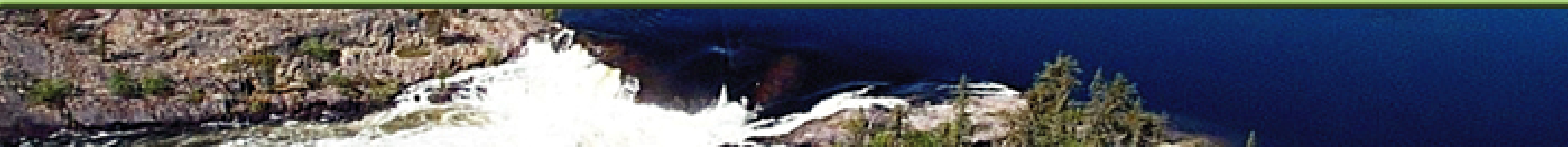


TALTON HYDROELECTRIC EXPANSION PROJECT

MVEIRB HEARING PRESENTATION

by Dézé Energy Corporation

January 14th, 2010

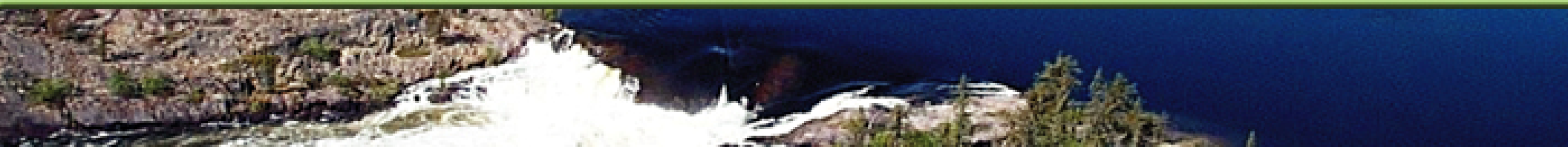


Dezé Energy Owners

- Métis Energy Company Ltd.
- Akaitcho Energy Corporation
- NWT Energy Corporation (03) Ltd.

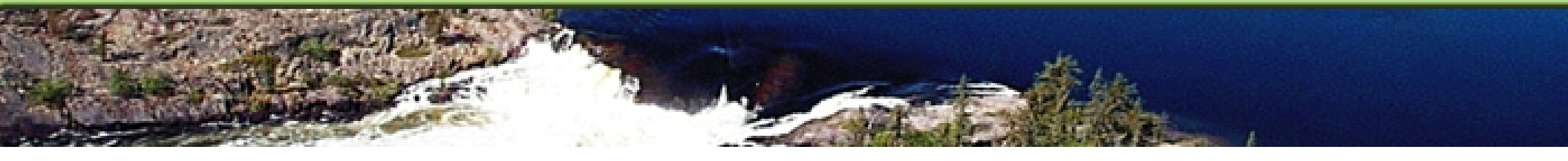
Dezé Energy Board Structure

- Equal representation



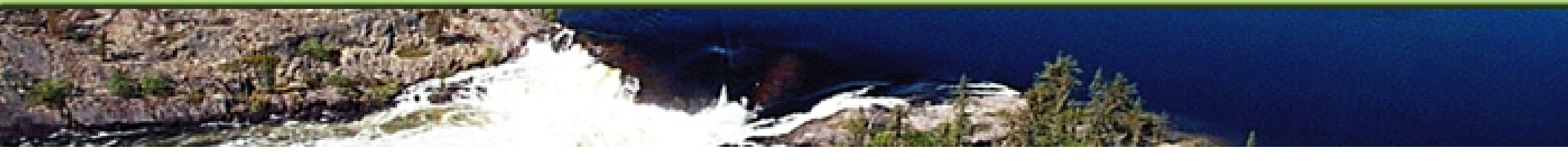
Dezé Energy Approach to Business

- Sustainable development
- Made-in-the-North business model
- Social, cultural, and environmental responsibilities
- Optimize Aboriginal participation and benefits
- Appropriate rate of return
- Long term vision



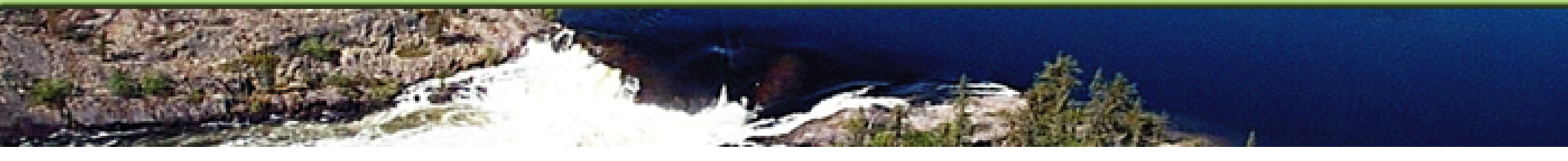
Project Benefits

- Partnership precedent and blueprint for future projects in the North
- Community ownership and multi-generational revenue stream
- Utilize existing reservoir and infrastructure, supplemented with new generation facilities and transmission line
- No new flooding



Project Benefits - continued

- Each m³/s of water through turbines can offset 45,000 tonnes of CO_{2e} diesel electrical generation emissions over a twenty year span.
- Substantial NWT GHG reduction (15%) with regional to global environmental benefits
- 2000 less B-train fuel trucks annually on winter roads
- Business, employment and training opportunities
- Long term revenue stream for majority Aboriginal owners
- Possible extension of mine life and associated economic benefits



Taltson Expansion Project Overview



Transmission Line

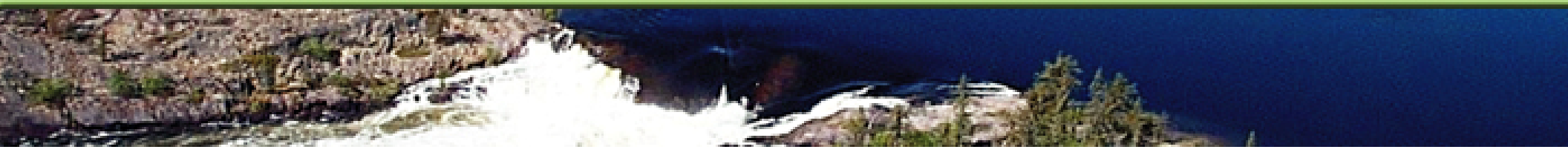
- 161 kV transmission line; 69 kV spur lines
- Substations at each mine

