

## Information Bulletin #1: Relationship between the Cumulative Effects Framework and Reviewable Project Environmental Assessment

Bulletin Purpose: to assist proponents, environmental assessment (EA) practitioners, and other participants in natural resource decision-making to understand the relationship between provincial government-led cumulative effects assessments completed at a regional scale under the BC Cumulative Effects Framework (CEF) and environmental assessments undertaken pursuant to the BC *Environmental Assessment Act*.

### **The Cumulative Effects Framework (CEF) and CEF Assessments**

The CEF enables a strategic approach to assessing cumulative effects and identifying recommended management responses to mitigate undesired effects to provincial **values**. The CEF includes **policy, procedures, and decision support tools to improve the consideration of cumulative effects** in natural resource decision-making in BC.

A CEF Assessment is a strategic assessment, i.e. an office-based data analysis using a Geographic Information Systems model over large areas, to characterize **the current and potential future condition of CEF values**. A CEF Assessment describes the current and future condition of CEF values and compares them against objectives<sup>1</sup> (e.g., sustaining grizzly bear populations) using a suite of indicators and associated benchmarks or management review triggers<sup>2</sup>.

In the CEF, **values** are the things that the people and government of British Columbia care about and see as important for assuring the integrity and well-being of the province's people and communities, economies, and ecological systems, as defined in policy, legislation, or agreements with First Nations.

Initial values approved as CEF values for the province are:

- Forest Biodiversity
- Old forest
- Aquatic Ecosystems
- Grizzly bear
- Moose

The Environmental Assessment Office (EAO) defines **Valued Components** (VCs) as components of the natural and human environment that are considered to have scientific, ecological, economic, social, cultural, archaeological, historical, or other importance. A cumulative effects assessment is undertaken for each project undergoing an EA, focusing on important interactions between that project and identified VCs. CEF values will inform VC selection in the EA process.

<sup>1</sup> Objectives are the desired condition of a value as defined in legislation, policy, or agreements with First Nations.

<sup>2</sup> Management review triggers are defined and approved levels of condition that trigger a change in the level of management review. For more information on management triggers and their application please see the Interim CEF Policy at: <http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/cumulative-effects-framework>

The results of the CEF assessment can be used to generate two types of reports:

<b>Current Condition Report:</b>	This is the first step in reporting. It provides the <b>current condition</b> for individual <b>CEF values</b> , in relation to selected indicators.
<b>Cumulative Effects Assessment and Management (CEAM) Report:</b>	This is the second step in reporting. It summarizes <b>current condition</b> reports for <b>all CEF values in a specific area</b> , and adds a summary of the assessment for <b>potential future condition</b> of CEF values. It includes approved or recommended <b>management responses</b> to mitigate and/or monitor cumulative effects.

### **Summary and Comparison of CEF Assessment and EA Cumulative Effects Assessment**

CEF Assessment		Cumulative Effects Assessment in EA
<b>Conducted by</b>	Government	Proponent and their consultants
<b>Values</b>	Approved provincial or regional CEF values	List of VCs tailored to each project, as approved by EAO
<b>Spatial Scale</b>	Generally landscape to sub-regional in scale	Within spatial boundaries defined individually for each project
<b>Frequency</b>	Periodically updated	Conducted once
<b>Scope</b>	Assesses the current (and in some cases future) condition of indicators for CEF values.	Assesses effects remaining to a VC after mitigation, and how those project effects may combine with the effects of other past, present, and reasonably foreseeable projects and activities.
<b>Findings</b>	Describes the current (and in some cases future) condition of indicators for a value in relation to benchmarks or management review classes, where applicable.  Interprets results in relation to government's objectives for the value and identifies key drivers likely causing the condition of values, including common causes of effect across values.	Includes a determination of significance of residual project effects and cumulative effects remaining after the implementation of mitigation.
<b>Response</b>	Identifies recommended management responses that may be undertaken or considered by government, proponents, or other land users and stakeholders to address cumulative effects.	A decision whether to issue an EA Certificate for a project or require further assessment is made by the relevant Ministers.

## **How does EAO assess the cumulative effects of a proposed Project?**

An EA must consider the cumulative effects of the reviewable project in combination with the effects of other past, present, and reasonably foreseeable projects and activities. The scope of, and procedures and methods for, EAs are determined by EAO and set out in the Application Information Requirements (AIR) for each project. For each VC being assessed, an EA must:

- establish spatial and temporal boundaries for the assessment of cumulative effects; describe how each VC has been or is being affected by other past and present projects and activities;
- identify any natural or human-caused trends in the condition of the VC;
- identify potential incremental future cumulative effects;
- identify additional measures that could mitigate cumulative effects;
- evaluate residual cumulative effects; and
- make a determination of significance of cumulative effects using a clearly defined threshold.

