

# INCORPORATING SOCIAL IMPACTS INTO CUMULATIVE EFFECTS ASSESSMENT: LESSONS AND BEST PRACTICES

## EXECUTIVE SUMMARY



Tsinlhqox Biny (Chilko Lake)

Arnold L., Hanna K., Fell C., LaPlante J.P., Nishima-Miller J., Wade J. (2023).

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Impact Assessment  
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## INTRODUCTION

The natural and human systems that shape the environment are interconnected. Environmental impacts that result from human activities can combine and interact with each other over time and space. This is the basic principle and meaning of cumulative effects/impacts; environmental changes are cumulative over time and across geographic regions and can cause important, unexpected, and sometimes irreversible changes to the environment and to people's lives.

**Cumulative Effects Assessment (CEA)** was developed to improve Impact Assessment (sometimes called Environmental Assessment or Environmental Impact Assessment) which is a process used in Canada, and other countries, to evaluate and make decisions about resource development projects. **Impact Assessment (IA)** is often carried out as a project-based process when a company, government, or individual has applied to construct a project that requires an IA. This focus on a particular project is important because one of the key purposes of an IA is to improve the project design by examining its impacts and making changes to the plan to avoid or to lessen those impacts. But, a problem with this project-based focus is that it may leave out the real-world cumulative effects that could result from the project in combination with other projects and other impacts.

An important challenge in CEA is determining what impacts the assessment should be focused on. The term **impact/effect** should include biophysical impacts to the environment, such as those to land, water, animals, plants, and air, but also social impacts. This includes impacts on communities and individual's health and well-being, economic opportunities, and the connections between environmental qualities and cultural-social sustainability.

Identifying and accounting for social impacts has been a limitation of CEA. This is because many of these impacts are difficult to measure and understand using traditional CEA methods, and there is often very little guidance and support for assessing and making decisions about cumulative social effects.

This summary outlines the results of a two-year research project that focussed on processes and methods for assessing cumulative social effects. The work was collaborative and led by a team from the T̓silhqot'in National Government (TNG) Nen (Water, Lands, and Resources) Department and the University of British Columbia's Centre for Environmental Assessment Research (CEAR). The project explored four key objectives and included literature reviews, a case study analysis, and community workshops, interviews, and focus groups to develop a T̓silhqot'in approach to assessing cumulative social effects.