Nonacho Lake

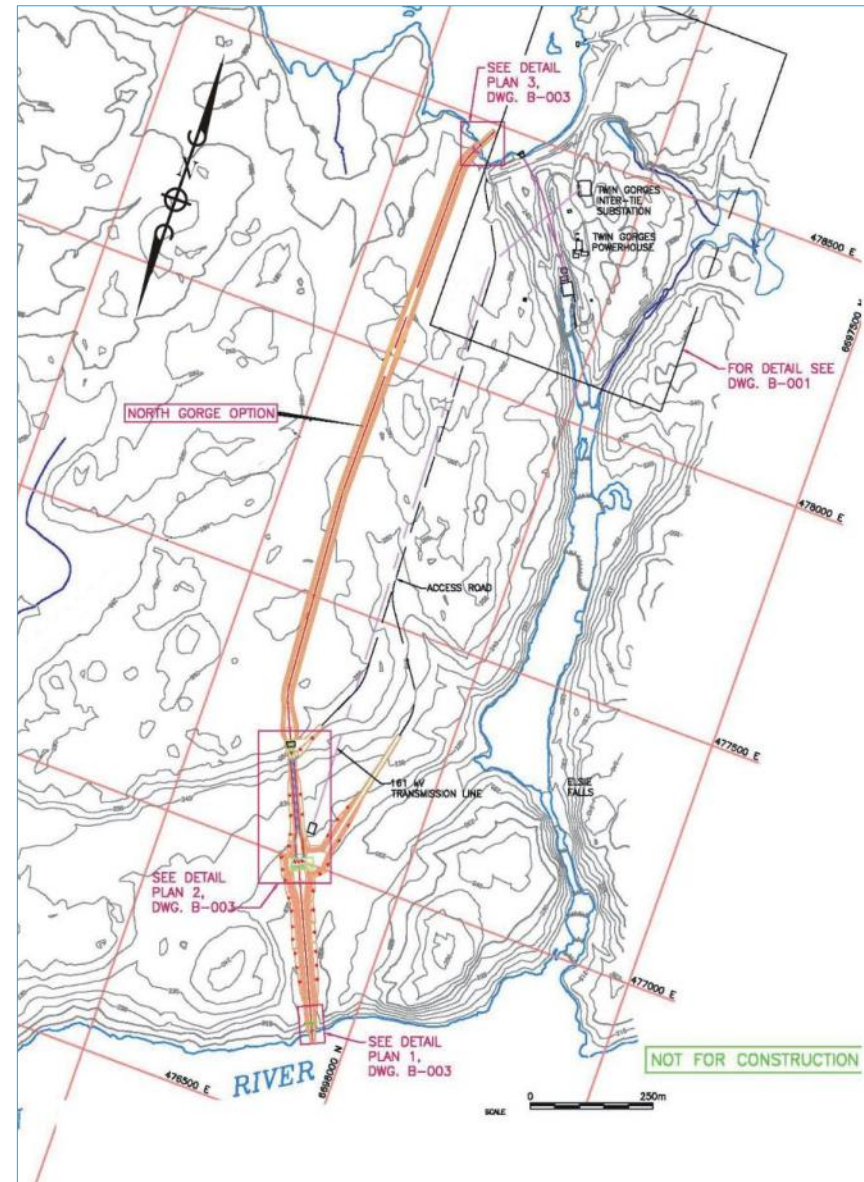
- Nonacho Lake control structure
- Nonacho dam refurbishment

Twin Gorges

- New powerplant (36 - 56 MW)
- New bypass spillway
- New release facility for Trudel Creek

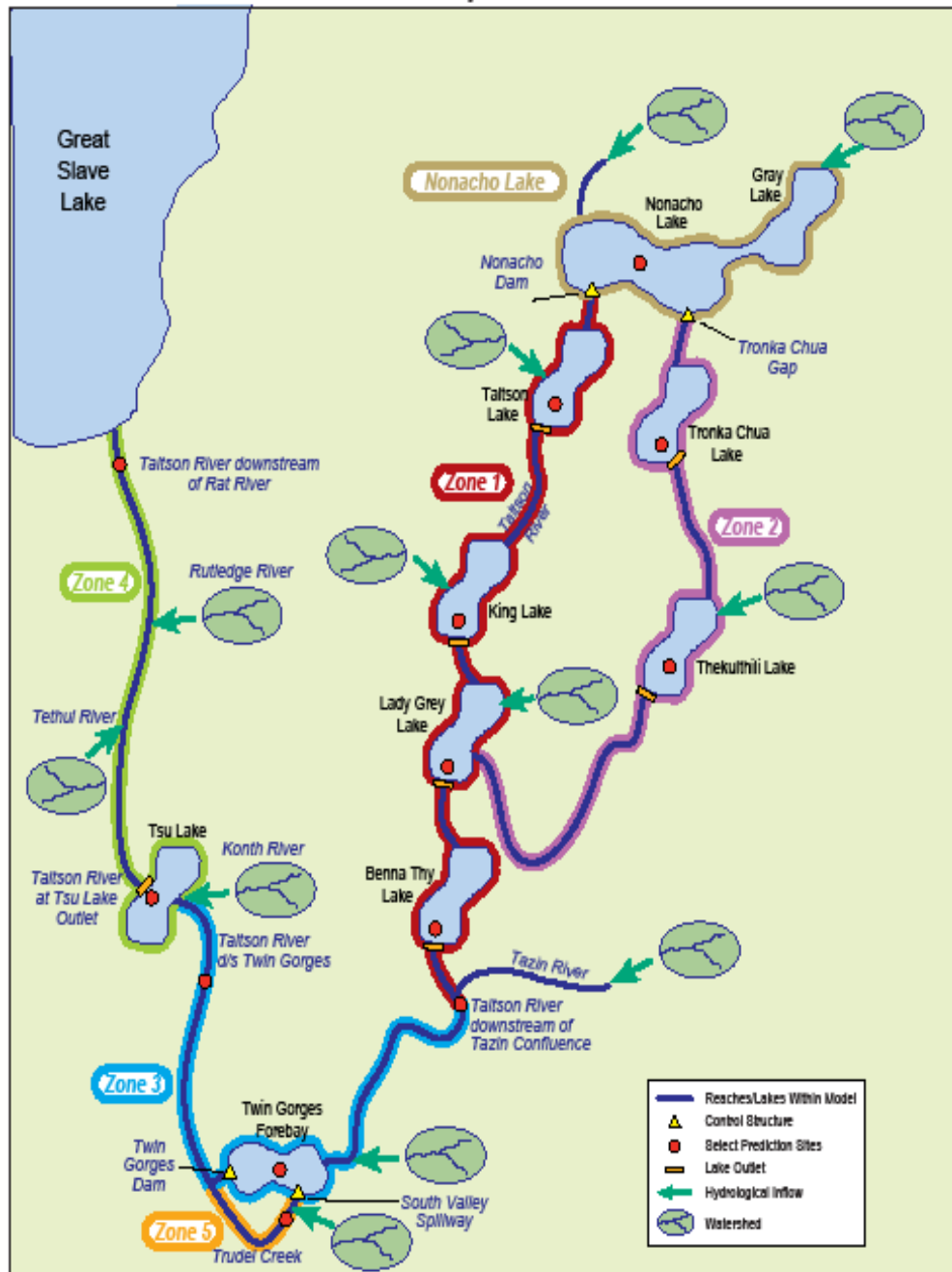


Taltson Expansion Project Overview



Taltson Expansion Project Overview

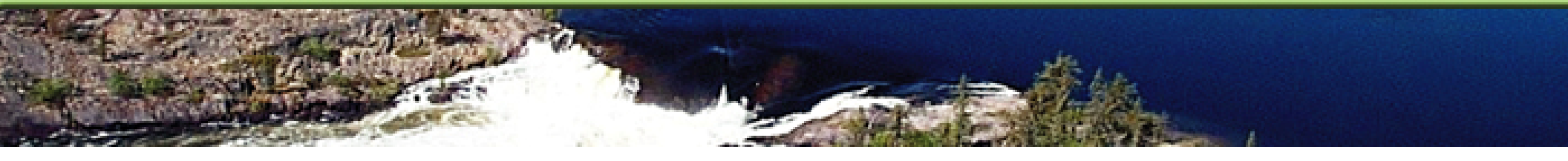
A. Conceptual Sketch



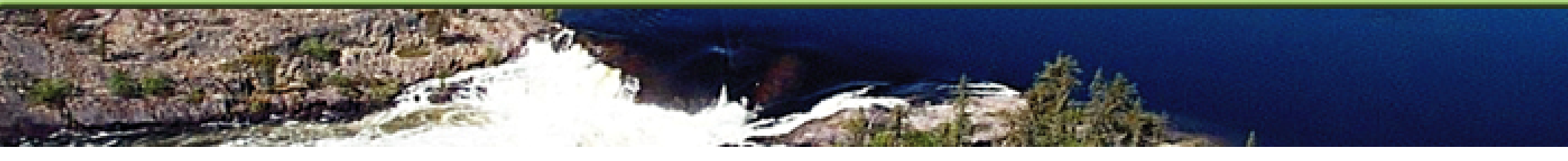
B. Geographic Setting



- Dézé has been proactive in community and party involvement
- Worked with parties to address numerous interests throughout the process, as early as 2006
- Milestone dates in process:
 - Project Description to MVLWB: May 2007
 - Referral to MVRB: October 2007
 - DAR submission: February 2009
 - Technical sessions and sidebar meetings: July - Oct 2009
- Continue to engage with parties to develop monitoring program and adaptive management

