

KWOIEK CREEK HYDRO PROJECT: A Shared Success

Environmental Managers Association
of British Columbia



INNERGEX

Renewable Energy.
Sustainable Development.



Development, Construction & Operations

Kwoiek Creek Hydro Project

50MW run of river project located 14 kilometers south of Lytton BC (on Both sides of the Fraser River).

A project website is available at:

<http://www.kwoiekcreekhydro.com/>

1990: Water license application filed.

2000: First EAO review

2008: Second EAO review

2009: Environmental

Certificates Issued

2011: Construction Starts

2013: Project up & Running

2014: Certified Operational

The Before Shot



Ground Breaking Ceremony 2011



Getting the Keys- December 15, 2013



Development Phase

1. Social License
2. First 10 years
3. First EAO Review
4. Specifications
5. The Partnership
6. The Second EAO Review
7. The Commitments

Doing Things Right

“Do it right”

- Use no more than you need
- Take back out what you take in
- Return the land back to its natural state
- Don't make promises you don't intend to keep.

Construction Phase: We all had a vested interest.



Fish Habitat Enhancement

The project has a unique fishway at the intake structure that allows fish to migrate easily, and 980m long Fish Habitat Enhancement Area.



The Intake

Digging down and then building back up the physical structure to divert allowed water and a head pond for flow certainty.



The Diversion Channel



Intake & the Fish

Coanda Screen: to eliminate entrainment (mortality)

Fish Channel: allows fish to go back up past the intake



The Penstock

Using the existing road (ROW)

CPR Railroad Crossing



The 4 Creek Crossings



Penstock is green to acknowledge sight concerns and new steel bridges have replaced the old timber bridges.

The Gravel Pit

Digging, crushing & sorting



Making the concrete onsite



The Powerhouse: Inside



Powerhouse: Outside



The Cable Crane

Fuel



Penstock



Cable Crane II

The Vehicles



The People



The Transmission Line

71 kilometres of 138kV line



Kanaka Mountain & Hwy. 1



Operations Phase



Unique Challenges

- Highway 1
- Local employment
- Tailed Frogs
- Instream fish populations
- Avalanche/Slides
- Erosion/Sediment Controls
- Canada's hotspot
- Arch Sites and heavy Traditional Use area
- Spotted Owl
- Mountain Beaver
- Site specific weather conditions

How We Addressed Challenges

- Identifying impacts
- Transparency
- Communication
- Long-term Monitoring
- Continually working to keep our commitments

The boots are still on the ground.

The After Shot



The After Shot II



Red: The Nlaka'pamux

White: The explorers, the colonisers, the subsequent governments and BC's industry.

Black: The history between all

Yellow: The future

Blue: A new relationship for all brought together by Clean Energy.



Thank you, any questions?