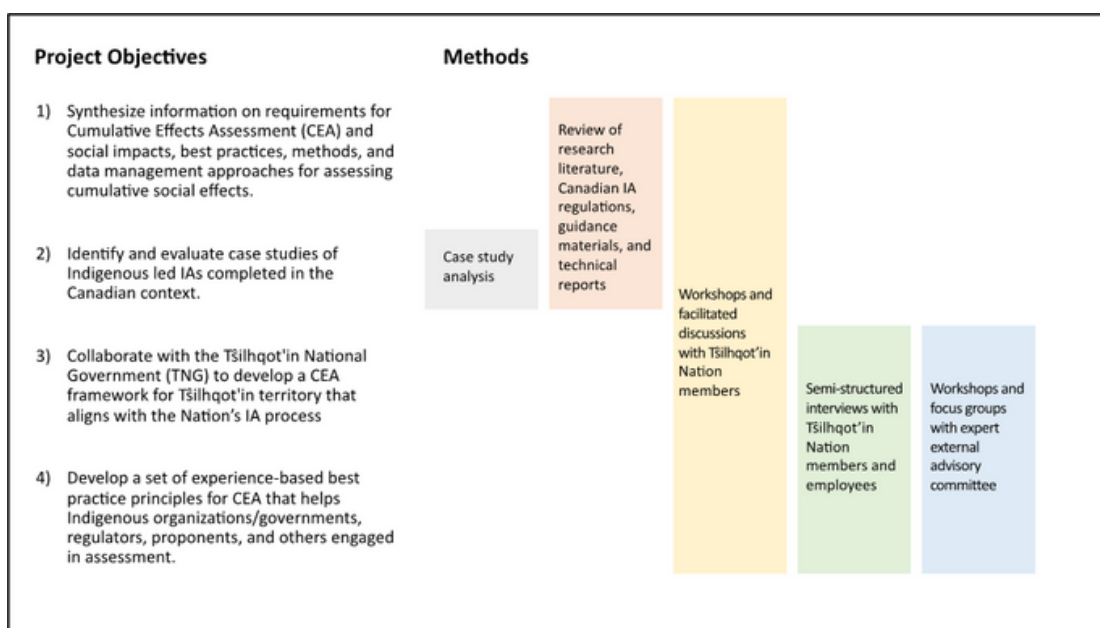


Figure 1: Objectives and Methods

## CASE STUDIES OF INDIGENOUS LED IMPACT ASSESSMENT

In many jurisdictions, cumulative social effects have become an important issue for Indigenous communities. Many are dealing with industrial development affecting their territories, environmental, and social systems. Indigenous perspectives on CEA and management, including approaches to understanding social impacts are important for improving assessments of cumulative social effects and of impacts to Indigenous peoples and their rights.

**Indigenous-led impact assessment (ILIA)** is a process to evaluate proposed projects that is designed and carried out by Indigenous governing bodies according to their own values, concerns, and priorities. For this project, five case studies of ILIA in Canada were selected for analysis:

- The Tsleil-Waututh Nation assessment of the Trans Mountain Pipeline and Tanker Expansion
- The St'K'ém'lu'psemc te Secwepemc Nation assessment of the Ajax Mine Proposal
- The Squamish Nation assessment of the Woodfibre Liquified Natural Gas facility
- Ktunaxa Nation assessment of Teck Resource Coal Mine
- Mikisew Cree First Nation assessment of the Frontier Oil Sands Mine Project

The approach to CEA in each case study was unique and reflective of the specific values of the Nation, but key lessons emerged across the case studies – these are shown in Figure 2. Detailed information on each case study can be found at the Centre for Environmental Assessment Research website (<https://ok-cear.sites.olt.ubc.ca/report-publications/>).

Lesson	Example
<p><b>Defining Cumulative Effects as a focus</b></p> <ul style="list-style-type: none"> <li>• Clearly identifying CEA as a focus and a motivation for developing the assessment to support a broad and holistic lens for impact evaluation and the resulting decisions.</li> </ul>	<p>In the Squamish Nation Process, one of the binding conditions for approval that were agreed upon between the Squamish Nation and proponent, Woodfibre LNG, was focused on addressing cumulative effects.</p> <p>In the Ktunaxa Nations Rights and Interests Assessment, cumulative effects was a central focus and defined as a cross sector valued component that coincided with all other studied components.</p>
<p><b>Applying a regional perspective</b></p> <ul style="list-style-type: none"> <li>• Using regional study areas to examine the site of a proposed development and also the state of the territory, and direct and indirect impacts that might result from the project.</li> </ul>	<p>St'K'ém'lu'psemc te Secwepemc Nation assessed the Ajax Mine proposal according to a local study area and regional study area. Ajax mine was proposed within the interior region of British Columbia in an area where there are many active industries and land uses that would interact with the anticipated impacts of the mine including forestry (lumber harvest, resource roads, milling, etc.), residential development, agriculture/ranching, and highway and infrastructure development. The boundaries of the regional study area were set to assess the project's environmental effects, which may overlap or act cumulatively with the environmental effects of other projects or activities.</p>
<p><b>Considering past, present, and future impacts</b></p> <ul style="list-style-type: none"> <li>• Using broad time scales to assess cumulative effects, account for past, present, and future impacts and stressors, rather than relying on an understanding of the current state of important environmental and social values.</li> </ul>	<p>Mikisew Cree First Nation traditional territories have been subject to substantial industrial development, including oil sand mining along the Athabasca River. Mikisew Cree First Nation developed their IA process to provide baseline information regarding the existing status of Mikisew culture and rights practices using a “pre-1965” baseline. This baseline is considered by Mikisew knowledge holders as the last time when Mikisew peoples were able to sustain harvesting practices consistent with those which would have occurred around the time of signing Treaty 8 in 1899.</p>
<p><b>Sustainability Focused Decision-making</b></p> <ul style="list-style-type: none"> <li>• Using a holistic lens to identify where there impacts to environmental and social systems have occurred and considering priorities for the future</li> </ul>	<p>In the Ktunaxa Nation Rights and Interest Assessment VCs were organized according to governance sectors including traditional knowledge and culture, social, economic, and land and resources, with cumulative effects considered as an additional VC that coincides with impacts across each of these sectors.</p> <p>In Tsleil-Waututh Nation's assessment, one of the reflective questions asked about the project was: does this represent the best use of the territory? This prompts a consideration of future priorities and objectives for the territory</p>

