

# Summary of the Current Condition Report for Grizzly Bear in the Cariboo Region | 2019 Analysis

*Disclaimer: This summary and current condition report was developed solely by the Province of British Columbia. This is a strategic-level assessment based on GIS information and has not been ground-truthed. Opportunities exist for First Nations and the Province of British Columbia to explore opportunities to collaborate to develop future current condition reports and to monitor the condition of CE values and validate the outcomes of these assessments.*

Grizzly bears have ecological, economic, and cultural importance in British Columbia (B.C.) as they reflect the overall health of the landscape they live in. Many First Nations in B.C. include grizzly bears in their cultural and spiritual traditions, histories, and philosophies. Ecotourism and bear viewing also contribute to the provincial economy.

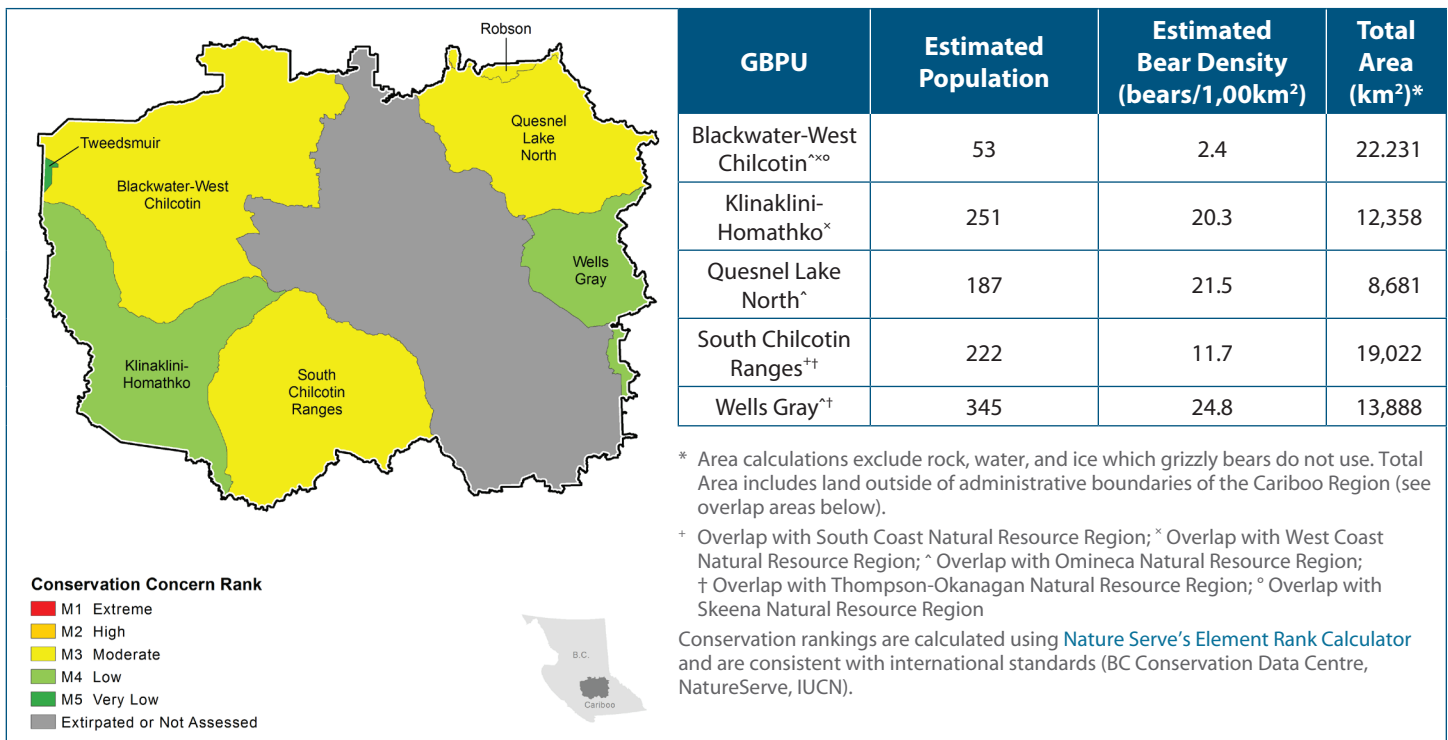
The purpose of this summary is to:

- Highlight results from the [Current Condition Report for Grizzly Bear in the Cariboo Region – 2019 Analysis](#); and,
- Inform collaborative discussions among government, natural resource industries, First Nations, and other community stakeholders in support of healthy grizzly bear populations.

## Grizzly Bear Population Units (GBPUs)











Grizzly bears are wide-ranging habitat generalists that require planning and conservation measures to occur at a large landscape scale. For management purposes, B.C. has been divided into Grizzly Bear Population Units (GBPUs) based on bear biology, ecological boundaries, and management needs. There are five GBPUs wholly or partially located in the Cariboo Region (Figure 1).

