

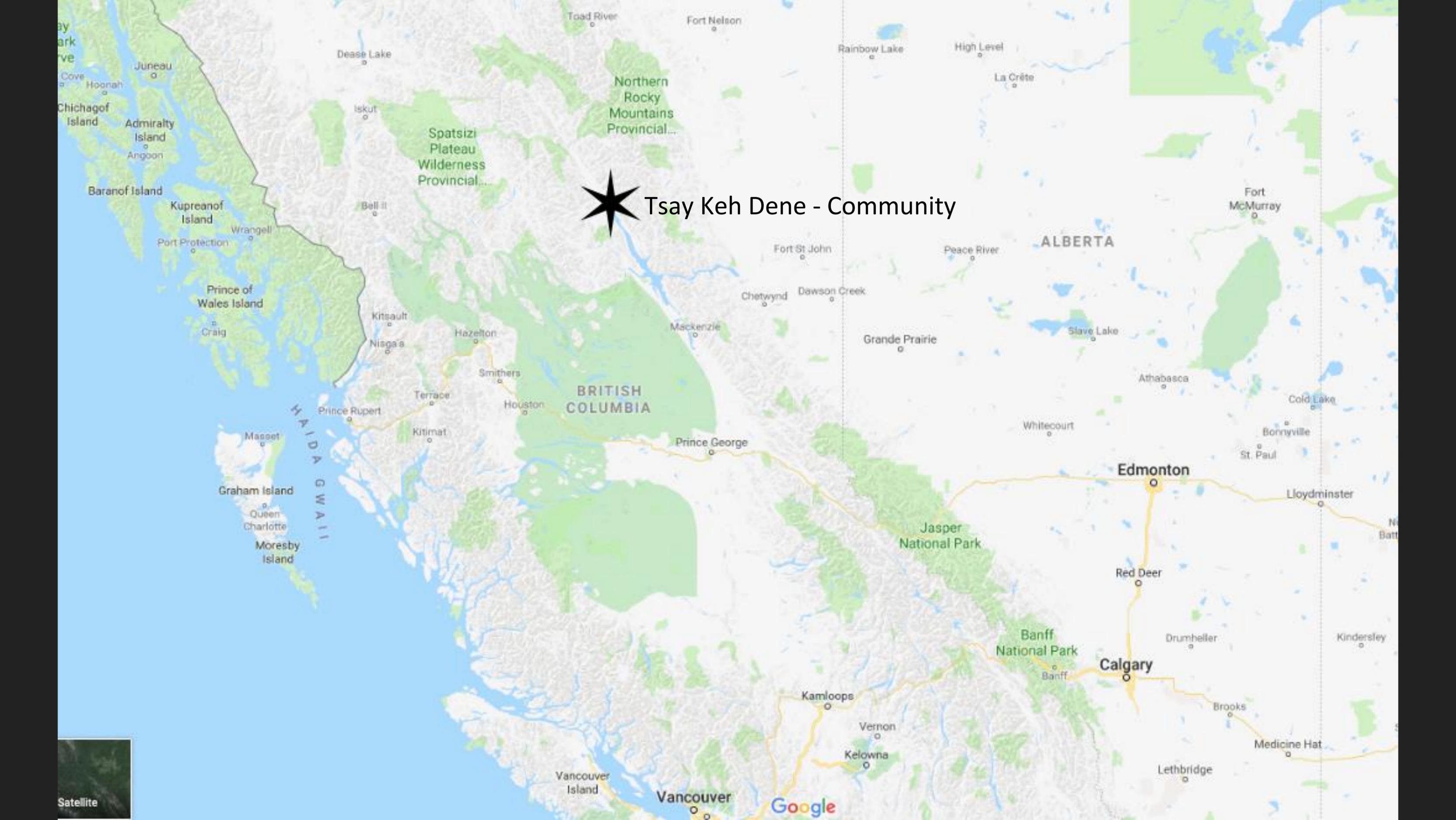
RENEWABLE ENERGY FOR TSAY KEH DENE NATION