Figure 2: Lessons for Assessing Cumulative Social Impacts

## A T̂ILHQOT'IN APPROACH TO CUMULATIVE EFFECTS ASSESSMENT

The T̂ilhqot'in Nation "the People of the River" includes six main communities: Tl'etinqox, ʔEsdilagh, Yunešit'in, T̂sideldel, Tl'esqox and Xení Gwet'in. T̂ilhqot'in Territory covers 66,466km<sup>2</sup> in central British Columbia, including Canada's first declaration of Aboriginal title (1,922km<sup>2</sup>). In 2021, the T̂ilhqot'in Nation began work on developing an IA Framework that would guide assessment and decision-making for development projects on or that affect the Nation's territory. A priority for the development of the IA Framework is establishing expectations and principles for assessing cumulative effects. The T̂ilhqot'in approach to CEA is woven into the draft IA Framework and closely aligned with the Nation's Dechen Ts'edilhtan (laws), community land-use planning, and priorities for social wellbeing.

Building on the reviews and case study analysis completed for this project, six key principles for integrating social impacts into CEA were identified.

### PRINCIPLE 1: CUMULATIVE SOCIAL IMPACTS ARE CONTEXT DEPENDENT

**Cumulative social change is context specific and values-based. Understanding social impacts requires understanding how individuals and communities experience changes to their environment and social systems. The unique perspectives of the individuals and communities affected must be incorporated into the understanding and definition of cumulative social effects.**

**Principle to Practice:** The T̂ilhqot'in perspective and understanding of cumulative effects is embedded in the Nation's values, laws, and culture, including T̂ilhqot'in language. The phrase *nenqay detelʔaš* was essential to building an understanding and definition of cumulative social impacts. *Nenqay detelʔaš* is not synonymous with the term cumulative effects, but it is an interrelated concept. It encompasses the history of change, and how impacts to the *nen* (land and resources) affects the relationship between the *nen* and *deni* (people) and the cultural security of the T̂ilhqot'in (the ability to practice, preserve, and transmit culture and cultural practices). The T̂ilhqot'in definition of cumulative effects and *nenqay detelʔaš* allows a better understanding of the Nation's perspective and the impacts and values that are important, and could help facilitate more respectful and effective discussions about identifying and evaluating cumulative social effects when conducting IAs in the future.



Sagebrush grasslands near Tl'esqox where T̂ilhqot'in harvest safe for ceremonial practices and medicinal use

## PRINCIPLE 2: THE IMPORTANCE OF RELATIONSHIPS

**Social impacts reflect the relationships between people and their environment. Impacts to the environment, result in impacts to social systems and changes to the way people interact with their environment.**

**Principle to Practice:** A central concept for T̓silhqot̓in CEA is the relationships between the nen (land and resources) and the deni (people). Impacts to the environment and its health over time, result in impacts to the wellbeing of T̓silhqot̓in people, and results in changes in people's behaviour and the way that they experience and interact with their land. Within the draft T̓silhqot̓in IA Framework, a set of decision-making criteria and reflective questions that are equally weighed prompt an assessment of environmental and social impacts and the interactions between them.



Tsiyi (Bull Canyon) is an important place for the for cultural and spiritual practices including harvesting foods and medicines, collecting spring water, conducting ceremony, and teaching youth to care for the land and honour their ancestors

## PRINCIPLE 3: INCORPORATING OBJECTIVE BASED ASSESSMENT

**Meaningfully assessing cumulative social effects requires evaluating if a project contributes toward healthier land and people and aligns with strategic objectives, in addition to evaluating the potential negative impacts of the project, and available mitigation and enhancement measures.**

**Principle to Practice:** Attributing a specific portion of cumulative effects to a project is particularly challenging for social impacts, such as impacts to mental health, culture, gendered impacts, or substance abuse, that may be exacerbated by a project but also affected by a wide range of current and historic land use activities, and social and political conditions. The T̓silhqot̓in example offers an innovative approach to framing CEA. The decision-making criteria outlined in the IA process emphasize the importance of protecting the environment and people from harm and the risk of harm, but there is also a specific decision-making criterion that requires an evaluation of the extent to which a project contributes toward a healthier environment and community. This criterion: 1) requires that a clear understanding be established about existing social conditions and strategic objectives, 2) establishes the expectation that management of cumulative social effects requires working towards healthier systems and improving people's lives and wellbeing, and 3) frames CEA at the project level to align with broader management plans and policies made by the Nation.



