



Case Study: How Cumulative Effects Assessment Informed Landscape Level Planning and Salvage Harvesting

CASE STUDY LOCATION	CASE STUDY DESCRIPTION
<p>Cariboo Region, Cariboo-Chilcotin Forest District</p>  <p>Cumulative Effects: <i>Changes to environmental, social and economic values caused by the combined effect of past, present and potential future activities and natural processes.</i></p>	<p>Development of a landscape level stewardship plan and subsequent cutting and road-building permits</p> <p>Potential Benefits:</p> <ul style="list-style-type: none"> • Fire risk management for beetle killed pine. • Forestry-related employment. • Increased fibre supply for local industry. <p>Potential Concerns Identified:</p> <ul style="list-style-type: none"> • Potential cumulative effects of proposed salvage harvesting and road building on moose populations. • Potential impacts to Aboriginal rights in relation to moose hunting, as well as grizzly bear and marten populations.
CUMULATIVE EFFECTS VALUES ASSESSED	
<p>Value of Primary Concern:</p>  <p>Other Values Assessed:</p> <ul style="list-style-type: none"> • grizzly bear • marten • mule deer • biodiversity • watersheds 	
CARIBOO CUMULATIVE EFFECTS ASSESSMENT (CEA) INFORMATION USED	
Cumulative Effects Assessment Information	Proposed Additional Mitigation
<p>The cumulative effects assessment evaluated the current condition of moose habitat based on:</p> <ol style="list-style-type: none"> 1. Hazard – the current state of the landscape and the ability to meet habitat requirements (% of habitat impacted by roads and harvesting). 2. Ecological Importance – the relative importance or consequence of an impact to habitat (abundance of high value habitat). 3. Current Mitigation – the level of mitigation currently in place (% of habitat protected). 	<p>Goal: No net loss to moose habitat.</p> <p>Mitigation Responses:</p> <ol style="list-style-type: none"> 1. Connectivity Corridors – habitat suitable as moose movement corridors was identified and retained as proposed deferral areas. 2. Access Control – control measures were developed to limit the impact of roads on moose habitat and populations. Forest licensees committed to either rehabilitating roads, limiting access or closing roads to reduce impacts and disturbance on moose.



The Cariboo Cumulative Effects Assessment was instrumental in building a common understanding of the condition of values and supporting collaborative planning

CUMULATIVE EFFECTS AND THE DECISION-MAKING PROCESS

The beginning...

Cutting permit applications for salvage harvesting of mountain pine beetle affected stands were received by the Cariboo-Chilcotin District. First Nations raised concerns about the cumulative impacts of these and other activities on moose populations, a valued traditional food source to First Nations.



CEA review and tactical plan development...

To help address First Nations concerns, the South Chilcotin Stewardship Plan (SCSP) was developed collaboratively by government, forest licensees and First Nations to provide tactical direction for managing moose and other values. The Cariboo Cumulative Effects Assessment (CEA) and its associated planning maps identified the current condition of each value, which helped to form and guide the SCSP.

Addressing cumulative effects concerns...

The SCSP partners reviewed the Cariboo CEA results for each value. For moose, SCSP partners agreed to a goal of no net loss to moose habitat. The Cariboo CEA

planning maps were used to identify habitat connectivity and retention corridors for moose as well as access control options to limit road impacts on moose populations. Harvesting plans and schedules were redesigned so licensees could close roads, and thus limit access, as they worked their way out of a particular watershed.

The decision...

The SCSP, with the Cariboo CEA as its foundation, provided a framework for responding to First Nations cumulative effects concerns. Through the collaborative process of the SCSP, cumulative effects were assessed and cutting permits were approved, while achieving the goal of no net loss to moose habitat.



The outcome...

The improved information provided by the Cariboo CEA helped to strengthen the SCSP and identify potential workable and informed solutions. This collaborative approach was one of the reasons why the Association of BC Forest Professionals awarded the SCSP its Award of Merit in Sustainable Forestry in 2016.

CUMULATIVE EFFECTS BENEFIT STREAMS			
STREAMLINE AUTHORIZATIONS	SUPPORT DURABLE DECISIONS	IMPROVE OUTCOMES FOR VALUES	RESPOND TO ABORIGINAL AND TREATY RIGHTS
Reduced approval times where cutting plans were consistent with the SCSP.	Current and easily accessible information to support decision making.	Increased mitigation options identified and applied for moose.	Collaborative process to meaningfully respond to First Nations concerns.