



Case Study: Site C Dam

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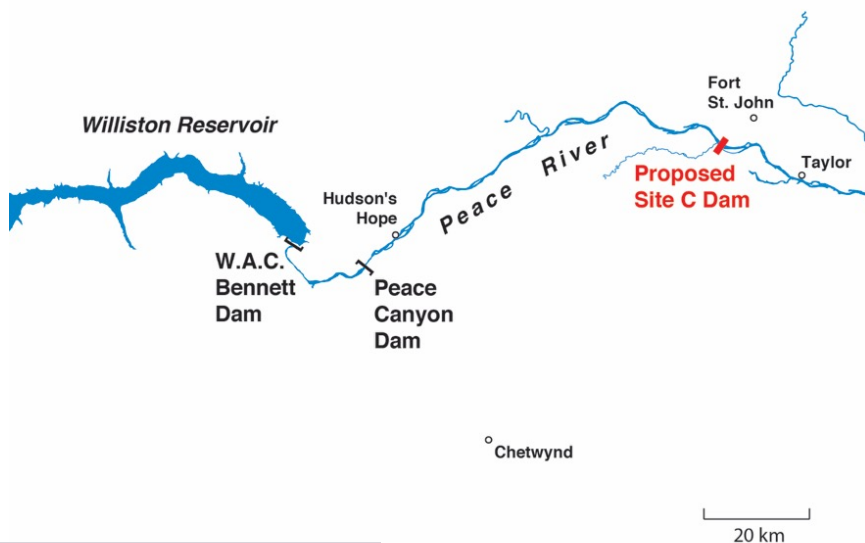


Source: Leinberge, E. UBC Department of Geography

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History of Site C

- Early plans for Site C developed in the 1950s when a predecessor of BC Hydro was exploring hydroelectric potential of the Peace River
- In 1983 and 1989, the provincial government rejected the Site C proposal, following BC Utilities Commission recommendation that Site C was “too risky and costly”
- 2000s: Project re-initiated
- 2012: Federal and provincial agreement to conduct a cooperative environmental assessment on Site C, including the establishment of a Join Review Panel (JRP)



Source: Leinberge, E. UBC Department of Geography

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Regulatory Gaps

- ▣ JRP has limited time and resources
- ▣ JRP stated in their report that insufficient time or resources limited their ability to properly assess certain key issues, including costs of Site C, and thus recommended the project be referred to the BC Utilities Commission
- ▣ Site C exempted from review by BC Utilities Commission

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Environmental Impacts

- ▣ Site C has a **higher number** of “significant adverse environmental effects” than any other project ever assessed under the Canadian Environmental Assessment Act
 - ▣ Impacts on dozens of species, aquatics, vegetation, wildlife, Aboriginal use of lands and resources, and cultural heritage
- ▣ Alternative portfolio proposed by BC Hydro = **no** “significant adverse environmental effects”

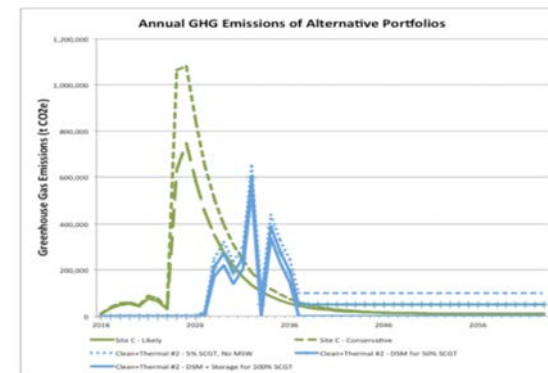
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First Nations and Site C

- ▣ Site C proceeds despite the fact that environmental assessment process undertaken by Canadian and British Columbian governments for Site C Project did not consider whether or not its approval would constitute an infringement of First Nations rights under Treaty No. 8

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GHG Emissions Analysis

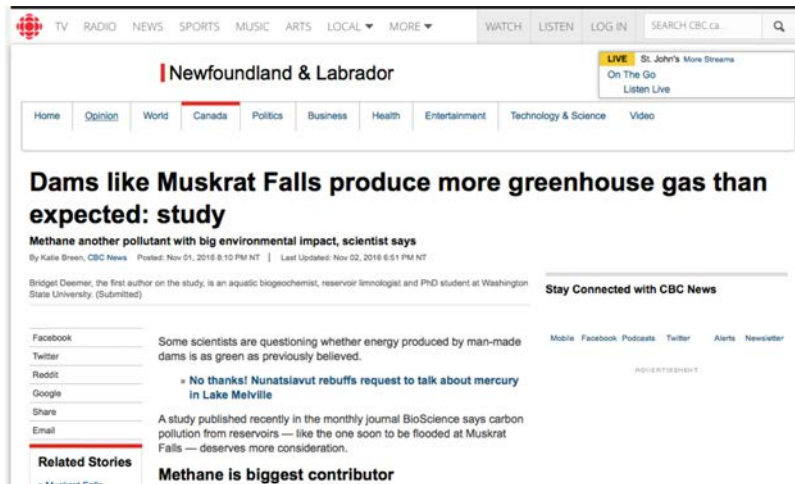


COMPARATIVE ANALYSIS OF GREENHOUSE GAS EMISSIONS OF SITE C versus ALTERNATIVES

Site C does not deliver energy and capacity at significantly lower GHG emissions than put forward in BC Hydro's Alternative Portfolio

Source: Hendriks, R., Raphals, P. and K. Bakker (2016) Comparative Analysis of Greenhouse Gas Emissions of Site C versus Alternatives. Program on Water Governance, University of British Columbia: Vancouver. P. 24.

