



BRITISH
COLUMBIA

The Best Place on Earth

ORDER – Ungulate Winter Range

#U-7-003

Mountain Caribou – Upper Fraser, Hart Ranges and Mount Robson Planning Units

This order is made under the authority of sections 9(2) and 12(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004) (GAR).

1. The Deputy Minister of Environment, being satisfied that
 - i. the following areas contain habitat that is necessary to meet the winter habitat requirements for mountain caribou (*Rangifer tarandus caribou*), and
 - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment.

orders that

- a) this order cancels and replaces the order that became effective on February 19, 2009, entitled “ORDER – Ungulate Winter Range #U-7-003”,
 - b) the areas shown in the map set out in the attached Schedule A (U-7-003) and contained in the ungulate winter range (UWR) spatial layer stored in the Land and Resource Data Warehouse (*tuwr_bc*) are established as an ungulate winter range U-7-003 for mountain caribou. The centre point of the line on the attached Schedule A is what establishes the UWR boundary, and
 - c) if there is a discrepancy between the areas shown in the map set out in the attached Schedule A and the UWR spatial layer stored in the Land and Resource Data Warehouse (*tuwr_bc*), the areas as detailed in the UWR spatial layer will take precedent.
2. The Deputy Minister of Environment, being satisfied that
 - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve the habitat of mountain caribou, and
 - ii. GAR or another enactment does not otherwise provide for that protection or conservation.

orders that

- a) the GWMs outlined in Schedule 1 are established for UWR U-7-003.

Schedule – General Wildlife Measures applicable to UWR U-7-003

Definitions:

Words and expressions not defined in this order have the meaning given to them in the *Forest and Range Practices Act* (FRPA) and the regulations made under it unless context indicates otherwise.

helicopter landing means a location where individuals disembark the helicopter, most often at the top of a ski run.

helicopter pickup means a locations where individuals embark the helicopter, most often at the bottom of a ski run.

material adverse in the context of disturbance or impact, “material” means that the disturbance must be real, substantive, or significant. “Adverse” means the disturbance must have negative consequences for the affected species.

mineral exploration activity means an activity involving the cutting of trees or construction and or maintenance of roads and trails related to the exploration and development of a mineral or placer tenure under the *Mineral Tenures Act* and which requires a Notice of Work permit under the *Mines Act*.

mineral cell means a Mineral Titles Online claim acquisition unit and is 16 to 21ha, depending on latitude.

productive forest means the current or future timber harvesting land base designation as identified through timber supply review.

ski run development means cutting non-merchantable timber (<15cm diameter at stump height for PL, < 20cm diameter at stump height for all other species), and removing hazardous stems through primarily hand falling techniques. This includes glading in mature forests, cutting in old burns, spacing in avalanche chutes and alder cutting. This is not considered logging, as no cut trees are extracted from the area.

snow trail means winter snow trails for cat-ski travel. They are developed using snow and may have trees cut or removed for access. Snow trails rarely have side-cuts into mineral soils.

treatment area means the specific geographic area identified in tenure management plans for adventure tourism tenure holders as an individual run and referred to as the “identified ski terrain” or “ski-pod”. Treatment areas can be defined spatially as having a running length and width.

UWR unit means a portion of UWR U-7-003 that is discrete from any other portion. i.e. not contiguous with another portion.

General Wildlife Measures:

GWM 1 – Caribou Corridor.

Within each Caribou Corridor UWR Unit: P-001, P-004, P-005, P-009, P-013, P-015, P-017, P-018, P-026, P-028, P-029, P-039, P-042, P-044, P-046, P-047, P-050, P-051, P-052, P-059, P-061, P-062, P-063, P-070, P-073, R-003, R-008, R-009, R-010, R-014, R-016, T-005, T-009, T-010, T-012.:

- a) Primary forest activities will result in a minimum of 20% of the forest within each unit as greater than 100 years of age in a contiguous, windfirm corridor.
- b) Primary forest activities will result in no more than 20% of the productive forest area of each unit being less than 3 metre green-up condition at any time.