Spring run-off floods a hay meadow near Xeni Gwet̓in

## PRINCIPLE 4: LEGACY AND HISTORY

**Understanding the history of an area is central for understanding cumulative social effects. Project assessments cannot be separated from the specific social, political, and environmental context of an area, including socioeconomic conditions, inequities, and legacy impacts of past development.**

**Principle to Practice:** The T̓silhqot̓in process emphasizes understanding the history of the area in which a project is proposed, and also the history and knowledge of the Nation and the specific developments, government policies, and events that have affected the T̓silhqot̓in. Project IA cannot address all the factors that contribute to existing social conditions, but it is important that it is not separated from conversations about the social, political, and environmental context of the project.

## PRINCIPLE 5: PLACE-BASED UNDERSTANDINGS

**Thresholds for social changes may be different across space according to the social and/or environmental value of an area and are not transferable as a ready-made framework. Understanding cumulative social effects requires attention to social values and identifying important locations and existing effects.**

**Principle to Practice:** An important aspect of T̓silhqot̓in IA process is the addition of a place-based consideration for determining if a project should be assessed through an IA. It is not solely the size of a project that is important, but also its location, the nature of its impacts, and its alignment with the Nation's vision for the territory. The social importance of a location or existing cumulative effects could potentially result in early project rejection, or referral to an IA. A particular project and impacts may be acceptable in one location, and not acceptable in another. Applying a location or place-based referral process is likely not practically applicable in all IA settings, particularly those that cover a much larger region, but understanding the influence of place on social values and identifying important locations, or where cumulative effects are already a pressing concern, helps to guide IA and decision-making.

## PRINCIPLE 6: APPLYING MULTIPLE ASSESSMENT METHODS

**Assessing cumulative social effects requires multiple methods and combining quantitative and qualitative assessment methods, and local and Indigenous knowledge sources.**

**Principle to Practice:** The approach being developed by the T̓silhqot̓in moves toward combining the need for technical assessment with a focus on community knowledge and values. This approach is applied by the Nation, which leads the engagement of communities through its internal governance structure, maintains control over its knowledge, and proactively outlines the values, priorities, and assessment expectations.



Nagwentled (Chilcotin River at Farwell Canyon) is a traditional dip netting site for the T̓silhqot̓in Nation

## FINAL THOUGHTS

This project brings together reviews of research literature and guidance materials, case study analysis, and collaborative work with the T̓silhqot̓in Nation to identify lessons for integrating social impacts into CEA that can be used by Indigenous communities and governments, regulators, and proponents. The experience described here provides an example of how we can move beyond defining a problem, to providing principles and practical examples of how to address it. The work also shows us that cumulative effects include not only changes to the biophysical environment, but how those impacts are linked to the social qualities essential to the well-being of communities.

The outcomes are helpful to regulators, Indigenous governments, and other practitioners across Canada as they work to strengthen assessments of cumulative social impacts and include health, gender, culture, and Indigenous rights.

For more information on this project and related information please visit the CEAR website at UBC using this link <https://ok-pear.sites.olt.ubc.ca/report-publications/>

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### Project Team

**Dr. Lauren Arnold**, Project Manager, Centre for Environmental Assessment Research, University of British Columbia  
Contact: [lmarnold@mail.ubc.ca](mailto:lmarnold@mail.ubc.ca)

**Dr. Kevin Hanna**, Associate Professor and Director of the Centre for Environmental Assessment Research, University of British Columbia

**Cynthia Fell**, P.Ag., Resource Management Coordinator, T̓silhqot̓in National Government

**J.P. LaPlante**, Director of Negotiations, T̓silhqot̓in National Government

**Jeffery Nishima-Miller**, Summer student (2021), PhD Student & Research Associate, Centre for Environmental Assessment Research University of British Columbia

**Jeremiah Wade**, T̓silhqot̓in National Government Summer intern (2022)



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