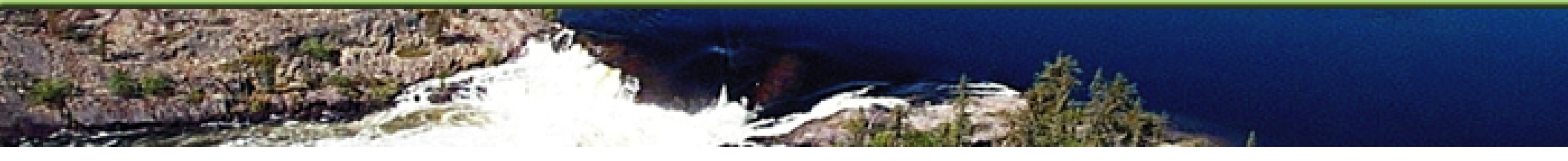


- Revised design and mitigation in response to environmental findings and party interests
 - Transmission line routing
 - Revised minimum flow in Trudel
 - Flexible timing of scheduled outages
 - Low environmental risk explosive products in-stream
 - Clearing methods
 - No trails within sensitive areas
 - Lockhart River crossing flexibility

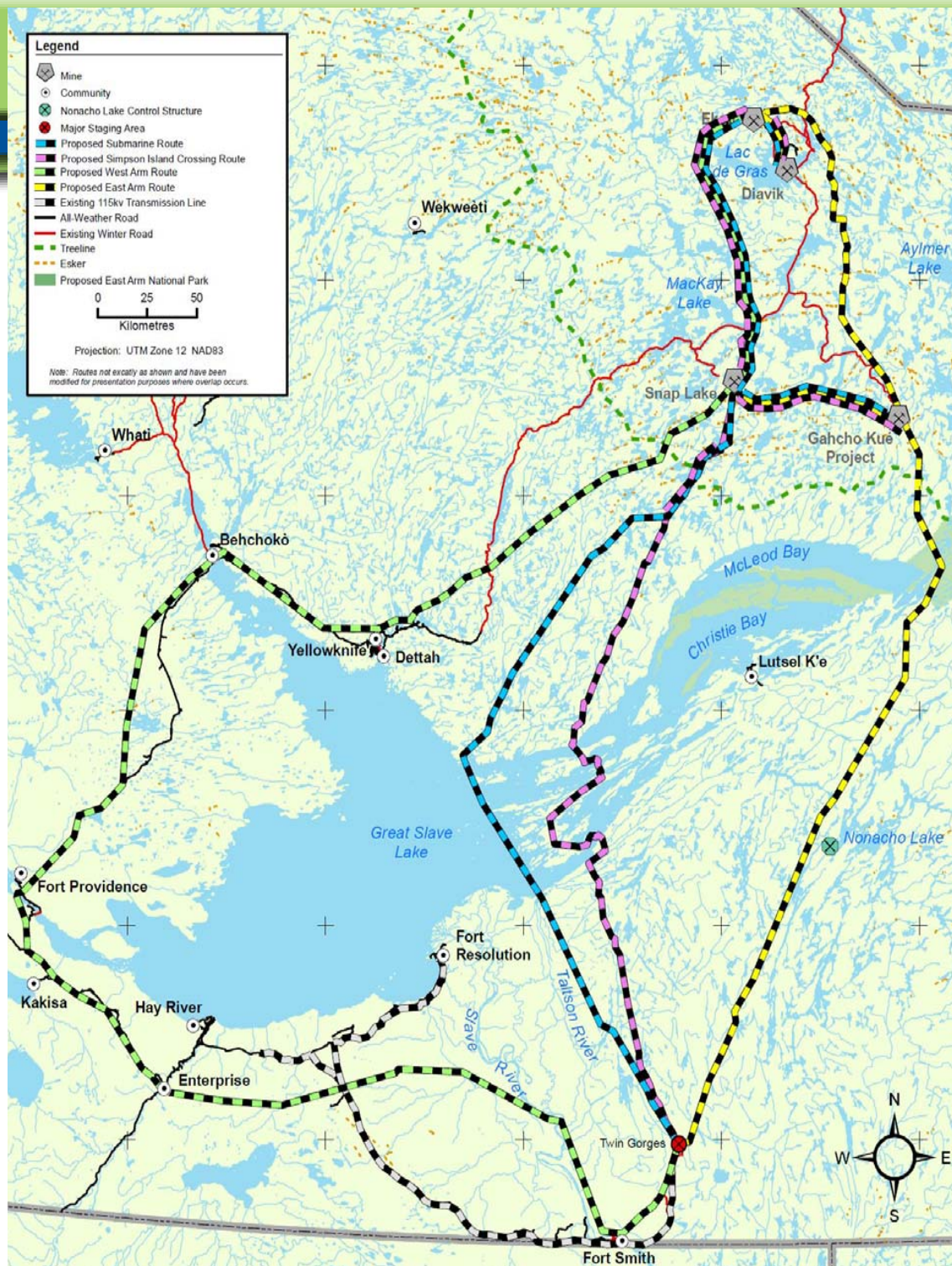


Summary of Key Interests

- Transmission line alternatives
- East Arm Park Area
- Caribou and access
- Birds
- Nonacho Lake
- Trudel Creek

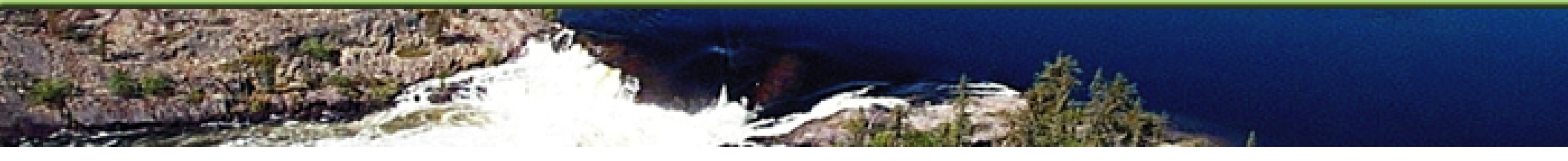
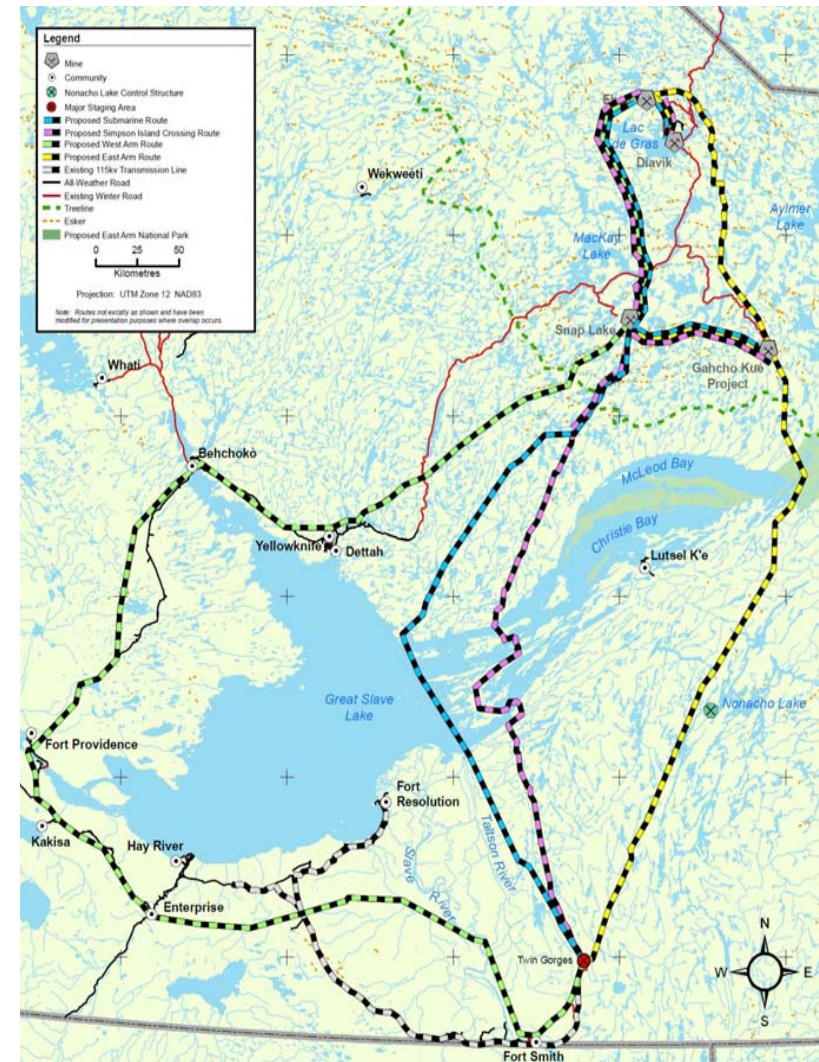