## **How can a CEF Assessment inform and support an EA of a Reviewable Project?**

Where a CEF Assessment has been completed, EAO, the proponent, EA practitioners and participants can use the resulting reports (Current Condition Report or CEAM Report) and supporting data<sup>3</sup> to facilitate and inform the assessment of VCs that are related to CEF values. The diagram following shows how a CEF Assessment can support each of the methodological steps typically undertaken in an EA, as recommended in EAO's [Guideline for the Selection of Valued Components and Assessment of Potential Effects](#) and [AIR Template](#), as well as how an EA can inform a CEF Assessment on an ongoing basis.

## **What are the benefits of CEF Assessments for Major Project Proponents?**

Where CEF Assessments have been completed, they offer a number of benefits to proponents and other participants in the EA process, including:

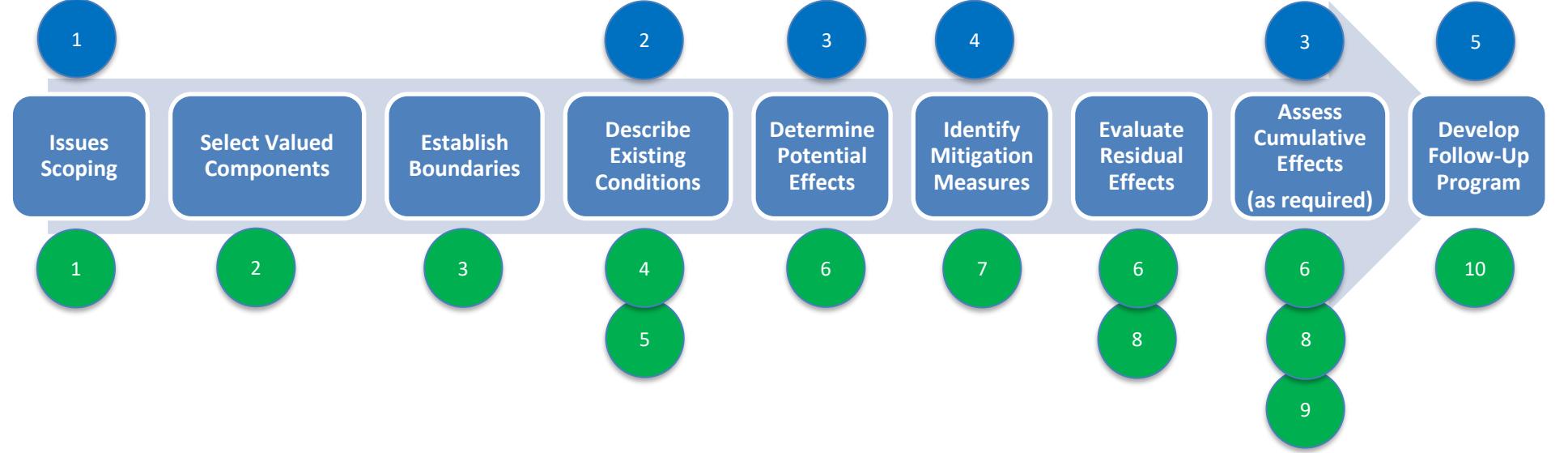
- during the EA process, **identifying priority values** for consideration, providing valuable data regarding **existing and future conditions and trends**, facilitating the **evaluation of potential effects** (in part by articulating government objectives and management classes), and **identifying recommended management responses and priorities for consideration**;
- **facilitating permitting** and other decision-making processes by identifying recommended management responses and priorities for consideration (Also note that assessments of cumulative effects completed as part of the EA review may inform or address requirements for considering cumulative effects in subsequent authorizations);
- potentially **facilitating proponent engagement with Aboriginal groups and potentially affected stakeholders** on project-specific issues, by having those parties engaged during the development and review of CEF Assessments and reporting products;
- improving **consistency in assessment and management practices** across the province, which will **increase predictability and certainty** of natural resource decision-making processes (including EA);
- increasing **consistency** in cumulative effects assessment and management **across sectors**;
- promoting **shared responsibility** for cumulative effects assessment and management across sectors and between government, industry, and other stakeholders; and
- facilitating **sustainable natural resource development**, by ensuring natural resources are effectively stewarded.