GWM 2 – Caribou High:

Within each Caribou High UWR Unit: P-002, P-003, P-006, P-007, P-008, P-010, P-011, P-012, P-014, P-019, P-020, P-021, P-022, P-023, P-024, P-025, P-030, P-031, P-032, P-033, P-034, P-035, P-036, P-037, P-038, P-040, P-041, P-043, P-045, P-048, P-049, P-053, P-054, P-055, P-056, P-057, P-058, P-060, P-064, P-065, P-066, P-067, P-068, P-069, P-072, P-074, P-075, R-001, R-002, R-004, R-005, R-011, R-018, R-019, R-020, R-021, R-022, R-023, R-300, T-003, T-006, T-014, T-016:

- a) Timber harvesting and road construction must not occur within the UWR except as provided in GWMs 2(b), 2(c), 2(d) and GWMs 4 and 5.
- b) Timber harvesting and road construction may occur where cut blocks and associated roads have been previously approved in a Forest Development Plan prior to the date of the original order for U-7-003 of October 6, 2003.
- c) GWM 2(a) does not apply to road construction, maintenance and deactivation through UWR units R-005, P-015, P-024, P-034, P-058 and P-066.
- d) GWM 2(a) does not apply for the purposes of road maintenance, road deactivation, or road reclamation activities.

GWM 3 – Caribou Medium:

Within each Caribou Medium UWR Unit: R-015, R-017, T-001, T-002, T-004, T-007, T-008, T-011, T-013, T-015, T-017, T-018, T-019:

- a) Timber harvesting will result in less than or equal to 30% volume removal on a cut block area every 80 years, such that:

- i. opening sizes do not exceed 1.0 ha, with a mean opening size of less than or equal to 0.5 ha,
 - ii. openings are distributed throughout the cut block area and kept at least two tree lengths apart, where practicable.
- b) Primary forest activities for forest health sanitation activities will be conducted in a manner that does not result in a material adverse impact on the caribou habitat within each UWR unit.
 - c) Permanent road access in the Caribou Medium UWR Units will not be constructed within 2 km of any Caribou High UWR Unit.
 - d) When Road access is no longer required to meet harvesting and silviculture obligations roads will be deactivated as per sections 82(1)(a),(b) and (c) of the *Forest Planning and Practices Regulation* (FPPR).
 - e) Where the road is needed for multiple-year harvesting, snow will not be ploughed unless required to facilitate timber harvesting.

GWM 4 - Mineral Exploration Activities:

- a) GWM 1 does not apply for the purposes of mineral exploration activities.
- b) GWM 2 does not apply for the purposes of mineral exploration activities if:
 - a) exploration activities occur outside of the peak calving period of May 15th – June 15th;
 - b) exploration activities use existing clearings, trails and roads unless it is not practicable to do so;
 - c) new trails and roads are not built in areas closed to snowmobile use under the *Wildlife Act* using *Motor Vehicle Prohibition Regulation*, Schedule 7, Section 7.1;
 - d) any necessary tree harvesting avoids mature stands (≥ 80 years old) and avoids the removal of lichen-bearing trees, unless it is not practicable to do so;
 - e) an individual forest opening (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity) is not greater than 1ha, not including forest openings for the purposes of building trails and roads;
 - f) the total of individual forest openings (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity), including those created for the purposes of building trails and roads does not exceed:
 - i. 10 percent of the mineral cell, OR
 - ii. 10 percent of any defined aggregate of mineral cells up to a maximum of 25 mineral cells;
 - g) new trails and roads do not have a running width greater than 6m except for the purposes of safety or culvert placement; and
 - h) actions are taken on newly constructed or reconstructed trails and roads to restrict access. This will be site-specific and could include, but is not limited to:
 - i. Use of signage and gates on active trails and open roads where practicable;
 - ii. Use of signage and safe (defined as large and clearly visible), impassable barricades across seasonal or permanently deactivated road surface widths.
- c) GWM 3 does not apply for the purposes of mineral exploration activities if

- a) an individual forest opening (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity) is not greater than 1ha, not including forest openings for the purposes of building trails and roads.

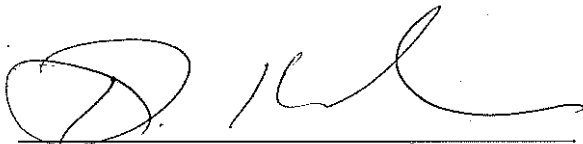
GWM 5 - Guided Adventure Tourism Activities:

