



Newsletter Fall 2017

CEMF Working Group



Photo: Troy Malish

ELK VALLEY CEMF UPDATE

In the last year, a number of important milestones have been reached. The historical assessment using GIS & field data, and future assessment using ALCES Online modelling have been completed. This enabled the completion of draft valued component (VC) cumulative effects assessment (CEA) reports and a draft Cumulative Effects Assessment and Management (CEAM) report for the Elk Valley. These documents were reviewed by the Working Group, and some key recommendations were identified. While the Grizzly Bear and Bighorn Sheep reports are near completion and ready for approval, some additional analyses were identified for Old and Mature Forest and Aquatic Ecosystems (Riparian Habitat and Westslope Cutthroat Trout). This additional work is anticipated to be completed by ALCES by the end of 2017. In anticipation of wider engagement on the draft reports, planning has commenced for the next Stakeholders Workshop on Jan. 30 and 31, 2018.



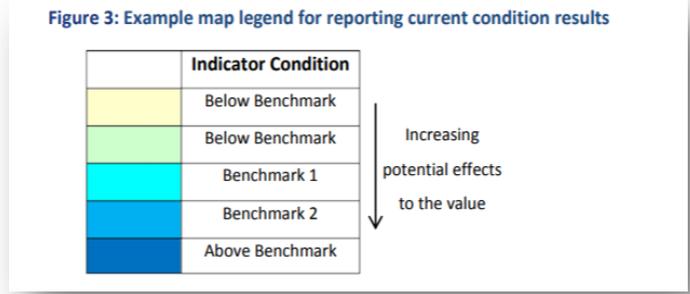
Provincial Interim Cumulative Effects Framework Policy

The CEF Interim policy:

- Supports the government's approach to integrated resource management
- Defines the cumulative effects framework regional and provincial governance structure
- Identifies consistent standards and direction for completing and reporting cumulative effects framework assessments
- Provides guidance for considering and managing cumulative effects sector-wide
- Ensures consistent and coordinated provincial assessments and regional management responses
- Confirms continued monitoring and evaluation of policy and cumulative effects framework assessment effectiveness
- Outlines expectations and commitment for continued engagement and collaboration

Find the policy here:
<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/cumulative-effects-framework/interim-policy>

The Interim CE policy was released in Fall 2016 and outlines direction for assessment, management and engagement related to cumulative effects (see left panel). Figure 3 from the policy (below) illustrates the colour scheme used to communicate current condition for a value. The provincial values currently include Old Growth, Forest Biodiversity, Aquatic Ecosystems, Grizzly Bear and Moose.





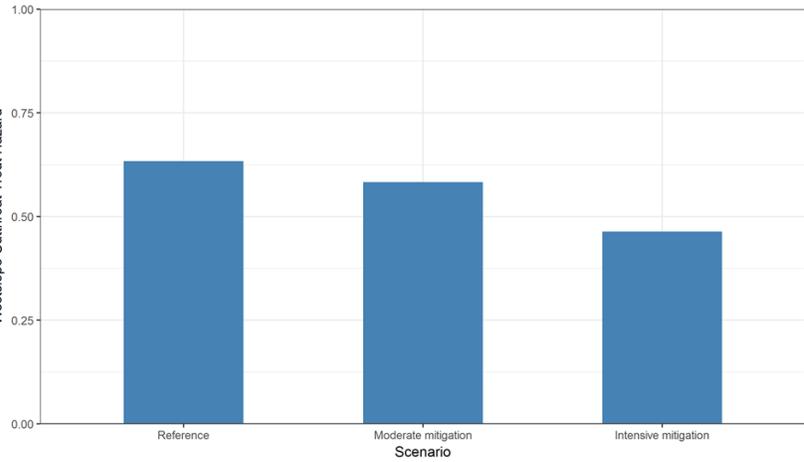
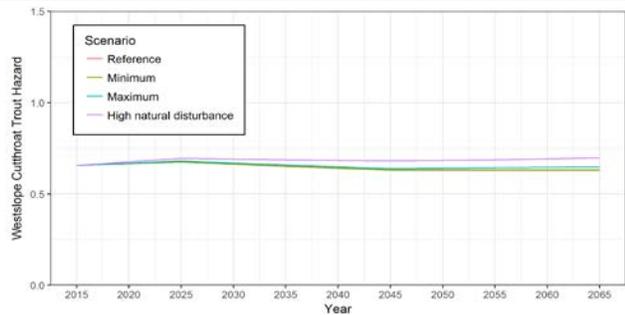
ALCES Online: Modelling & Assessment

Potential future conditions were simulated under reference, minimum and maximum development scenarios.