Transmission Line Alternative Routes

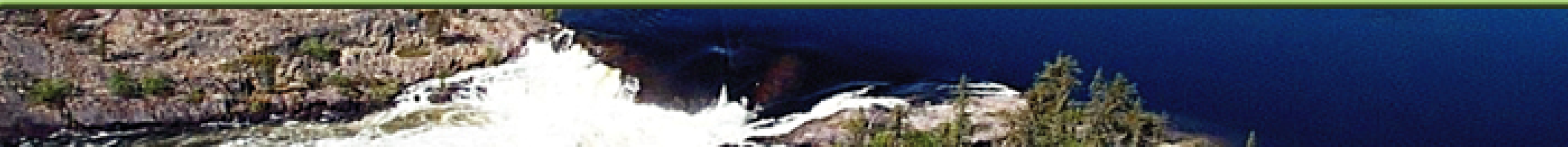
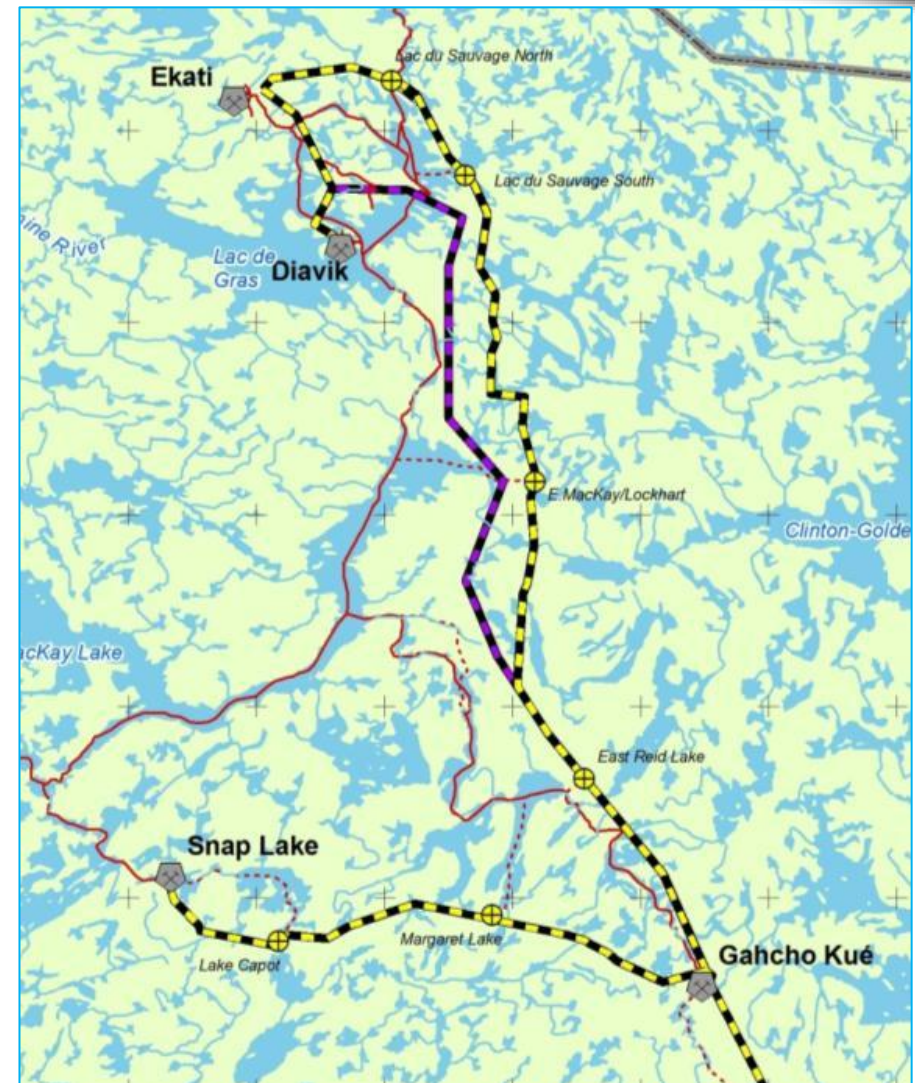


Alternate Routing

- Dézé invested significantly in environmental and engineering studies of alternatives
- Alternatives were considered until they were found to be impractical or unfeasible
- Underwater reliability issues
- Changes to Project routing have been made to avoid sensitive areas

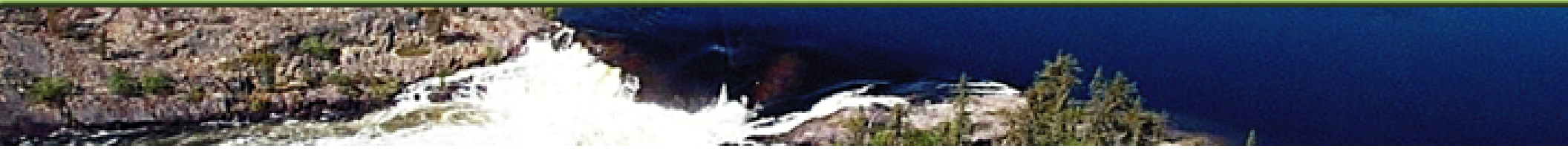


- **Dezé is open to improvements and continues to investigate routing designs that best consider party interests**
- Examples include:
 - Change to transmission line alignment near Lac de Gras and Mackay Lake