- a) GWM 1 does not apply for the purposes of guided adventure tourism activities.
- b) GWM 2 does not apply for the purposes of guided adventure tourism activities if:
 - a) For the purposes of ski run development, construction and maintenance:
 - i. ski run development does not occur within the calving period of May 15th to June 15th;
 - ii. use of existing forestry openings or natural openings is maximized in order to minimize cutting in treatment areas;
 - iii. individual tree spacing within treatment areas is 5-8m, with retention of forest 'clumps' (10-20 trees or 1-2 tree lengths in size) spaced at <100m intervals throughout the treatment area;
 - iv. >90% of conifer stems >20cm DBH in treatment areas are retained from cutting. The full range of tree species, ages and sizes must be represented following treatment, similar to pre-treatment forest stand species composition and size-class distribution;
 - v. individual ski run development/treatment areas are separated from adjacent treatment areas by an area at least 3-4 times the treatment area;
 - vi. forest stands with trees bearing lichen on slopes <40% are avoided when selecting treatment areas, unless there is no other practicable option;
 - vii. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option; and
 - viii. areas of forest stands requiring removal of large veteran legacies or a significant number of standing dead snags to make the work site safe shall be avoided, unless there is no other practicable option.
 - b) For the purposes of helicopter landings and pickup site development, construction and maintenance:
 - i. helicopter landing and pickup site development does not occur within the calving period of May 15th to June 15th;
 - ii. use of existing forestry openings or natural openings is maximized in order to minimize cutting when selecting helicopter landings and pickup sites;
 - iii. where harvesting is required the amount of cutting will not result in the total opening size to exceed 1 ha; and
 - iv. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option.
 - c) For the purposes of snow trail development, construction and maintenance:
 - i. snow trail development does not occur within the calving period of May 15th to June 15th;

- ii. snow trail development does not occur in areas closed to snowmobile use under the Wildlife Act using Motor Vehicle Prohibition Regulations Schedule 7, Section 7.1;
- iii. existing forestry openings or natural openings are used to minimize cutting when developing snow trails;
- iv. the volume of timber to be removed does not exceed 50m³ of per 3 km of individual trail when developing a snow trail. An individual snow trail is defined as a contiguous snow trail route used by a snow-cat machines for the purpose of transporting skiers to skiable terrain;
- v. any harvesting avoids mature stands (>80 yrs old) and avoids removal of trees bearing lichen, unless there is no other practicable option; and
- vi. actions are taken on snow trails to restrict summer access. This will be site-specific and could include, but not limited to the use of large, impassable boulders, root balls, and felled trees.

c) GWM 3 does not apply for the purposes of guided adventure tourism activities if :

- a) for the purposes of helicopter landings and pickup site development, construction and maintenance, where harvesting is required the amount of cutting will not result in the total opening size to exceed 1 ha.



Signed this 9 day of Dec., 2009

Doug Konkin, Deputy Minister

Ministry of Environment

Appendix 1:

The following information is provided by the Ministry of Environment (MoE) as background information and support to the order establishing UWR U-7-003. This appendix is not part of the order.

1. **Activities to which the order does not apply:** Section 2(2) of the *Government Actions Regulation* states

An order under any of sections 5 to 15 does not apply in respect of

- (a) any of the following entered into before the order takes effect:
 - (i) a cutting permit;
 - (ii) a road permit;
 - (iii) a timber sale licence that does not provide for cutting permits;
 - (iv) a forestry licence to cut issued by a timber sales manager under section 47.6 (3) of the Forest Act;
 - (v) subject to subsection (3), a minor tenure,
- (b) a declared area,
- (c) areas described in section 196 (1) of the Act, and
- (d) areas referred to in section 110 of the Forest Planning and Practices Regulation.

2. **Compliance with the GWMs and Exemptions:** If timber harvesting and road building activities cannot be carried out in compliance with the established GWMs, an exemption is required from the requirement to comply with the GWMs if the activities are to proceed. The authority to consider an exemption is provided in section 92(1) of the FPPR. An exemption may be provided if the Minister's delegate (MoE Regional Manager, Environmental Stewardship Division, for the region that the UWR is located) is satisfied that the intent of the GWM will be achieved or that compliance with the provision is not practicable, given the circumstances or conditions applicable to a particular area.

If an exemption is desired, an exemption application should be submitted to the Minister's delegate with a rationale describing the nature of the problem and options to integrate UWR conservation with proposed activities. This submission will assist in timely consideration of the matter, and will inform the conditions, if any, of the exemption that may be granted prior to commencement of activities. Upon receipt of a complete exemption application, a determination will normally be made within 14 days of arrival. Incomplete packages will be returned to the proponent for re-submission.