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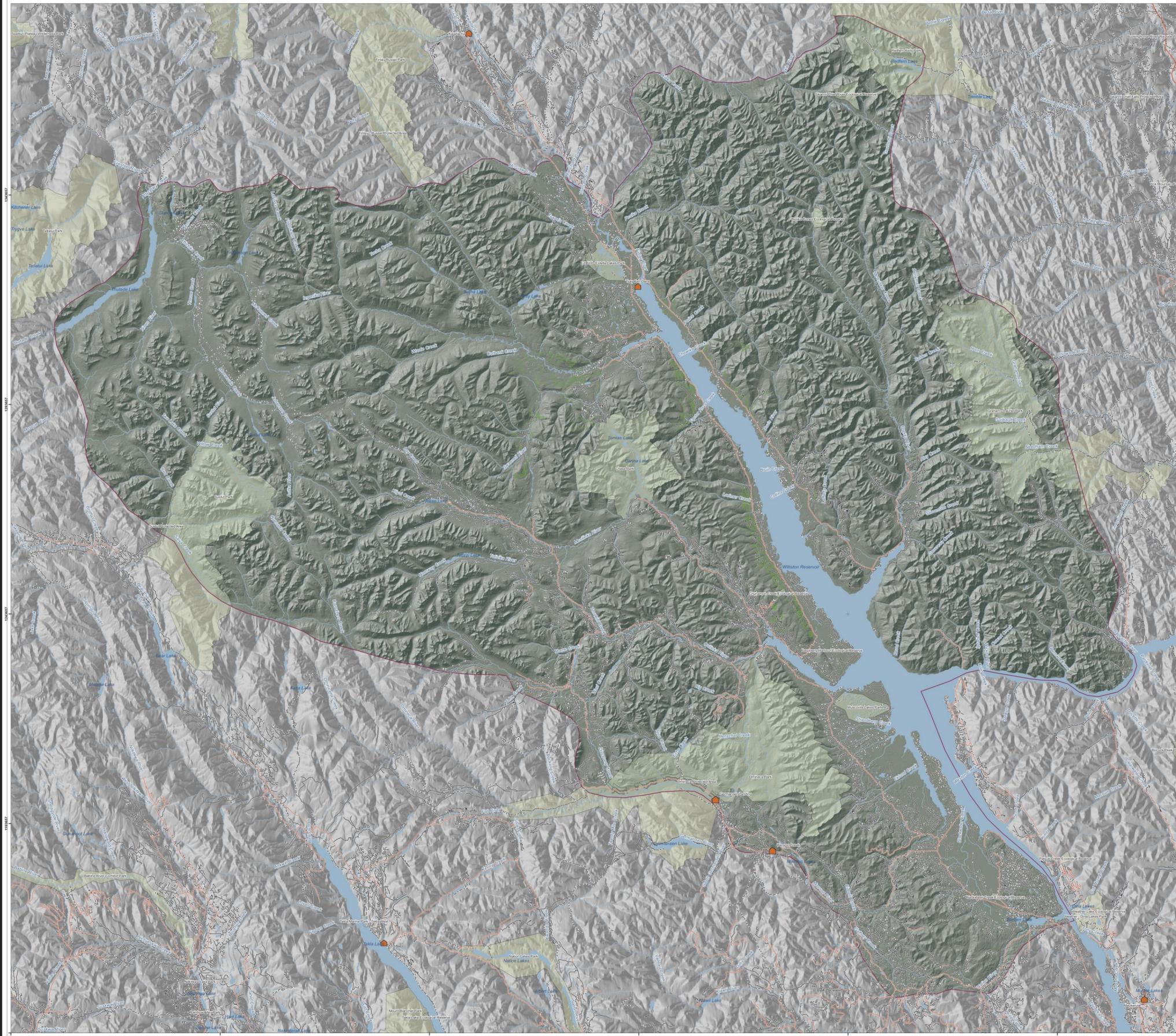
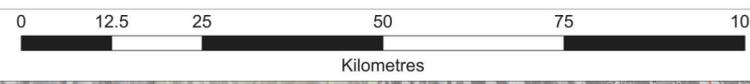
REMOTE COMMUNITY  
RE-ELECTRIFICATION