**Figure 1** Status of GBPUs managed by the Cariboo Region



# Indicators used to assess the status of grizzly bear populations and habitat

The Interim Assessment Protocol for Grizzly Bear in British Columbia – Version 1.2 (2020) is based on a scientific understanding of grizzly bear ecology. This protocol provides a standard methodology for evaluating cumulative effects on grizzly bear populations and habitat across the province. Ten indicators from this protocol were used in this assessment:

	<b>Population Rank:</b> a conservation concern ranking for grizzly bears in GBPU's (following NatureServe ranking methodology).
	<b>Number of Bears:</b> estimated number of bears/1,000 km <sup>2</sup> .
	<b>Mortality Rate:</b> percent female mortality (human caused).
	<b>Road Density:</b> total length of roads divided by the size of the area (km/km <sup>2</sup> ).
	<b>Core Security:</b> suitable habitat larger than 10 km <sup>2</sup> found at least 500 metres from people and human infrastructure.
	<b>Front Country:</b> urban and rural landscapes with high densities of people and bear attractants (e.g., human food, garbage, livestock, fruit trees, crops). This includes roads.
	<b>Hunter Day Density:</b> number of hunter days per year in the area's wildlife management units.
	<b>Poor Forage Potential (BEC Mid-Seral Dense Conifer):</b> amount of mid-seral dense conifer forest (associated with low amounts of berry shrubs and other food supply).
	<b>Quality Food:</b> estimate of the amount of quality food sources available (e.g., forbs, berries, grasses, and sedges) and salmon biomass.
	<b>Quality Habitat Protected:</b> amount of high capability grizzly bear habitat protected in conservation areas and wildlife habitat areas.

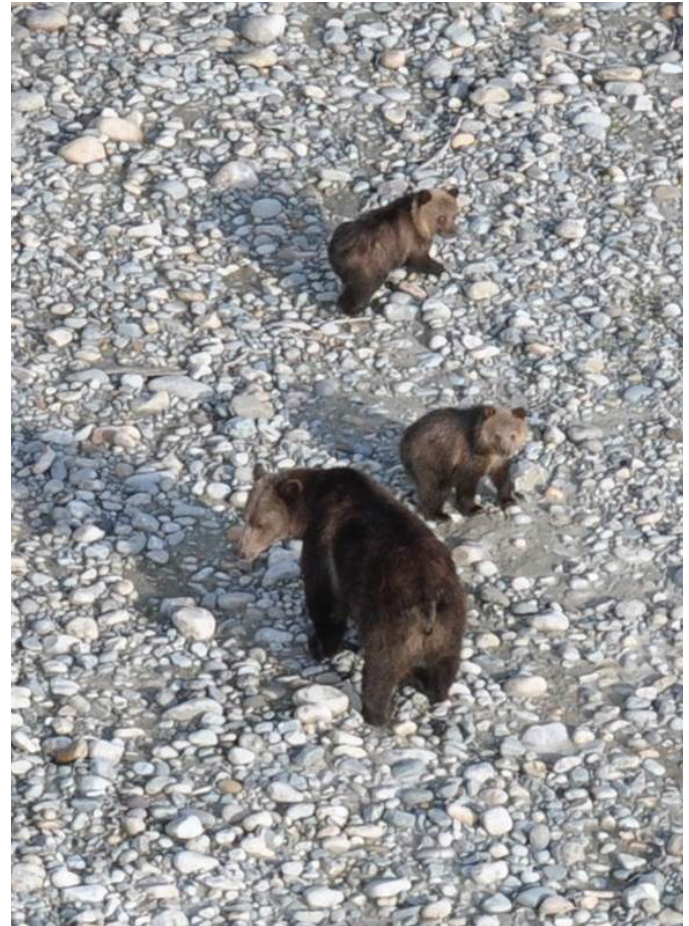


Photo: Pat W. Dielman

## Regional Summary

Grizzly bears are susceptible to cumulative impacts on their populations and habitat from various historic, present, and future human activities and natural disturbances. Overall, grizzly bears are found throughout much of the Cariboo Region, apart from the extirpated area around the larger community centres of 100 Mile House, Williams Lake, and Quesnel<sup>1</sup> (Figure 1). Industrial development (primarily forestry, agriculture, ranching, and mining) is present throughout the Cariboo Region. These activities, including the roads and corridors created to enable human access to the backcountry, pose a significant threat to grizzly bears as they may lead to habitat loss, fragmentation, displacement, increased human-bear conflicts, and increased risk of mortality. Climate change may also impact grizzly bears in the region.

<sup>1</sup> Grizzly bears may be present in local communities on an occasional basis due to attractants such as food.

