

# Assessing Cumulative Effects in B.C. Old Growth Forests

Old growth forests have ecological, cultural, and economic importance to people in British Columbia (B.C.). They develop over centuries and feature complex structures including old live trees, large standing and fallen dead trees, layered forest canopies, and natural openings. These forests provide critical biological diversity and important habitats for various species, including many species at risk. When left undisturbed, old growth forests mitigate climate change by capturing and storing carbon, moderating temperatures, and protecting watersheds by regulating water flow, which prevents erosion and reduces flood risks.

**Cumulative effects** result from the combined impacts of human activities and natural processes on the land over time. Together, these impacts may affect environmental, social, and economic values. The Province of B.C. has developed a Cumulative Effects Framework (CEF) to assess the condition of values, identify emerging risks and help manage cumulative effects. To learn more about the CEF, read the [CEF Infographic](#)

The ecological characteristics of old growth forests develop over centuries, making them non-replaceable in any reasonable time frame. Old growth forests are often impacted by multiple resource development activities and natural disturbance events, subjecting them to cumulative effects.



Key drivers of cumulative effects on old growth forests include many forms of resource extraction (forest harvesting, mining, agriculture), human activity and development and natural disturbances.

**Old growth forests are one of the five environmental values currently assessed by the B.C. CEF.**



Aquatic Ecosystems



Grizzly Bear



Moose

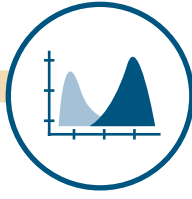


Forest Biodiversity



Old Growth Forest

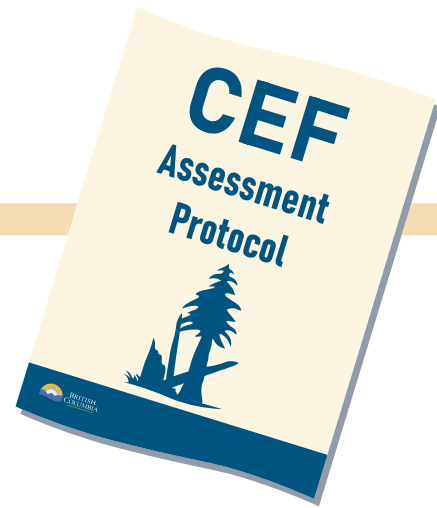
**The purpose of this assessment** is to report on the current condition of old growth forest and mature-plus-old forest relative to provincial legal orders and policy targets within defined areas (assessment units). The two **key components** that are assessed include:



**Non-spatial** (not-mapped) old growth forest and mature-plus-old forests



**Spatial** (mapped) Old Growth Management Areas (OGMAs)



**Mature forests** have gone through several successional stages and are beginning to develop a complex forest structure. Mature forests are important to maintain on the landscape as they will eventually become old growth forests.

The indicators used to report the current condition of these components include:



The current amount of old growth forest and mature-plus-old forest compared to legal or policy targets

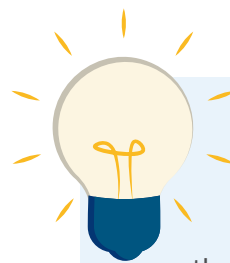


The current amount and types of human-caused disturbances (“incursions”) into Old Growth Management Areas (OGMAs)



The current amount of old growth forest and mature-plus-old forest in OGMAs compared to legal or policy targets.

The old growth forest assessment is closely linked to the CEF forest biodiversity value assessment, as old growth forest is an important component of forest biodiversity.



Findings from the assessment can be used to inform resource management decisions including setting objectives to better manage the value into the future. However, **they do not make decisions or set limits for development.**

All CEF assessments and data are publicly available through the CEF [website](#). While the CEF assessments are created by the Province of B.C. and use provincial datasets, the program is working towards collaborative assessments with First Nations.

Access the full Old Growth Forest Protocol [here](#).

Learn more about the B.C. CEF’s other priority environmental values here: [Grizzly Bear](#), [Aquatic Ecosystems](#), [Moose and Forest Biodiversity](#).