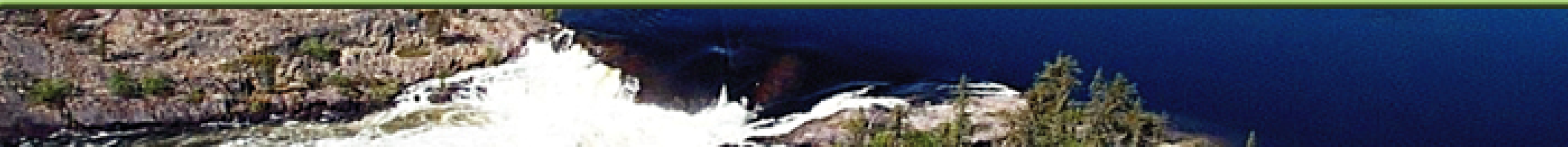
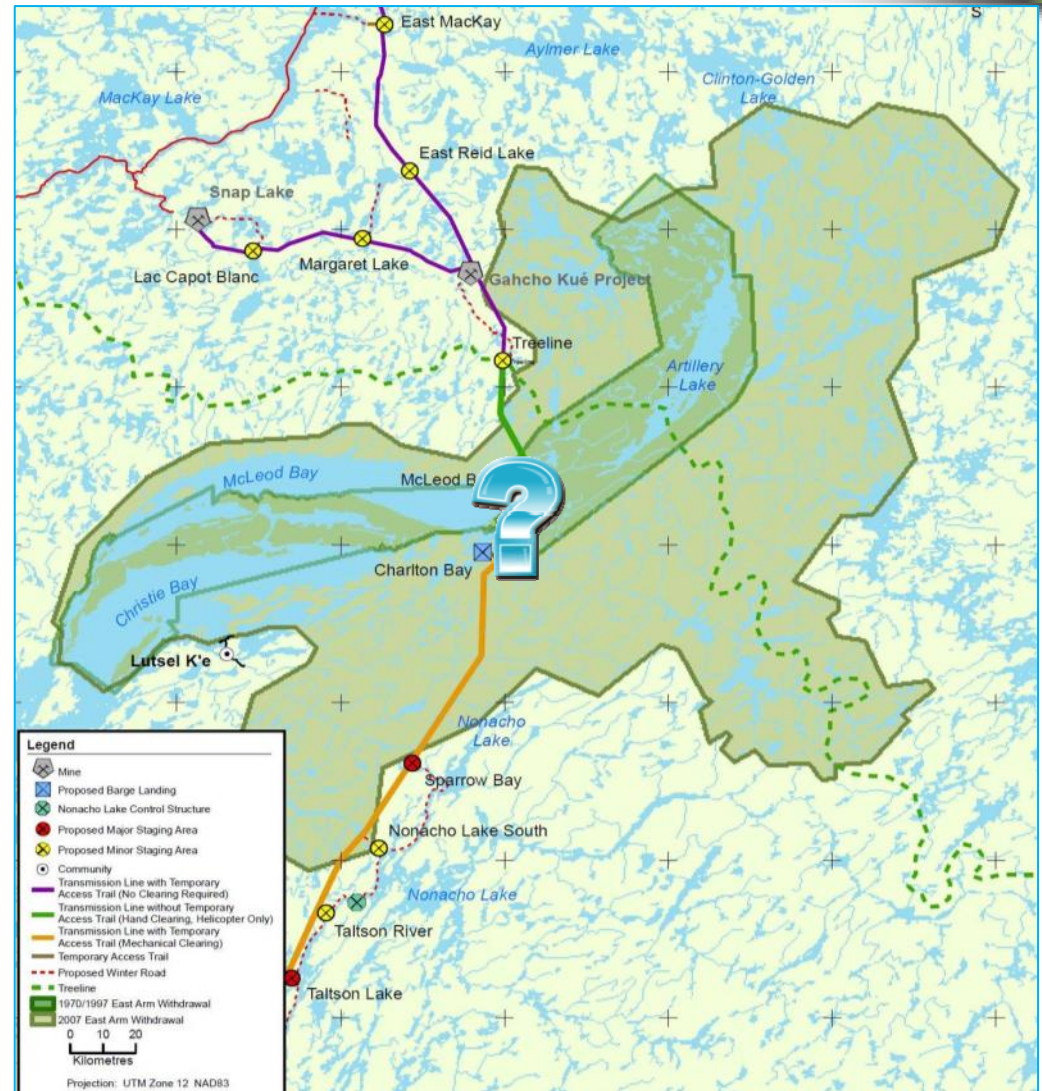
Transmission Line Alternative Routes

- Examples include:
 - possible adjustment at Pikes Portage at Harry Lake



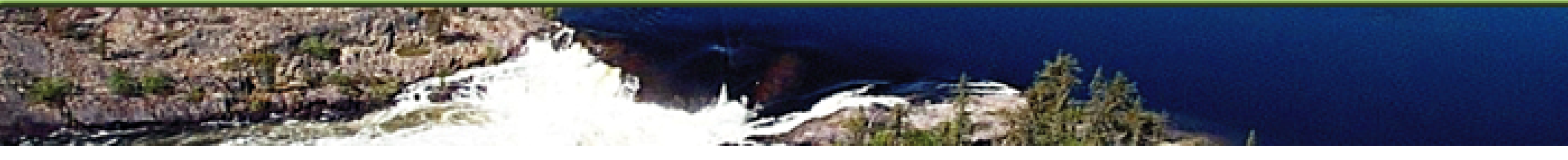
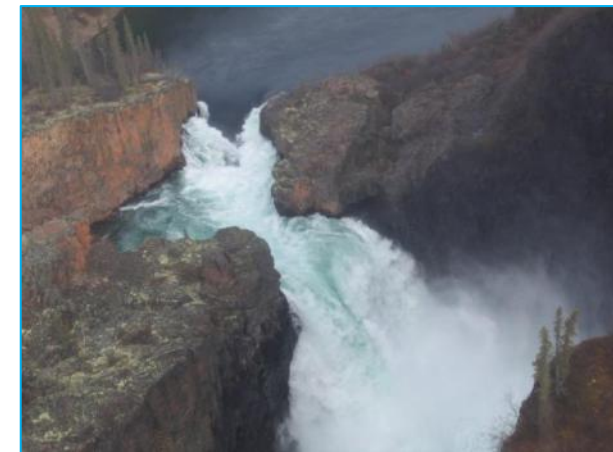
Transmission Line Alternative Routes

- Future examples will include:
 - Alignment in the Lockhart River area

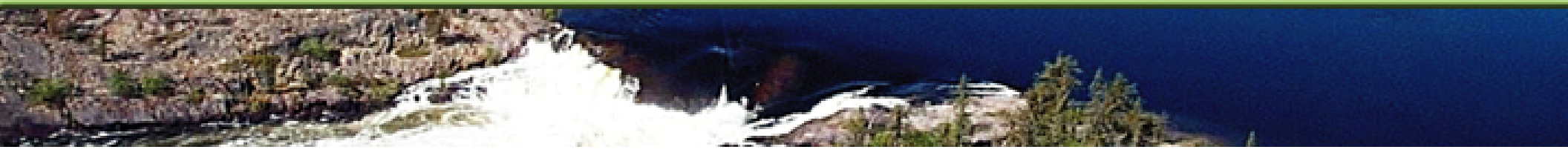
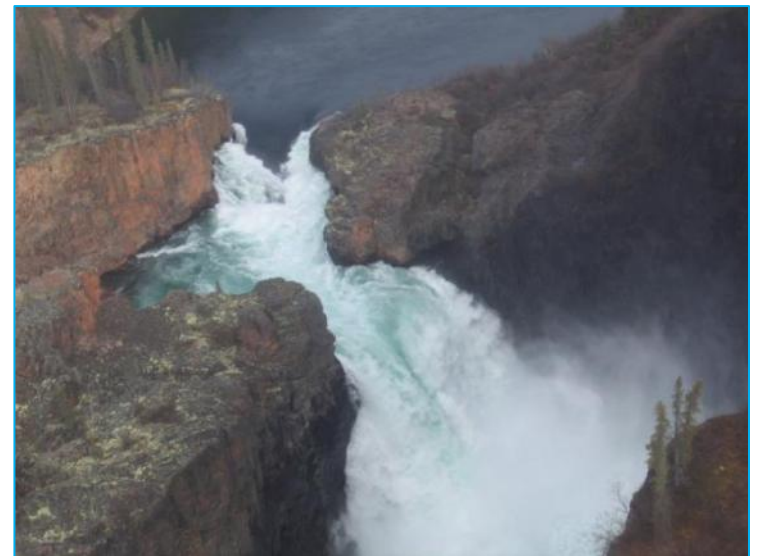


Lockhart River Crossing

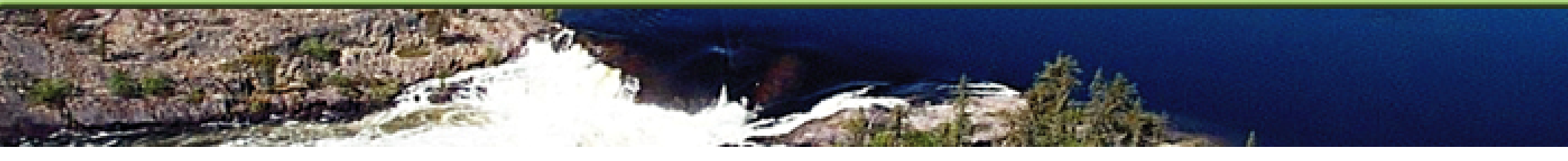
- Lockhart River and Parry Falls are sacred places
- The federal government recognizes this, moving for National Park status
- Dézé recognizes and supports Park initiative
- Sponsored annual retreat to the Lockhart River
- Numerous meetings with Lutsel K'e and Parks Canada to address this issue