Tsay Keh Dene - Community

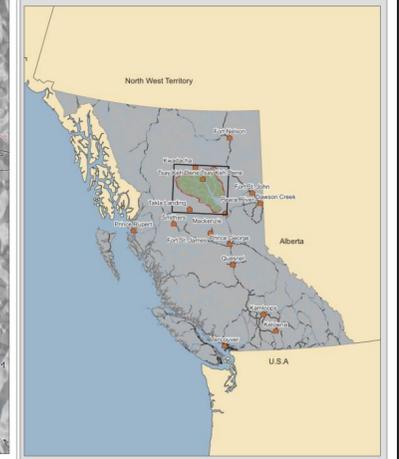
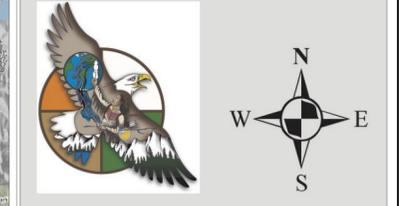


# Tsay Keh Dene Traditional Territory Overview Map



- ### Legend
- BC Communities
  - Forest Service Road
  - Road Permit
  - Special Use Permit, Forest
  - Special Use Permit, Non-Forest
  - Highways
  - Overgrown Roads
  - TKD Traditional Territory
  - Streams
  - Lakes & Rivers
  - Parks

Produced By: Dana Schwehr  
Tsay Keh Dene Nation  
Lands, Resources, & Treaty Operations  
Date: June 16, 2017  
Scale: 1:300,000  
Projection: Albers Equal Area Conic







