Infrastructure.
- Utilize low train speeds.

Residual Effects:

- Changes in noise levels due to the Project will not result in any new exceedances of BC's permissible sound level criteria.

Maximum Predicted Nighttime Noise Level





Surface Water

Existing Conditions:

- Tenas Creek, Four Creek, Goathorn Creek, Telkwa River and the Bulkley River were selected as representative drainages.
- Streamflow regime is snowmelt-dominated with the majority of runoff occurring in the spring and early summer due to melting winter snowpack. Annual low occurs during the winter.
- Watercourses monitored during baseline studies within the Regional Study Area have historically had elevated concentrations of iron, copper, and aluminum when compared to the BC Water Quality Guidelines.

Example Mitigation Measures:

- Monitor seepage, groundwater, and surface water levels, and quality/quantity downstream and upstream of the Project as per the monitoring programs set up in the Minesite Water Management Plan.
- Establish trigger levels that require the implementation of contingency mitigations measures described in the Discharge Management Plan.
- Monitor and control water discharges from Tenas Control Pond to a tributary of Goathorn Creek based on downstream water flow rates and water quality to meet in-stream guidelines and flow requirements during the Operation, and Decommissioning and Reclamation phases.

Residual Effects:

- The Project is expected to change summer and winter streamflow from baseline conditions in sections of Four and Tenas creeks, and changes in water quality parameters are limited to within the watersheds of Four Creek and Tenas Creek. However, residual effects are not expected to alter the integrity of the Surface Water Valued Component within the Regional Study Area beyond 5% which is deemed acceptable.



Groundwater

Existing Conditions:

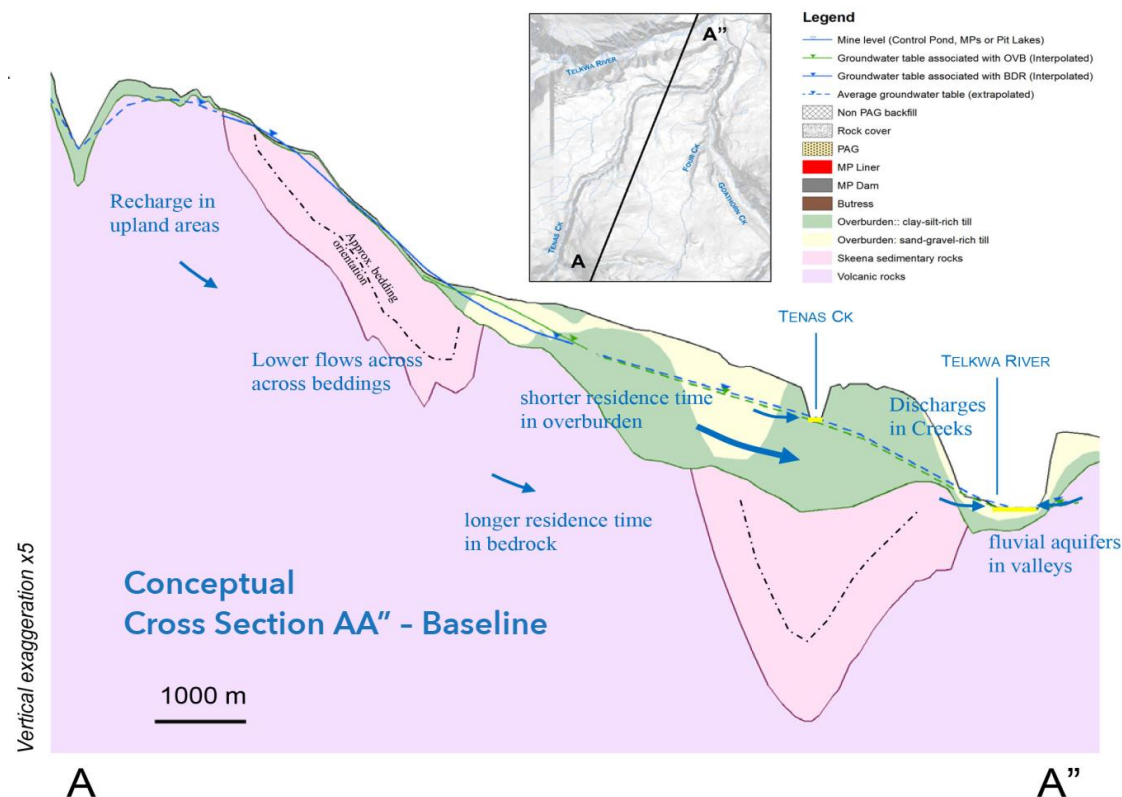
- Conceptually, the groundwater system is divided into two sub-systems: deep bedrock and shallow overburden. Groundwater flows towards the valleys, moving away from the open pit towards Tenas Creek, the Telkwa River, and Goathorn Creek.
- Baseline groundwater samples exceeded the BC Water Quality Guidelines for the protection of Freshwater Aquatic Life (FAL).

