

Grounded in values, informed by science: The selection of valued components in a First Nation cumulative effects management system Katerina Kwon (MRM Candidate), School of Resource and Environmental Management, Simon Fraser University

RESEARCH CONTEXT:



The government plans to build a liquefied natural gas (LNG) industry on BC's North Coast. As of June 2015, 53 major projects are proposed and 22 of these are **LNG projects**. These projects will contribute to cumulative effects, which are the changes to valued components (VCs) – the elements that communities care about – due to past, present and future human activities¹. Cumulative effects are evaluated through environmental assessments and their failures have resulted in uncoordinated land use patterns that are short-sighted and fraught with uncertainty². Valued components are at the core of any cumulative effects management system, but challenges exists for selecting well-defined VCs that explicitly incorporate Aboriginal values and local knowledge^{3,4}.

PROJECT DESCRIPTION: I propose an improved methodology for identifying and selecting biophysical VCs and applied it in Metlakatla First Nation's regional cumulative effects management (CEM) system. **SIGNIFICANCE:** This research will directly benefit BC's First Nations by providing a concrete methodology for selecting priority VCs to help manage development and natural-resource decisions that may affect them.



LITERATURE CITED:

Smit, B., & Spaling, H. (1995). Methods for cumulative effects assessment. Environmental Impact Assessment Review, 15(1), 81–106. http://doi.org/10.1016/0195-9255(94)00027-X

Noble, B. F. (2010). Cumulative environmental effects and the tyranny of small decisions : Towards meaningful cumulative effects assessment and management. Natural Resources and Environmental Studies Institute Occasional Paper No. 8, University of Northern British Columbia, Prince George, BC. 23 p.

Research Partner: Metlakatla First Nation

METHOD: (1) IDENTIFY KEY DEFICIENCIES

Challenges and Deficiencies in VC Selection Process	Challenges and Deficiencies in Effective Aboriginal Engagement
Conceptual challenges	Institutional challenges
Methodological challenges	Administrative challenges
Inadequate public	Limited data/information on
consultation	Aboriginal VCs
Lack of decision-making	Poor integration of
criteria and rationale	local/traditional knowledge
No explicit consideration	No consideration for
of cumulative effects	Aboriginal values
Strong reliance on	No support for
project-based VC process	collaboration

(2) DEVELOP IMPROVED METHOD





Olagunju, A. O., & Gunn, J. A. E. (2015). Selection of valued ecosystem components in cumulative effects assessment: Lessons from Canadian road construction projects. Impact Assessment and Project Appraisal, (June 2015), 1–13. http://doi.org/10.1080/14615517.2015.1039382

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RESULTS:



Booth, A. L., & Skelton, N. W. (2011). Improving First Nations' participation in environmental assessment processes: Recommendations

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KEY FINDINGS FROM CASE STUDY:

2. Implementation planning is a critical component

- Critical issue for social, health and cultural valued components specific to Aboriginal communities

- - developing management objectives and triggers
 - Develop implementation strategy for the future