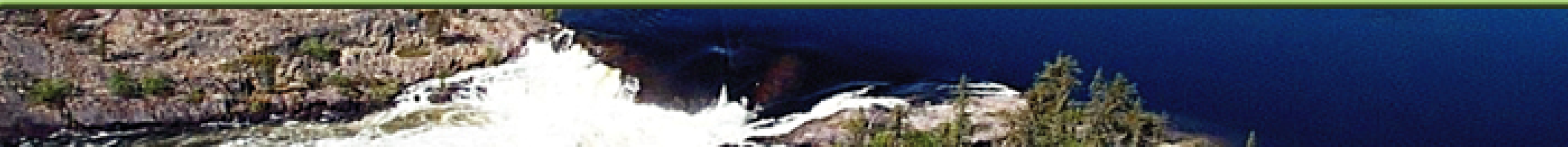
- Mitigation includes measures specific to proposed Park area
- Dézé recognizes the significance of Parry Falls and the Lockhart River and would contribute by supporting initiatives such as:
 - annual gatherings
 - traditional knowledge collection
 - arts
 - cross-cultural experiences



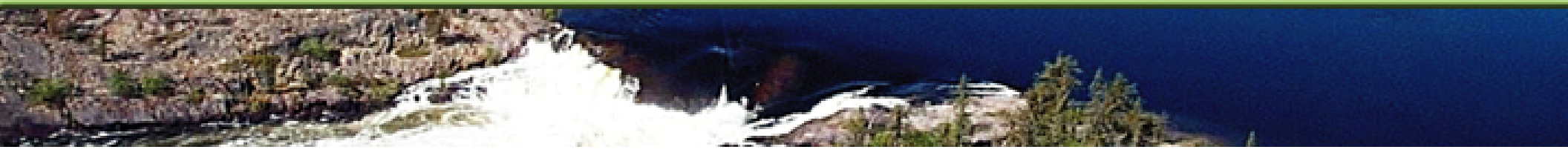
- Cumulative effects were considered in detail
- Some uncertainty in the predictions
 - Transmission line on barren lands
 - Woodland caribou models
 - Long-term environmental trends and extreme events
- Caribou likely in a period of low resilience
 - Population declines
 - Hunting ban
- Important habitat identified by TK studies



- Mitigating effects to caribou
 - Environmental monitors from surrounding communities
 - Draft Environmental Monitoring Plan proposes community and science-based monitoring
 - Construction schedule will consider caribou movements
 - Mobile caribou protection measures proposed

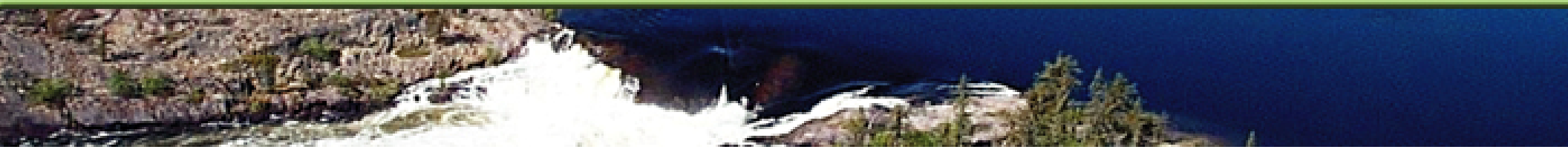


- New winter road from Fort Smith creates access to caribou winter range
- Burn in 1979, and anticipated recovery
- Mitigation is proposed
 - Construction phase controls to access
 - Operations phase controls to access



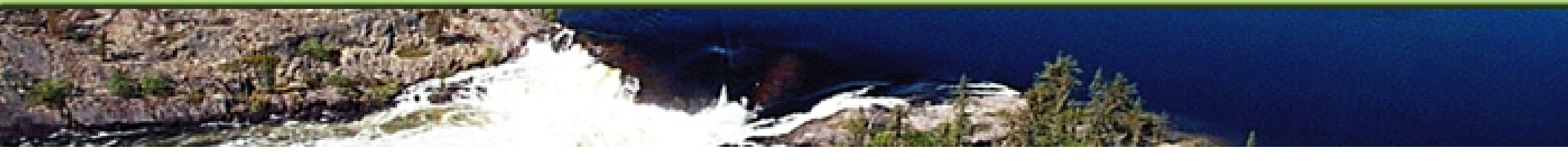
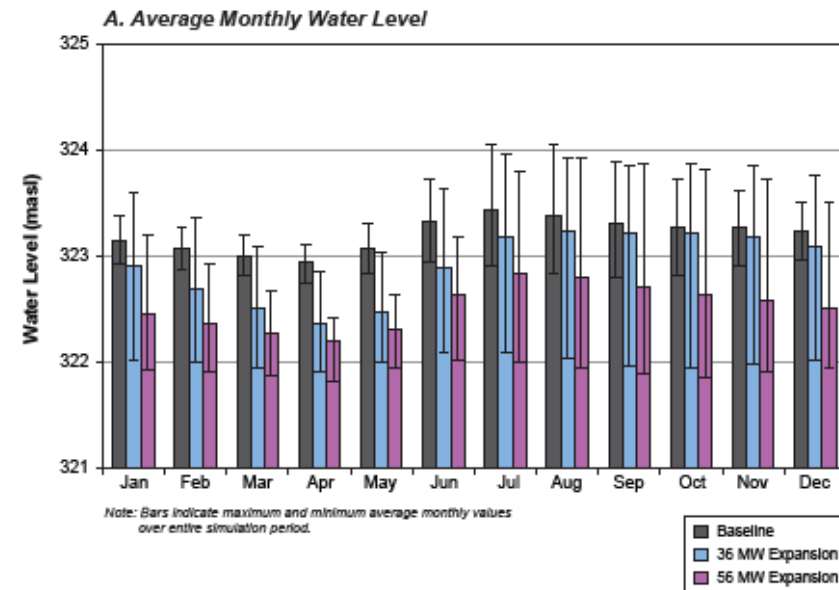
Migratory Bird Interests

- Transmission line collisions
- Nests in Trudel Creek and downstream of tailrace at risk from unscheduled outage
 - Mitigation is proposed
 - Nest management plan
- Species at Risk



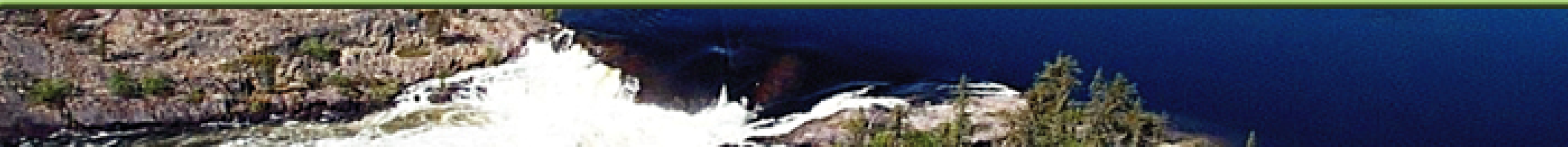
Nonacho Lake

- Levels maintained between water licence minimum level and historic maximums
- Previous to Twin Gorges, no connectivity through Tronka Chua Gap
- Ongoing dialogue with local user group