**For More Information:** please email [cumulativeeffects@gov.bc.ca](mailto:cumulativeeffects@gov.bc.ca)

---

<sup>3</sup> Data and information used to complete CEF Assessments will be freely and openly available in accordance with provincial legislation and policy.

## Interfaces between CEF Assessments and EAs

 <b>EA → CEF</b>	<p><b>How EA information can feed into the CEF</b></p> <ol style="list-style-type: none"> <li>1. Issues identified during an EA (including consultation with Aboriginal groups and the public) can inform future value selection for CEF Assessment.</li> <li>2. New data about existing conditions and trends can be integrated into CEF Assessment.</li> <li>3. Information about potential effects of the reviewable project and other projects and activities can be used to identify potential cumulative effects at a regional scale.</li> <li>4. Project-specific mitigation measures can be taken into account in the CEF Assessment to predict the future condition of values.</li> <li>5. Project-specific monitoring data about the evolving condition of values can be integrated into the CEF Assessment.</li> </ol>
 <pre> graph LR     A[Issues Scoping] --&gt; B[Select Valued Components]     B --&gt; C[Establish Boundaries]     C --&gt; D[Describe Existing Conditions]     D --&gt; E[Determine Potential Effects]     E --&gt; F[Identify Mitigation Measures]     F --&gt; G[Evaluate Residual Effects]     G --&gt; H[Assess Cumulative Effects as required]     H --&gt; I[Develop Follow-Up Program]     I --&gt; J[Issues Scoping]     J --&gt; K[Select Valued Components]     K --&gt; L[Establish Boundaries]     L --&gt; M[Describe Existing Conditions]     M --&gt; N[Determine Potential Effects]     N --&gt; O[Identify Mitigation Measures]     O --&gt; P[Evaluate Residual Effects]     P --&gt; Q[Assess Cumulative Effects as required]     Q --&gt; R[Develop Follow-Up Program]     R --&gt; S[Issues Scoping]     S --&gt; T[Select Valued Components]     T --&gt; U[Establish Boundaries]     U --&gt; V[Describe Existing Conditions]     V --&gt; W[Determine Potential Effects]     W --&gt; X[Identify Mitigation Measures]     X --&gt; Y[Evaluate Residual Effects]     Y --&gt; Z[Assess Cumulative Effects as required]     Z --&gt; AA[Develop Follow-Up Program]     AA --&gt; BB[Issues Scoping]     BB --&gt; CC[Select Valued Components]     CC --&gt; DD[Establish Boundaries]     DD --&gt; EE[Describe Existing Conditions]     EE --&gt; FF[Determine Potential Effects]     FF --&gt; GG[Identify Mitigation Measures]     GG --&gt; HH[Evaluate Residual Effects]     HH --&gt; II[Assess Cumulative Effects as required]     II --&gt; JJ[Develop Follow-Up Program]     JJ --&gt; KK[Issues Scoping]     KK --&gt; LL[Select Valued Components]     LL --&gt; MM[Establish Boundaries]     MM --&gt; NN[Describe Existing Conditions]     NN --&gt; OO[Determine Potential Effects]     OO --&gt; PP[Identify Mitigation Measures]     PP --&gt; QQ[Evaluate Residual Effects]     QQ --&gt; RR[Assess Cumulative Effects as required]     RR --&gt; TT[Develop Follow-Up Program]     TT --&gt; BB     </pre>	
 <b>CEF → EA</b>	<p><b>How CEF information can feed into an EA</b></p> <ol style="list-style-type: none"> <li>1. The CEF Assessment is a source of information to identify issues of concern to government, Aboriginal groups, and the public.</li> <li>2. VC (and indicator) selection for project-specific EA should consider the values (and indicators) in the CEF Assessment.</li> <li>3. The spatial and temporal boundaries for the project-specific EA should align with the CEF Assessment boundaries, where appropriate and feasible.</li> <li>4. The CEF Assessment can provide information about existing conditions and trends of VCs relative to established objectives.</li> <li>5. The CEF Assessment can provide information about how the VC has been affected by other past and present projects and activities.</li> <li>6. The CEF Assessment can provide information about the expected future condition of the VC over the time period during which project effects will occur.</li> <li>7. The CEF Assessment can identify approved and recommended management responses to be considered by the proponent when selecting mitigation for the project.</li> <li>8. The CEF Assessment can provide information about existing and potential future conditions relative to benchmarks, established objectives, and/or management triggers/classes to inform the determination of significance of residual project and cumulative effects.</li> <li>9. The CEF Assessment can provide information about the potential effects of other future projects and activities.</li> <li>10. Where approved and recommended management responses are available, they can inform and focus the design of follow-up programs.</li> </ol>