

# Assessing Cumulative Effects in B.C. Grizzly Bears

Grizzly bears are valued by many people in British Columbia (B.C.) and are a key component of healthy ecosystems. Historically, grizzly bears ranged across most of the province, but due to human-caused disturbances and habitat pressures, they are no longer found in the Lower Mainland, much of south-central B.C. and the Peace Lowlands.

**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](#)



Key threats that contribute to cumulative effects on grizzly bears include human presence, road development, industrial activities, and climate change.

**Grizzly bears are one of the five environmental values currently assessed by the B.C. CEF.**



Aquatic Ecosystems



Grizzly Bear



Moose



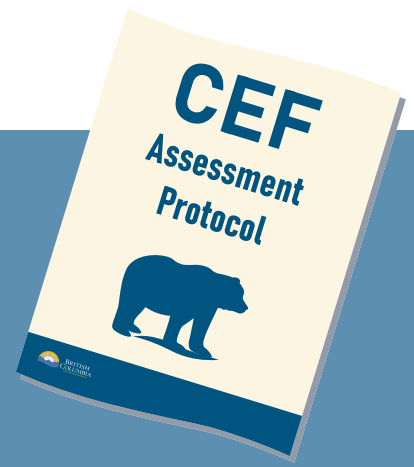
Forest Biodiversity



Old Growth Forest

**The purpose of this assessment** is to understand the current state of grizzly bears and risks to their populations and habitats across B.C.

Using standardized methods and datasets, the assessment evaluates a series of indicators. These indicators **measure and report on the key factors that affect grizzly bear populations and habitat.**



**Population-related indicators** provide information about the population status of grizzly bears or the mortality risks to grizzly bears. Mortality risks are greatest where people and bears overlap. This overlap occurs where people access bear habitat or where bears are attracted to where humans live.



**Population rank indicator:** provides an overall level of conservation concern due to threats to grizzly bears.



**Core secure area and road density indicators:** provide information about the likelihood of bear mortality occurring from human-bear encounters.



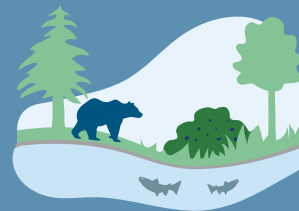
**Front country indicator:** provides information about the likelihood of human-bear encounters in urban and rural landscapes where people are present.



**Habitat-related indicators** provide information on threats to grizzly bears from habitat alteration that impacts food availability.

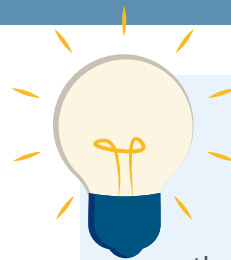


**Poor forage potential indicator:** reports the amount of area that has low food quantity.



**Quality food indicator:** shows the capability of an area to produce food.

The protocol contains several additional indicators that provide supplementary information and context for informing decisions.



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 Grizzly Bear Protocol [here](#).

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