

## Chapter 9: Cumulative Effects Assessment

**[This chapter is incomplete] Proposed additions in RED (Nov. 29/2017)**

Following a presentation at the 2 December 2015 Shuswap Trails Roundtable, input was collected from the participants in small groups on opportunities for use of cumulative effects assessment (CEA) in the strategy, risk assessments or evaluations that CEA could contribute to, and specifically how CEA could help with trails planning. This input was reviewed by the Working Group at their January and June meetings, and a Cumulative Effects Subcommittee was struck to further assess the opportunities for utilizing CEA. Barry Wilson, Principal of CE Analytic Ltd., has worked with the subcommittee to advance the opportunity and scope the project.

The following is an excerpt of survey input from the Cumulative Effects Subcommittee members and other participants from the December 2015 Shuswap Trails Roundtable, conducted in September 2016. The survey had 26 respondents.

### Definition

- Cumulative effects are defined as the changes, both benefits and liabilities, caused by our actions today in combination with other past and reasonably foreseeable human and natural disturbances (agreed to by 100% of survey respondents)

### Five Highest Ranked Priorities for Land Use Planning in the Shuswap Watershed:

- Control of invasive species
- State of environmental and/or cultural sensitive area integrity and protection
- Wildlife habitat integrity
- State of the economy and jobs
- Water quality

### Five Highest Ranked Opportunities for including CEA in the Shuswap Regional Trails Strategy:

- To help determine the type, appropriateness, amount or intensity of land uses in the watershed
- To identify areas that need to remain undisturbed
- To learn and understand how one land use affects other land uses and users and use this knowledge to help set priorities for land management zones to avoid conflicts
- To establish monitoring measures, and to set targets and/or thresholds
- To connect the Strategy to other plans like Official Community Plans

The project proposal presented to the **30 November 2016 Roundtable** is to conduct scenario planning using CEA, specifically the ALCES (A Landscape Cumulative Effects Simulator) online simulator.

The proposed potential project objectives are as follows:

1. To increase landscape dynamics understanding within the Shuswap Watershed using scenario planning.
2. To establish a spatial, online strategic landscape analysis tool that creates maps, graphs, histograms and imagery to very quickly and on demand:

- a. show historic changes from pre-European contact to present,
  - b. show future changes associated with proposed activities under different management strategies,
  - c. assess the risk to key values associated with uncertainty including climate change.
3. To assist long-term stewardship of multiple land uses within the finite boundaries the Shuswap Watershed by:
- a. identifying specific strategies, actions, monitoring and planning that can reduce conflict,
  - b. increase shared benefits and avoid negative, unintended consequences.
  - c. provide valuable input into natural resource management planning in the Shuswap Watershed
  - d. combine historic and contemporary traditional and western science knowledge
  - e. inform individual project development referral responses
  - f. identify strategies that lead to long term resilience of culture, economy & environment
  - g. identify future research priorities

(See: Shuswap Trails Roundtable Cumulative Effects Scoping Report, Nov. 30, 2017)

On 19 June 2017, the Roundtable Working Group hosted a Cumulative Effects Assessment discussion with invited regional leadership from a number of different land management sectors. Issues of shared need, range and scope of research data, other CEA initiatives underway in the province, and opportunities for partnering were discussed. The limitations of resourcing a CEA modelling program solely through the Trails Roundtable were acknowledged, with no clear partnership opportunities presenting themselves during that session. But acknowledgement to the value of the CEA process was affirmed, along with the need to continue the dialogue.

To this end, the following implementation goals are proposed to the 29 November 2017 Shuswap Regional Trails Roundtable:

1. that a Shuswap Trails Model for Cumulative Effects Assessment be realized within a broader regional land management context;
2. that resourcing of a viable CEA process for trail planning will only be realized through participation as a partner in this broader regional land management context with Secwepemc leadership, the Province, and other vested land management stakeholders in the Shuswap Watershed;
3. and that the Shuswap Trails Roundtable look to the Sexqéltkemc te Secwepemc Lakes Division as the lead champion for CEA in the Shuswap, and seek to have trails-based CEA hosted within their modelling process.