Example Mitigation Measures:

- The management ponds, and the Tenas Control Pond have been designed with low permeability liners to minimize the seepage of water from these facilities into the groundwater system.
- Identify and segregate potentially acid generating material while mining the open pit, and place and submerge potentially acid generating material underwater in management ponds to prevent acid rock drainage.

Residual Effects:

- Changes to groundwater levels are not predicted to reach any of the private domestic wells. Seepage from mine sources has the potential to reach the groundwater system utilized by private domestic well users but when mixed with background groundwater, no exceedance of the British Columbia Water Quality Guidelines for Drinking Water Standards are predicted.
- Changes in groundwater quality and discharge rates to watercourses are not expected to result in an unacceptable change that will alter watercourse integrity within the Regional Study Area.





Fish and Fish Habitat

Existing Conditions:

- Goathorn Creek, Tenas Creek, Four Creek and Helps Creek support fish and provide fish habitat.
- Three unnamed tributaries to Tenas Creek are non-fish-bearing and do not directly support fish or provide fish habitat upstream of their confluence with Tenas Creek.

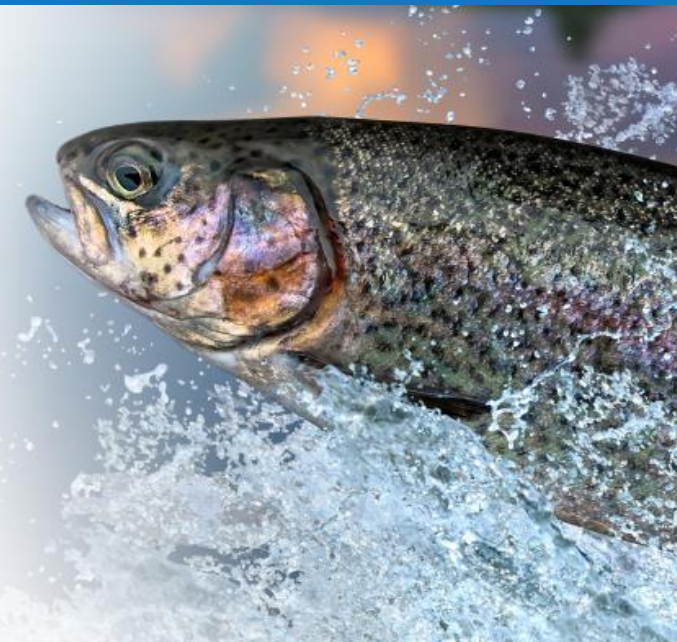
Example Mitigation Measures:

- When feasible, Construction Phase activities will be scheduled to occur within the reduced risk instream work window.
- At watercourse crossings a fish salvage operation will be conducted where instream works or isolation of the work area within the watercourse will occur.
- Clear-span bridges will be installed for fish bearing streams with abutments located outside of the bankfill water level of the stream.

Residual Effects:

- Changes in fish habitat are expected to arise from the diversion of water currently conveyed in tributaries to Tenas and Four Creeks. After implementation of fish habitat offsetting for the change in fish habitat due to the Project, a net gain habitat productivity is predicted.

Watercourse	Species
Goathorn Creek	Coho salmon, Dolly Varden, Steelhead/rainbow trout
Tenas Creek	Dolly Varden, Steelhead/rainbow trout
Four Creek	Dolly Varden, Steelhead/rainbow trout
Unnamed tributary to Four Creek	No fish caught
Bulkley River	Coho salmon, Lamprey, Steelhead/rainbow trout, Sucker (general), Chinook salmon, Dolly Varden, Longnose sucker, Minnow (general), Northern pikeminnow, White sucker
Telkwa River	Coho salmon, Steelhead/rainbow trout, Mountain whitefish, Dolly Varden





Existing Conditions:

- The Project Area is used by Moose, Deer, Black Bear, Grizzly Bear, Wolf, Lynx, Coyote and Elk. Caribou were not detected within the Project Area during the two years of baseline studies.
- Western toad, Columbia spotted frog, long-toed salamander, and wood frog were detected in the Project Area during surveys.
- Several species of bats were identified in the Project Area, including Little Brown Myotis and Long-eared Myotis.