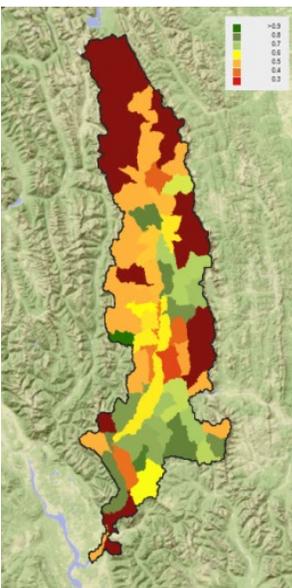
Increased Natural Disturbance and Maximum Development

An additional scenario was developed to better capture the potential impacts of increased natural disturbance combined with maximum development. It is meant to provide decision-makers with an understanding of the combined cumulative effects of human activity and maximum development with increased rates of fire and pest outbreak due to climate change.

While the reference, minimum and maximum development scenarios show insignificant differences in results for most indicators, the higher natural disturbance combined with maximum development scenario results in more significant impacts through time. This was a consistent pattern across VCs, and is shown in the graph on the right - Westslope Cutthroat Trout hazard.

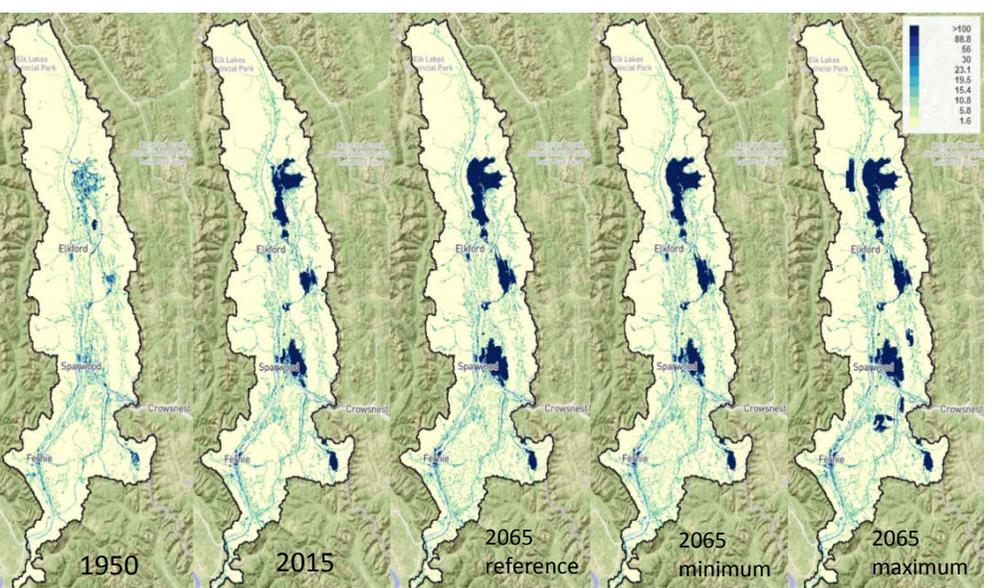


Moderate and Intensive Mitigation assumptions were developed for each Valued Component and modelled to assess the effect of different management strategies on hazard. The graph on the left represents the average hazard for Westslope cutthroat trout in 2065 under reference (business as usual), and then moderate and intensive mitigation actions were used to reduce hazard. An example of intensive mitigation is reducing road density to <math><0.06\text{ km/km}^2</math> within 100 m of streams in a sub-basin watershed.



The figure on the right shows total human footprint (%) in the Elk valley in 1950 and 2015, and 2065 reference, minimum, and maximum development scenarios.

The figure on the left shows where mitigation is most effective (green) or not effective (red) in reducing hazard to grizzly bears.