## Assessment Results

GBPU Assessment Results	
<p><b>Blackwater-West Chilcotin – Moderate Conservation Concern (M3)</b></p> <p>This GBPU has very low bear density (&lt;10 bears/1,000km<sup>2</sup>), and high road densities. Core secure areas are lacking in the eastern portion of the GBPU, which overlaps areas of high front country. This is a result of cumulative effects from human activities and continual expansion into backcountry areas. There is a lack of quality food sources and habitat protection in the GBPU, apart from the western portion where Itcha Ilgachuz Provincial Park is present. 10/10 indicators are flagged.</p>	<p><b>Klinaklini-Homathko – Low Conservation Concern (M4)</b></p> <p>This GBPU has low bear density overall (10 to &lt;30 bears/1,000km<sup>2</sup>) and moderate road density. Core secure areas are lacking in the eastern portion of the GBPU, but are present in the western portion of the GBPU. Front country is also high in the eastern portion of the GBPU, but improves in the western portion of the GBPU. There is a lack of habitat protection throughout this GBPU, however, salmon biomass (quality food) exists in the eastern portion of this GBPU from the Chilko River. 6/10 indicators are flagged.</p>
<p><b>Quesnel Lake North – Moderate Conservation Concern (M3)</b></p> <p>This GBPU has low to moderate bear density (10 to &lt;30 bears/1,000km<sup>2</sup>). Road densities and front country areas are highest in the western portion of the GBPU due to human presence, but decreases towards the eastern portion of the GBPU. Similarly, core security is lacking in the western portion of the GBPU due to human presence, but improves further east in the GBPU. This GBPU has the highest mortality risk in the region caused by moderate hunter day density, high front country access, and the human settlement and activities in and around the GBPU. Quality food sources, including vegetation and salmon, are present in the eastern portion of the GBPU due to the presence of the Quesnel River. Some habitat is protected in this GBPU through provincial parks (Bowron Lake Provincial Park and Cariboo Mountains Provincial Park) and several Wildlife Habitat Areas (WHAs). 8/10 indicators are flagged.</p>	<p><b>South Chilcotin Ranges – Moderate Conservation Concern (M3)</b></p> <p>This GBPU exhibits low bear density (10 to 20 bears/1,000km<sup>2</sup>) throughout the majority of the GBPU apart from a contiguous grouping of LUs in the southeast portion of the GBPU that has very low bear density (&lt;10 bears/1,000km<sup>2</sup>). There is a lack of core security, high proportions of front country, and high road densities in this eastern portion of this GBPU. This is a result of the combined effect of the proximity to agricultural and urban areas, road density and human presence in the region. There is a lack of habitat protection throughout this GBPU, however, salmon biomass (quality food) exists in the northwestern portion from the Chilko River. 8/10 indicators are flagged.</p>
<p><b>Wells Gray – Low Conservation Concern (M4)</b></p> <p>This GBPU exhibits low bear density (10 to 20 bears/1,000km<sup>2</sup>) throughout the majority of the GBPU apart from a contiguous grouping of LUs in the southwestern portion of the GBPU that has very low bear density (&lt;10 bears/1,000km<sup>2</sup>). This GBPU has high road densities, high proportions of front country areas, and lacks core secure habitat. This GBPU has high mortality risk caused by moderate hunter day density, high front country access, and the human settlement and activities in and around the GBPU. There is a lack of habitat protection in this GBPU<sup>2</sup>, however, vegetative food sources exist throughout the central portion of the GBPU, and salmon biomass is present due to the Horsefly River. 8/10 indicators are flagged.</p>	

## Opportunities for Improvement

Resource specialists and decision-makers could consider various mitigation measures to support grizzly bear populations and habitat. Mitigation measures could include:

- Incorporate grizzly bear population objectives for GBPUs from the Provincial Grizzly Bear Management Plan (in development);
- Deactivate and/or restrict access on roads (permanent or seasonal) in high-priority grizzly bear habitat, especially in areas where roads and associated human activity are impacting the ability of grizzly bears to travel across their range (i.e., to connect and enhance core security areas);
- Establish grizzly bear Wildlife Habitat Areas (WHAs) or Wildlife Management Area (WMAs) in locations where habitat capability is high and populations are threatened, and ensure that these areas are connected;
- Adjust forest planning and practices and access management in priority grizzly bear habitat to conserve grizzly bear habitat and to enhance seasonal foraging habitats (e.g., berry production) and limit future disturbance;
- Adjust range planning and practices to minimize conflicts between livestock and grizzly bears, particularly so that bears cannot access dead livestock and grain;
- Mitigate and reduce human-bear conflict by educating local communities on bear-smart initiatives (e.g., WildSafeBC) and implementing measures to reduce attractants (e.g., electric fencing, improved waste management, etc.);
- Address expansion of humans into remote/backcountry areas;
- Operational staff should consider using the grizzly bear guidance key, which is aimed at helping permit authorization staff consider grizzly bears.

<sup>2</sup> Administrative boundaries do not situate Wells Grey Provincial Park within the Wells Gray GBPU in the Cariboo Region; however, it is immediately adjacent to the east of the boundary in the Kootenay-Boundary Region.