Example Mitigation Measures:

- Project features will be placed within existing or planned Project component footprints to limit the clearing of vegetation.
- Least-risk timing windows will be used to avoid Project activities during sensitive time periods.
- Project footprint boundaries, sensitive habitats and identified wildlife features will be clearly delineated by flagging and or fencing.
- Wildlife Education Program will be implemented for employees, visitors, and contractors in accordance with the Wildlife Management Plan.

Residual Effects:

- Residual effects are not expected to alter the integrity of the Wildlife Valued Component within the study areas to a point where it is not able to sustain regional populations and contribute to ecological functionality.





Wet'suwet'en Rights and Interests

- Part C of the Application provides an assessment of Wet'suwet'en Rights and Interests in relation to the Tenas Project.
- The assessment was prepared from existing publicly available desk-based references and does not yet include direct input from Wet'suwet'en.
- Engagement with Wet'suwet'en has followed the process laid out in the Communication and Engagement Agreement signed in April 2017 and the Tenas Project Assessment Agreement, between Telkwa Coal Limited and the Office of the Wet'suwet'en signed in August 2021.
- Due to the unique nature of Indigenous rights, the Application makes no determination of the Significance of residual effects on Wet'suwet'en Rights and Interests.





Conclusions

- After consideration of the potential residual effects and considering the context of the Project Area, Project design, and mitigation measures, Telkwa Coal and its assessment team are confident that the Project can be constructed, operated, and decommissioned and reclaimed in an environmentally responsible manner.
- This conclusion considers the proactive planning and engineering, the ongoing and progressive reclamation efforts that are proposed to occur during all phases of the Project and the commitment to an adaptive management process.
- Telkwa Coal has identified appropriate monitoring programs to be conducted throughout the life of the Project. The information collected during these monitoring programs will be used to identify issues and the design and application of appropriate solutions in a timely manner to protect the identified VCs.



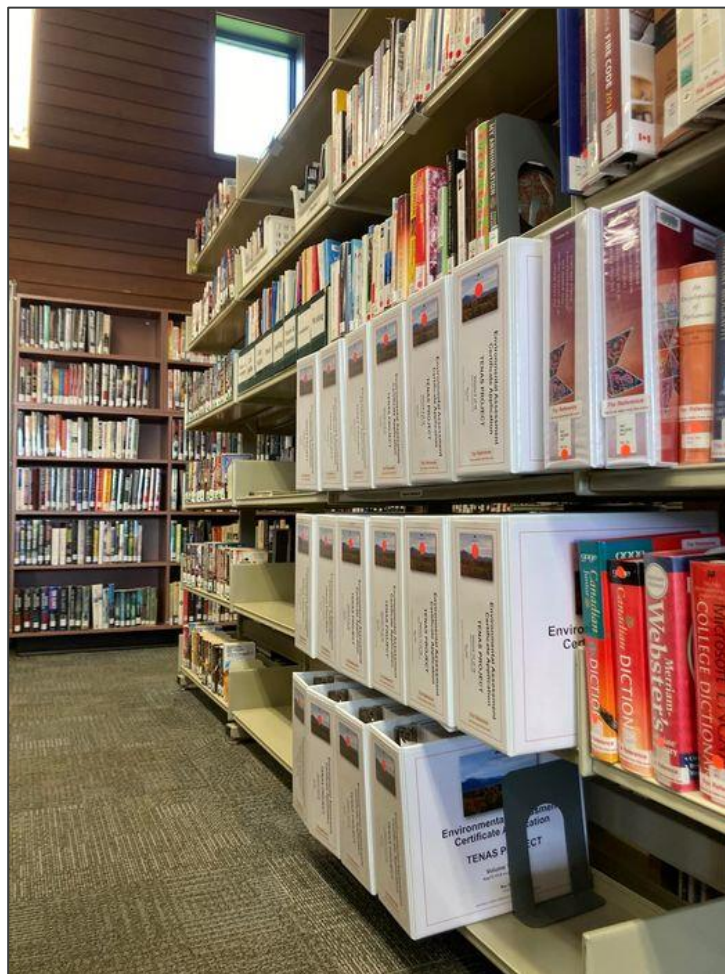


Learn more and stay connected

Visit www.TelkwaCoal.com for
Project information

Valued Component and
subcomponent
postcards, brochures and
infographics available at:

Telkwa Coal Office
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Telkwa BC, V0J 2X0



Hard copies are available at the Smithers and
Houston Libraries, and our Telkwa office.

Tenas Project EAC Application
available on EAO's EPIC website