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Deemer, Bridget R., et al. "Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis." *BioScience* (2016).

Summary

Site C is:

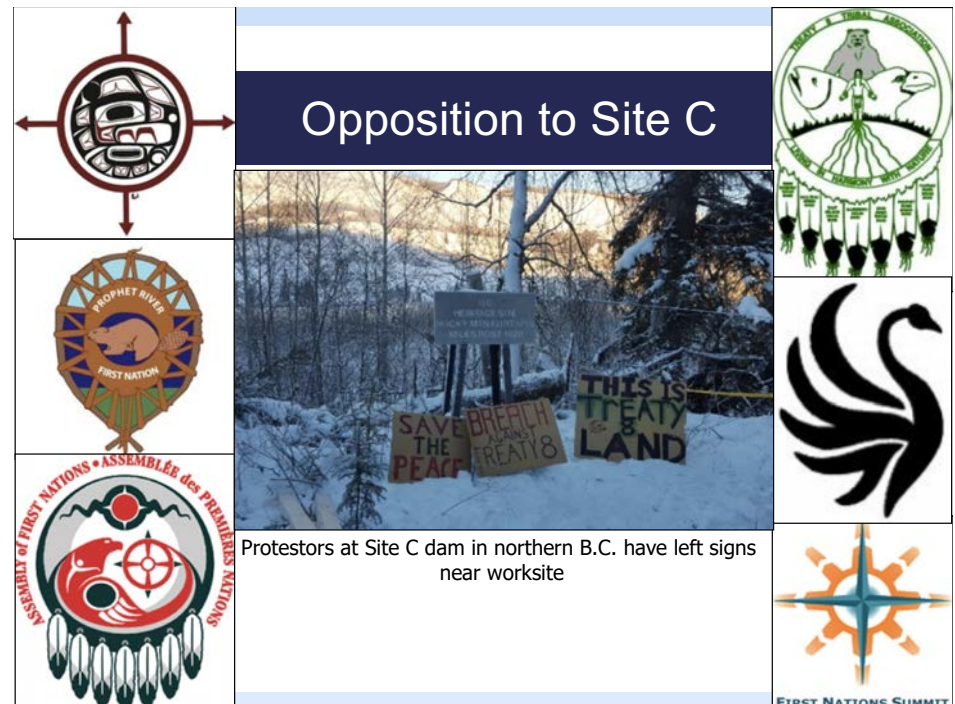
- ❑ Not the most effective at GHG emissions reductions
- ❑ Highest environmental impacts of any option
- ❑ Not the best strategy for long-term local jobs
- ❑ Significant, irreversible impacts on Indigenous peoples
- ❑ Not the most cost-effective choice

Economics of Site C

- ❑ Energy conservation 1/3 as expensive, but BC Hydro reduces demand side management to minimum
- ❑ Export potential very low
- ❑ Lock-in rates requiring long-term subsidies mean increased bills to ratepayers
- ❑ Retrofitting existing dams another option
- ❑ Risk of a "Standard Asset"

Note: "Point of no return" not yet reached

Opposition to Site C



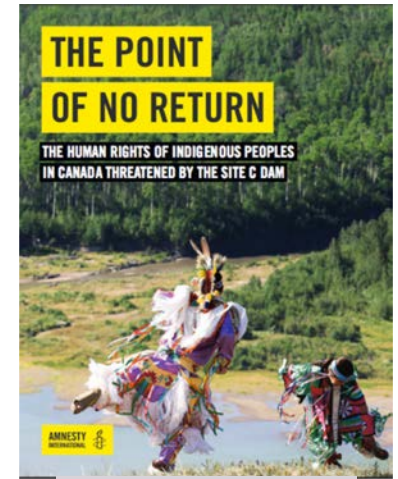
Opposition to Site C



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Amnesty International

- “Although the federal and provincial governments have both asserted that the harms caused by the dam are justified, the actual need for the dam has not been clearly established and alternatives have not been properly explored.”
- “No amount of consultation is adequate if, at the end of the day, the concerns of indigenous peoples are not seriously considered and their human rights remain unacknowledged or unprotected.”



Source: Amnesty International

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BC Hydro's response

“Amnesty International has raised a number of important issues with respect to the resource economy, community services and broad determinants of health and wellness for both Aboriginal and non-Aboriginal communities. At BC Hydro, we care about these issues as well, and have developed extensive mitigation measures.”

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BCUC Inquiry of Site C 2017

Key Findings:

- Over-time
- Over-budget
- Terminating Site C would cost \$1.8 billion – same cost as finding alternative energy sources
- BC Hydro's load forecast is over-optimistic
- Viable alternative energy sources – wind & geothermal
- Risk



Source: BCUC (2017). [British Columbia Utilities Commission Inquiry Respecting Site C: Executive Summary](#). Vancouver, B.C.

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Continuing Construction

B.C. government to go ahead with Site C hydroelectric dam project

Calling it a "difficult decision," the B.C. government has decided to go ahead with the controversial Site C hydroelectric dam, paving the way for work to restart.

CBC.CA

News / Vancouver

After intense debate, Horgan and B.C. NDP say yes to \$11B Site C dam project

Voters' hydro bills — not jobs or Indigenous rights — ended up being main factor in the John Horgan government's most controversial choice yet.

- ▣ Site C given the go ahead by the Premier in December 2017 because:
 - ▣ Risk of credit downgrade
 - ▣ Avoid increasing citizen hydro bills

Decision based on issue priorities