Overlooking the municipality of Fernie in the Elk Valley

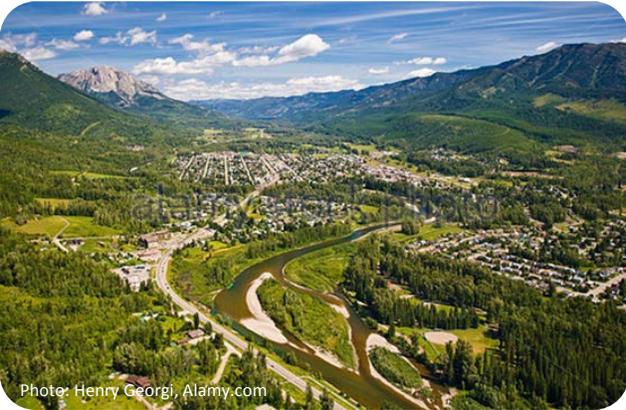


Photo: Henry Georgi, Alamy.com

The objectives of the workshop are for participants to:

- a) Learn about and understand the results of the cumulative effects modelling work
- b) Provide input on the value of the CEMF information products (e.g. maps, graphs, reports)
- c) Provide input on next steps in the CEMF process and identify priorities for implementation

Stakeholders Workshop

The Working group is preparing to host an engagement session for the public and Workshop Group. The 2 day session will consist of an open house for the public in Fernie Tuesday, Jan. 30th, 2018 and a full day for the Workshop Group in Elkford on Wednesday Jan. 31st, 2018. For the open house, there will be posters for each VC on display and members of the Working Group available to help address any questions. Bram Noble from University of Saskatchewan will provide a keynote address. The full day workshop will allow participants to further review the EV-CEMF products and engage on management and implementation.

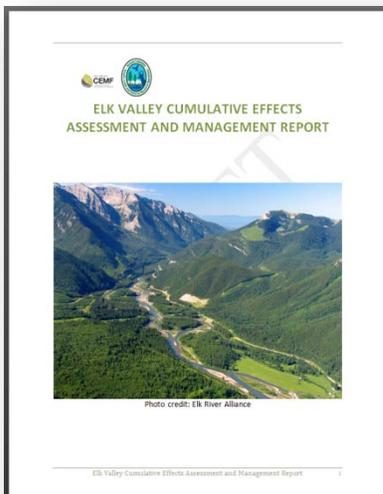


Photo: View of Elk Valley Provincial Park; Gina Bégin

Management and Mitigation

With the completion of hazard maps for each valued component, management and mitigation actions were developed. Management was structured into three categories: Operational, Tactical and Strategic.

- Operational responses include consideration of site- or project-level guidance or implementation of measures to mitigate the effects of projects or activities, typically undertaken by proponents.
 - E.g. Reduce road density to <0.06 near streams in affected watersheds
- Tactical management responses include processes to improve consistency and/or coordination in applying current policy direction, or to seek further information, that may be undertaken by government, proponents, stakeholders and/or First Nations. These can include assessment, monitoring, evaluation, research, coordination, collaboration, guidelines, management plans, etc.
 - E.g. Inventory of stream crossings
- Strategic management responses include measures to define or establish strategic direction for the management of land and/or resource values, typically led or coordinated by government. This can include new objectives for valued components, new acts and/or regulations.



Transition to Regional Cumulative Effects Assessment and Management

With the release of the provincial CE interim policy in 2016, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) is in the process of transitioning to a regional process to support the development of a Kootenay-Boundary Cumulative Effects Assessment and Management (KB-CEAM) Framework. Insights and learnings from EV-CEMF will be applied to the regional CEAM, and FLNRORD will continue to support training and implementation related to the EV-CEMF. FLNRORD will also retain membership in the Elk Valley Working Group for as long the committee remains active. EV-CEMF Working Group work plan for the CEMF implementation is presented below.

Milestones	2017/18				2018/19				2019/2020			
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
Complete CE Reports for 5 VCs & CEAM Report		█										
CE Reports for 5 VCs & CEAM Report reviewed by CEMF Working Group	█											
CEMF Stakeholders Workshop				█								
Workshop feedback incorporated into VC Narratives & CEAM Report				█								
Elk Valley CEAM Report reviewed/approved by Ktunaxa Nation Council				█								
Elk Valley CEAM Report reviewed/approved by FLNRORD					█							
CEAM Report published on provincial CEF site						█						
GIS information for 5 VCs loaded to BC Government Warehouse and available through existing visualization tools (iMap)						█						
Extension/training workshops* for internal NRS staff					█							
Extension/training* for First Nations & external partners						█						
Data/product validation (+ field)								█				
New data incorporated									█			
CE Reports (Narratives) for 5 VCs updated										█		
CEAM Report updated												█