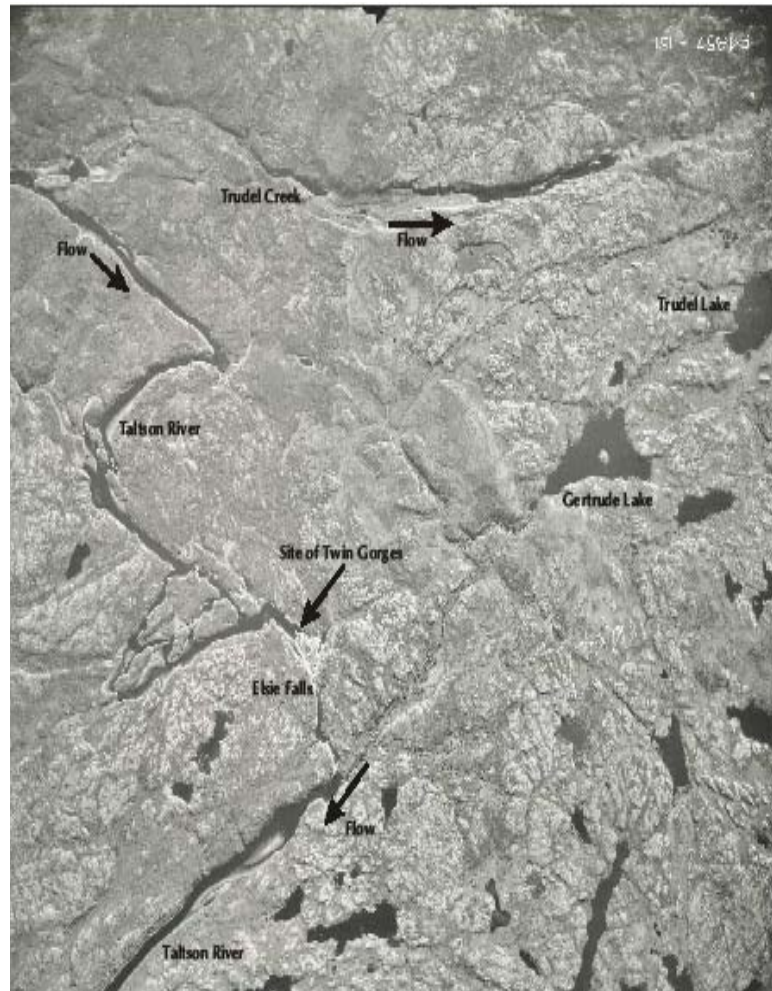


Trudel Creek Flow History

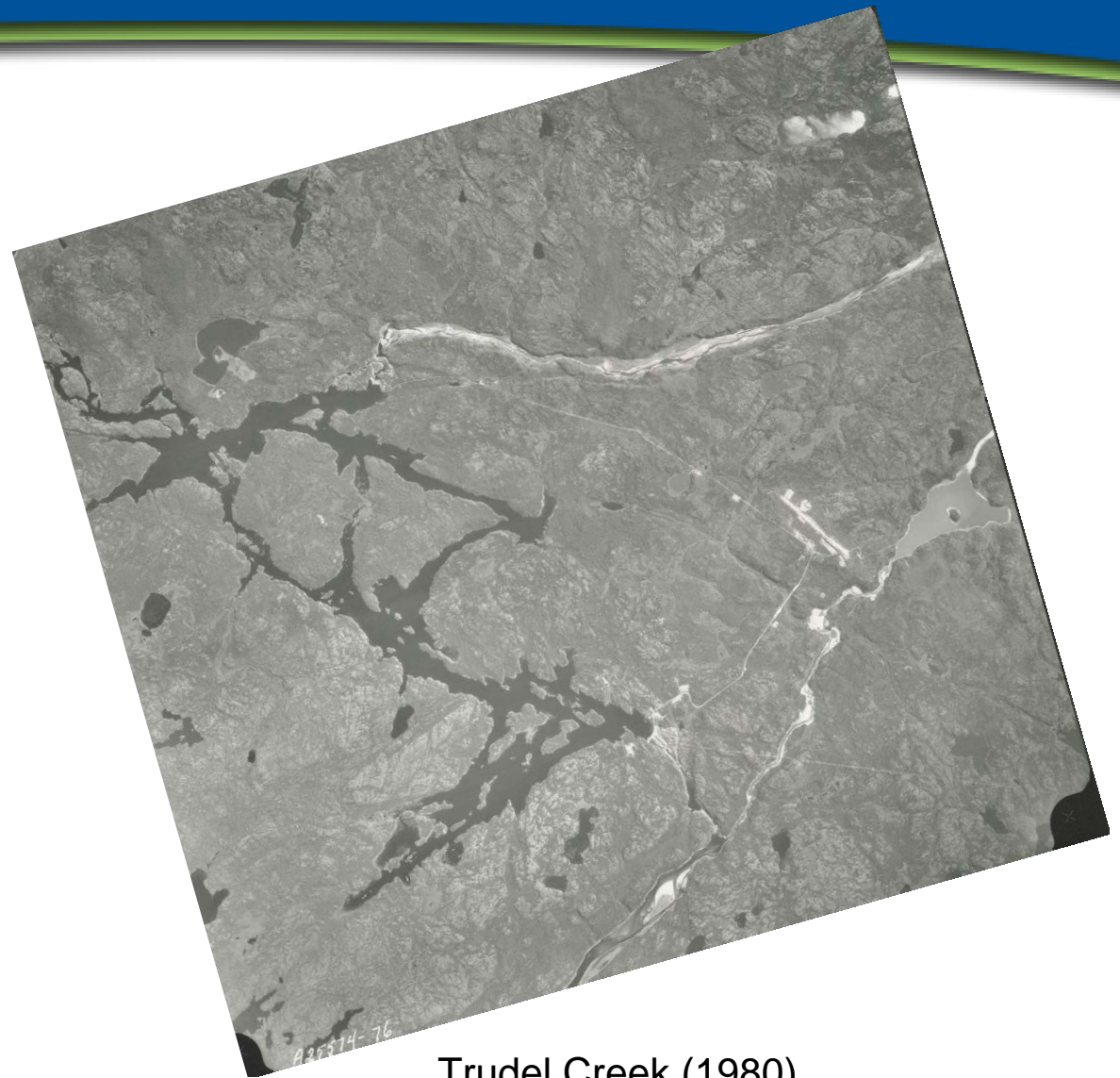
- Prior to existing Twin Gorges facility, small brook-like creek with no, or periodic, connectivity to Taltson River
- Flow and habitat changed with construction of Twin Gorges (1966)
- Pre-development flow $\sim 2.5 \text{ m}^3/\text{s}$; Current flow average $\sim 180 \text{ m}^3/\text{s}$
- Flow and habitat changed with reduction in power from closure of Pine Point Mine (1986)
- During Twin Gorges operations, periods of zero flow for up to 2 months