Forest Health

An exemption is required for harvesting and road building for forest health sanitation activities where these activities cannot comply with the established GWMs. Where approved by the Minister's delegate, forest health sanitation activities will be conducted in a manner that does not result in a material adverse impact on caribou within each UWR. Salvage of dead (non-infectious) timber resulting from severe natural disturbance

may be proposed as an exemption if the proposal results in a net benefit to the UWR species being managed, as opposed to taking no action.

An exemption is not required for harvesting within these UWR units when it is required to address worker safety such as felling of danger trees or brushing on existing roads. The authority to conduct activities to address worker safety is outlined in section 2(3) of the FPPR.

3. **GWM 1:** Purpose is to maintain landscape connectivity.
4. **GWM 2 and 3:** Purpose is to maintain old forests with arboreal lichen forage and to minimize caribou displacement and predation.
5. **GWM 2(b):** Where road construction occurs through the units outlined in GWM 2(b) or where previous roads exist, *Forest Act* agreement holders should consider deactivating any non main roads and trails as soon as possible following timber harvesting and silviculture treatment in order to reduce disturbance and access into key caribou areas.

Previously GWM 2 included the following “Forest health sanitation activities and salvage harvesting must not result in more than 20% of the unit being less than 3 metre green-up condition at any time”. This was removed from the current version of the order because primary forest activities in GWM 2(b) include forest health sanitation and salvage.

6. **GWM 3(d):** Deactivating roads as per section 82 of the FPPR is one means of achieving the desired result of the road being impassable to vehicles. Additional consideration should be given to creating unfavourable future conditions for wolf and snowmobile travel. This may include, but is not limited to, activities such as re-contouring and reseedling/replanting of roads or pulling significant crossing structures.
7. It is expected that fire suppression activities within UWR units will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range.
8. **GWM 4:** When conducting mineral exploration activities within the no harvest zone, the requirements of no timber harvesting and no road building do not apply if the conditions outlined in GWM 4 are met. These conditions are consistent with Notice of Work permit conditions that have been developed to address mineral exploration activities in mountain caribou habitat (see document titled “Notice of Work Permit Conditions and Operational Guidance for Mineral Exploration Activity in Mountain Caribou Habitat”). Where activities are carried out consistent with the permit conditions, activities will also be consistent with the conditions outlined in GWM 4 and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM 4 or associated Notice of Work permit conditions cannot be met, an exemption will be required from the Ministry of Environment prior to work proceeding. In addition to the conditions outlined in GWM 4 persons conducting mineral exploration activities should

also consider the operational guidance that has been developed and available in the document referenced above. Permit conditions 9 and 10 have not been included in the conditions outlined in GWM 4 because these are not activities managed under the *Forest and Range Practices Act*.

9. **GWM 5:** When conducting activities associated with guided adventure tourism, specifically the development of ski runs, helicopter landing and pick up sites and snow trails, the requirements of no timber harvesting and no road building do not apply if the conditions outlined in GWM 5 are met. These conditions are consistent with the standard operating practices developed for these activities (see the document titled "Standard Operating Practices for Ski Run Development, Helicopter Landing and Pickup Site Development, and Snow Trail Development in Mountain Caribou Habitat"). Where activities are carried out consistent with the standard operating practices, activities will also be consistent with the conditions outlined in GWM 5 and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM 5 cannot be met, an exemption will be required from the Ministry of Environment prior to work proceeding. In addition to the conditions outlined in GWM 5 persons conducting guided adventure tourism activities should also consider the operational guidance that has been developed and available in the document referenced above.

8. Further guidance on management practises in mountain caribou habitat can be obtained from: Susan K. Stevenson, H. Armleder, M. Jull, D. King, B. McLellan and D. Coxson, 2001. *Mountain Caribou in Managed Forests: Recommendations for Managers – 2nd Edition*. Wildlife Report No. R-26. Ministry of Environment, Victoria, BC. Also available at: http://wlapwww.gov.bc.ca/wld/documents/techpub/r26_mtcariou.pdf.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for a systematic approach to data collection and the importance of using reliable and valid measurement instruments. The document also discusses the challenges associated with data collection and analysis, such as missing data and measurement error, and provides strategies to address these issues.

3. The final part of the document discusses the importance of interpreting the results of the data analysis. It emphasizes that the interpretation should be based on a thorough understanding of the data and the context in which the data were collected. The document also discusses the importance of communicating the results of the analysis to the relevant stakeholders in a clear and concise manner.