WOODY DEBRIS

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COMMON  
RESERVOIR  
ISSUE





The World's Largest Tree Crusher  
Mackenzie BC circa 1965







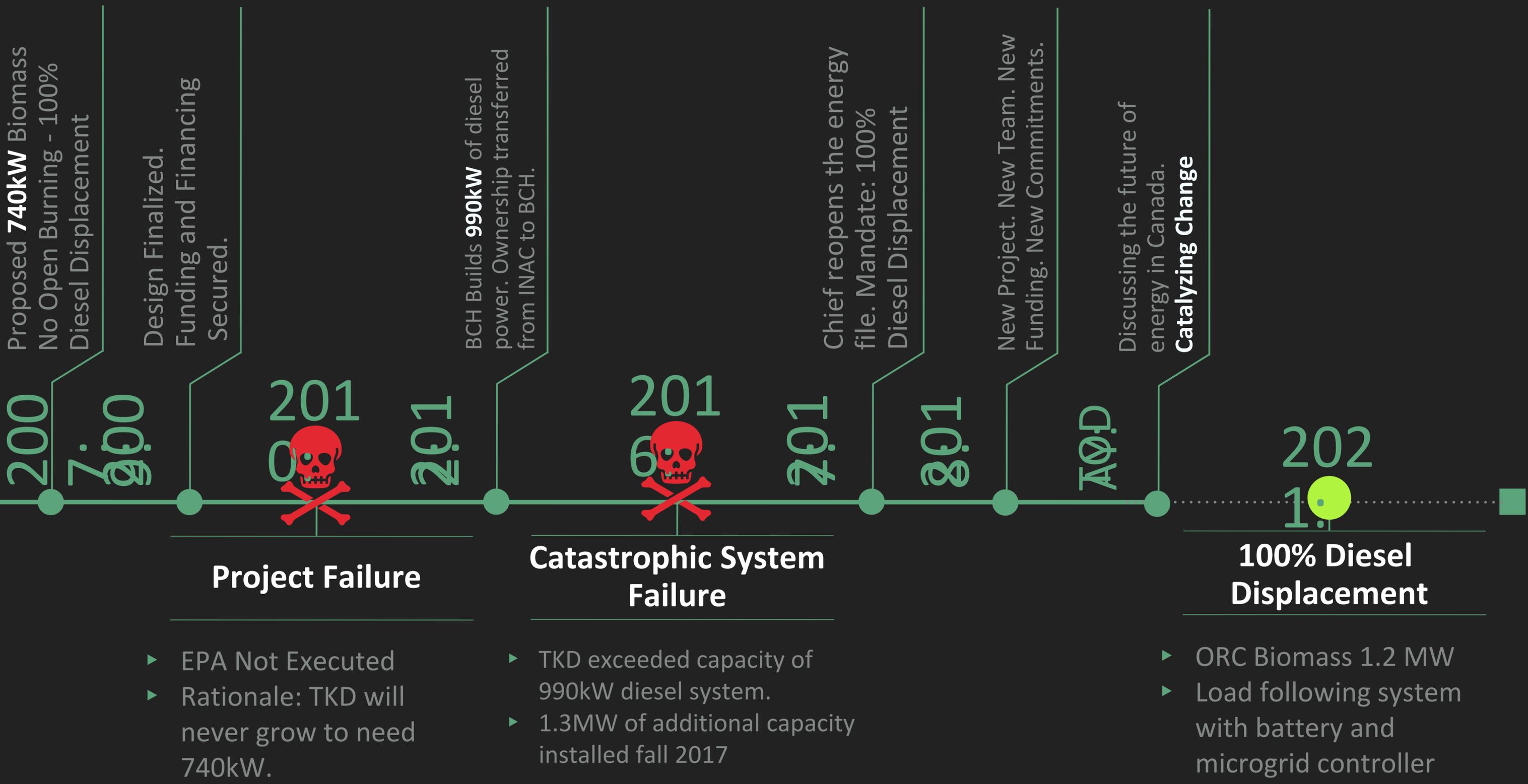


## DEBRIS MANAGEMENT

- ▶ From 2008 - 2018:
  - ▶ Piled 800,000+ cubic meters of woody debris.
  - ▶ 2500+ humongous piles.
- ▶ Chief refused to slash-burn the wood - sights set on clean energy.
  - ▶ In 2015 open burning commenced because of immense pressure to deal with the piles before they became a permanent habitat structure.
  - ▶ Over 2500 piles were burned from 2015 to 2018