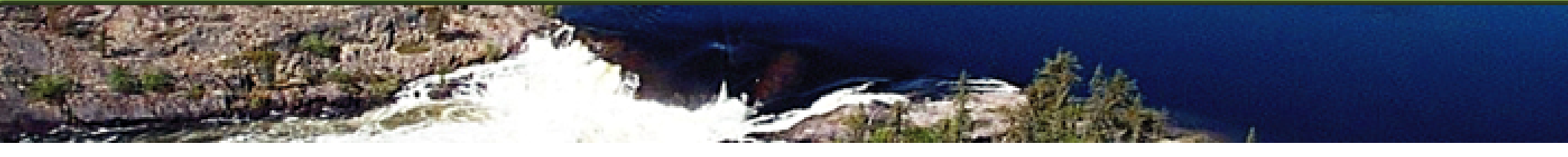
Trudel Creek

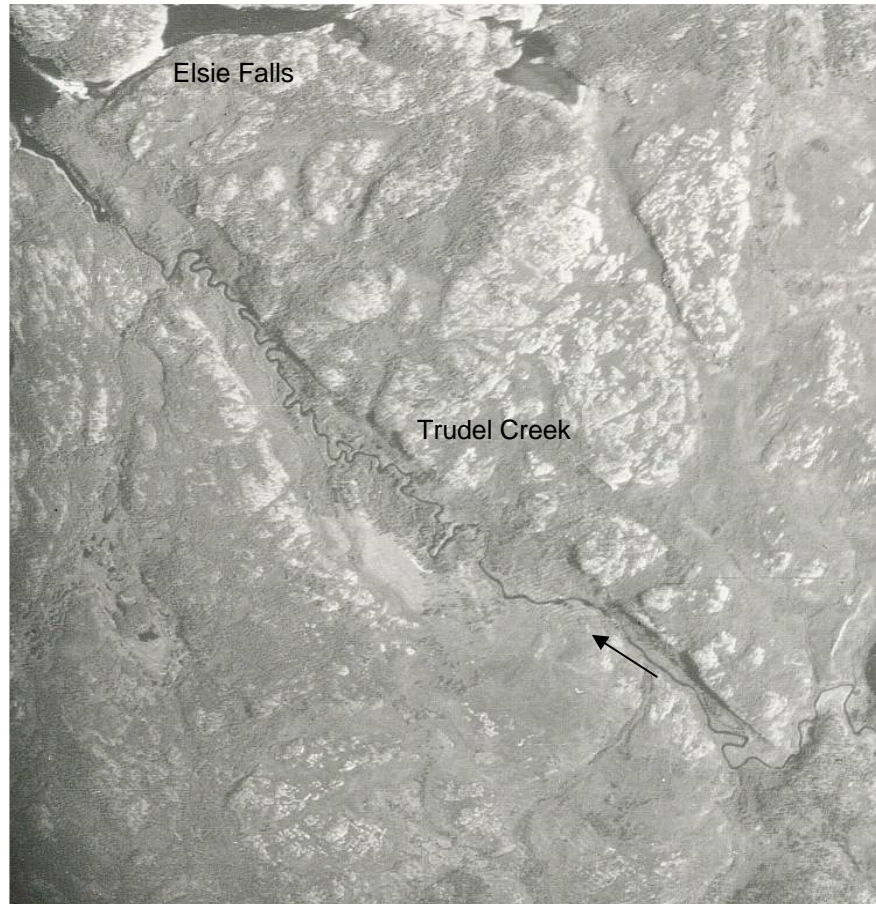


Trudel Creek (1955) pre-Twin Gorges

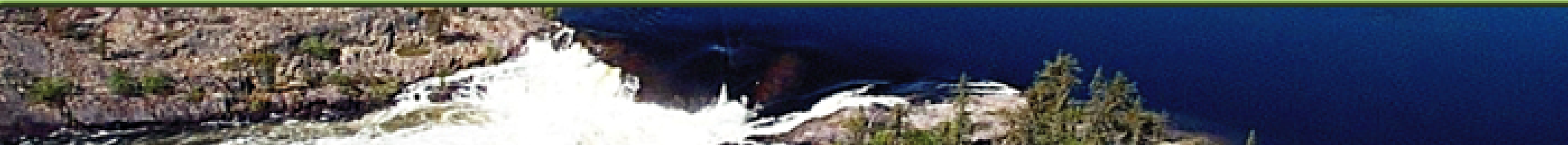


Trudel Creek (1980)



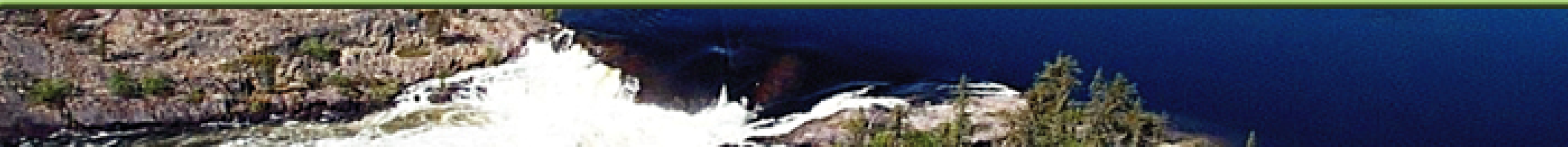


Trudel Creek (1955) pre-Twin Gorges



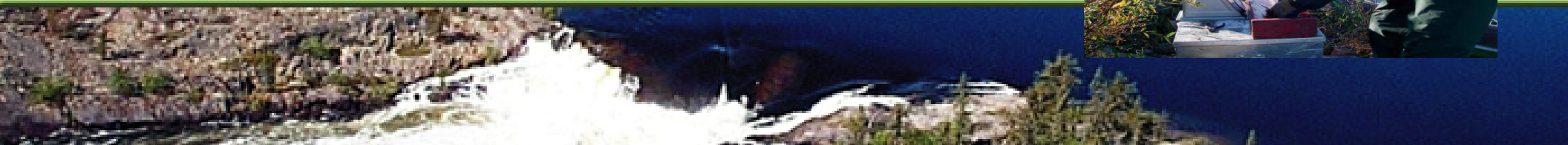
Expansion Project Flow in Trudel Creek

- Project proposes a minimum flow of 4 m³/s
- Each m³/s of water directed to the turbines results in 45,000 tonnes of CO_{2e} emission reduction over a twenty year span, which will benefit fisheries and other biological components in the regional and global context
- Seasonal hydrograph will typically occur
- Dézé recognized that reduced flow to Trudel Creek would not maintain the equivalent habitat to today
- Therefore, Dézé engaged DFO in the fisheries EA methodology since 2006 and presented the effects predictions to DFO in spring 2008 showing no significant negative effects



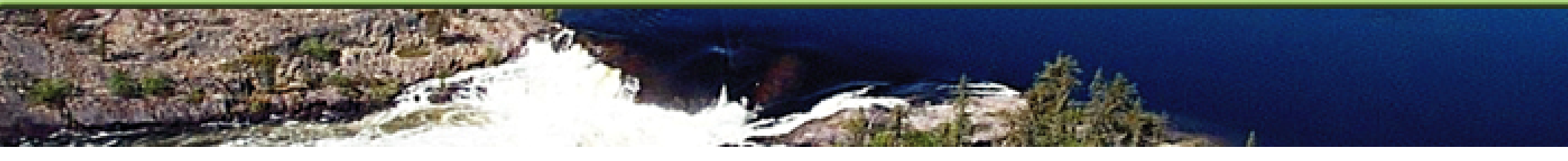
Trudel Creek Effects Assessment

- As a result of the 2008 assessment, the Project design advanced with the minimum flow design of 4 m³/s
- The DAR and supporting documents demonstrate that, with a minimum release of 4 m³/s, no significant negative fisheries (or other) effect would occur
- Through meetings with DFO, Dézé has committed to monitoring programs that monitor predicted fish habitat effects associated with the minimum release of 4 m³/s

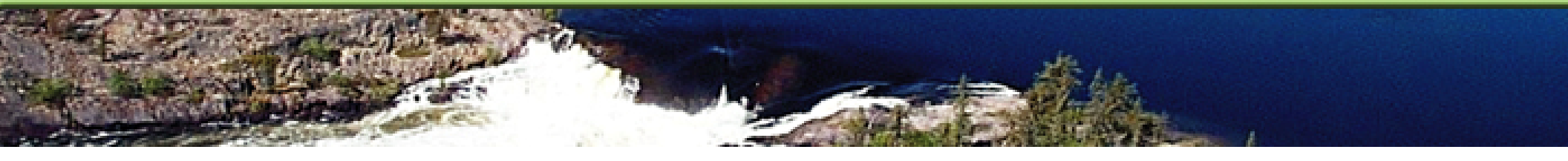


Dezé is proud to present this Project to MVEIRB

- Precedent setting Northern project by Northerners
- Design considerations that balance environmental, social, cultural and economic interests
- Template for future projects in the North
- Community ownership
- Multi-generational revenue stream



- Upgrades an existing development and supplements with new infrastructure
- Business, Employment, and Training benefits
- Regional and global environmental benefits through GHG reduction
- Positive legacy for the people of the North



Marsi Cho