# REMOTE COMMUNITY RE-ELECTRIFICATION

**PAS**  
TKD Powered by  
**550kW** of Diesel



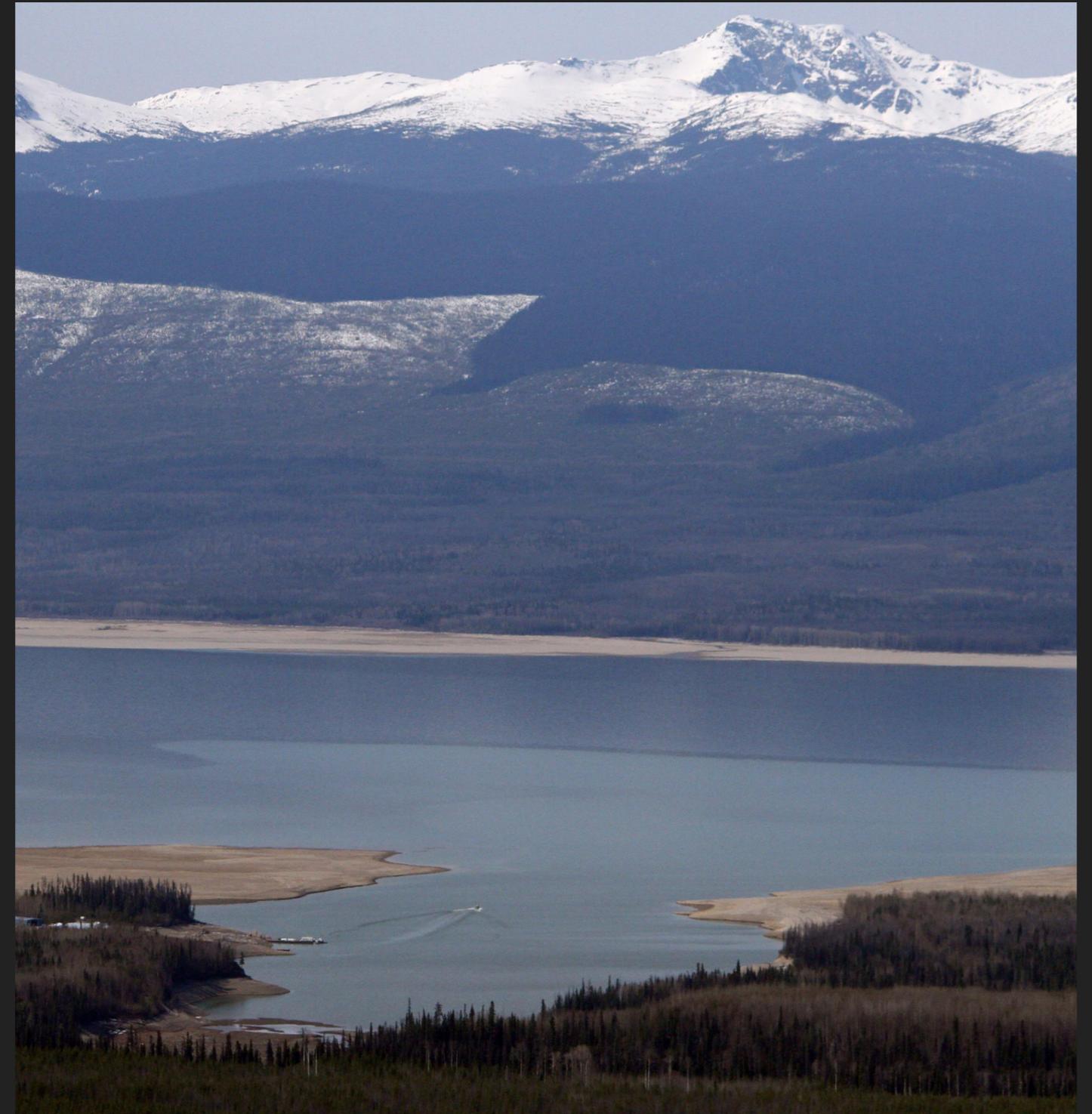
- Project Failure**
- ▶ EPA Not Executed
  - ▶ Rationale: TKD will never grow to need 740kW.

- Catastrophic System Failure**
- ▶ TKD exceeded capacity of 990kW diesel system.
  - ▶ 1.3MW of additional capacity installed fall 2017

- 100% Diesel Displacement**
- ▶ ORC Biomass 1.2 MW
  - ▶ Load following system with battery and microgrid controller

# THE FUTURE:

- ▶ Energy independence and all its direct and ancillary benefits.
- ▶ Meet and exceed both federal and provincial climate and carbon policies.
- ▶ Creates an economy where virtually no economy exists.
- ▶ Hundreds of thousands of cubic meters of reservoir debris.
- ▶ Displace diesel.



## UPDATE AND NEXT STEPS:

- ▶ CERRC funding awarded from NR Can.
- ▶ Finish EPA negotiations - change the procrustean view espoused by the utility.
- ▶ Financial Close.
- ▶ Capacity training.
- ▶ Built it, commission it, operate it – change a community forever.



REMOTE COMMUNITY RE-ELECTRIFICATION

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THANK YOU.