

ORDER – Ungulate Winter Range
U-4-013
Mountain Caribou – Southeast Kootenay Planning Unit

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-4-013”,
- b) the areas shown in the map set out in the attached Schedule A (U-4-013) and contained in the ungulate winter range (UWR) spatial layer stored in the Land and Resource Data Warehouse (*tuwr_bc*) are established as ungulate winter range U-4-013 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-4-013.

Schedule 1– General Wildlife Measures applicable to UWR U-4-013

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.

incursion means new timber harvesting or road construction that crosses a no harvest zone boundary and occurs within an UWR unit.

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.

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-4-013 that is discrete from any other portion. i.e. not contiguous with another portion.

General Wildlife Measures:

A. Within UWR units 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14

1. Timber harvesting and road construction must not occur except as provided in GWMs A(2), A(3), A(4), C and D.
2. GWM 1 does not apply to a portion of the UWR (the portion) if
 - a) timber harvesting and road construction in the portion would facilitate access to timber harvesting opportunities outside of the UWR;
 - b) there is no other practicable option to access those timber harvesting opportunities outside of the UWR;
 - c) timber harvesting and road construction activities within the portion are conducted to the minimum extent necessary to access those timber harvesting opportunities outside of the UWR; **and**
 - d) once access through the portion to the area outside of the UWR is no longer required to meet harvesting needs and silviculture obligations, roads within the portion are promptly deactivated as per sections 82(1)(a), (b), and (c) of the *Forest Planning and Practices Regulation (FPPR)*.
3. GWM 1 does not apply to the area of an incursion if
 - a) the incursion is to provide for a logical harvesting boundary or a logical road location that utilizes a physical feature or administrative boundary;
 - b) the area of incursion does not exceed 5 hectares;
 - c) the area of an individual harvest unit within the UWR unit is less than the area of the same harvest unit outside of the UWR unit;
 - d) the total cumulative area of incursions for multiple harvest units and clearing width for roads does not exceed 20 hectares or 5% of the total area of the UWR unit, whichever is greater; **and**
 - e) if the area of incursion exceeds two hectares, prior to timber harvesting or road construction occurring in the area of incursion
 - i. an alternative area of equivalent or better quality caribou habitat is identified outside of the UWR, but within the same TSA or TFL as the incursion, **and**
 - ii. the mapped location of the alternative area is provided to the office of the Regional Manager of the Ministry of Environment (MoE), and the District Manager of the Ministry of Forests and Range (MoFR).
4. Timber harvesting may occur within the UWR to the extent necessary to create guyline tiebacks for timber harvesting.

B. Within UWR units 15, 16, 17, 18, 20, 21 and 22

1. Any road building or timber harvesting must be completed before January 1, 2028.
2. Within UWR unit 17 the total area of timber harvesting must not exceed 80 ha;

3. Where timber harvesting occurs,
 - a) timber harvesting will result in the retention of stand and landscape elements that are important for mountain caribou habitat recovery; **and**
 - b) silviculture practices will result in establishment of stand and landscape elements that are important for mountain caribou habitat recovery.
4. Following January 1, 2028, the GWMs outlined in section A of this order will apply.

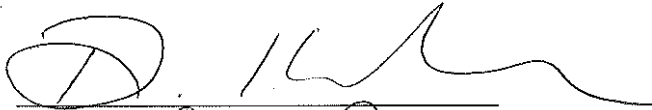
C. Mineral Exploration Activities

1. GWM A(1), B(1), B(2) and B(3) do 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.

D. Guided Adventure Tourism Activities

1. GWM A(1), B(1), B(2) and B(3) do 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.



Signed this 9 day of Dec., 2009

Doug Konkin, Deputy Minister

Ministry of Environment

Appendix 1:

The following information is provided by MoE as background information and support to the order establishing UWR U-4-013. 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

Any activities to address forest health factors within the UWR that cannot be accommodated by the established GWMs will require an exemption if they are to proceed. This approach is being taken as a short term measure until final GWM language can be developed to identify those specific circumstances where the requirements of no timber harvesting and road building should not apply to activities related to address forest health factors, and therefore an exemption would not be required. The final GWMs will be consistent with the intent and direction contained in Forest Health report once it is

finalized. It is MoE's intention that these GWMs will be completed and that U-4-013 will be considered for amendment to include these GWMs prior to late-mid 2009.

3. **GWM A(2):** The intent of GWM A(2) is to identify those specific circumstances where the requirements of no timber harvesting and no road building do not apply in order to provide access to timber that has been isolated by the no harvest zone boundary. All the conditions in GWM 2 must be met. Where the conditions cannot be met an exemption is required.
4. **GWM A(3):** The intent of GWM A(3) is to identify those specific circumstances where the requirements of no timber harvesting and no road building do not apply in order to provide operational flexibility around no harvest zone boundaries. The intent of this GWM is to recognize that issues arise when reconciling a mapped boundary, often mapped at a much smaller scale, to a line on the ground. All the conditions in GWM 3 must be met. Where the conditions cannot be met an exemption is required.
GWM 3(d) - MoE will work with MoFR to track the harvesting and road building that has occurred within the no harvest zone and make this information available to *Forest Act* agreement holders in order to meet the requirements of GWM 3(d).
GWM 3(e) - The requirement to provide the location of an alternative area of equivalent or better quality caribou habitat to the MoE regional office will allow MoE to amend the no harvest boundary to include these areas in the future.
5. **GWM B(2):** For the purpose of GWM B(2) the desired stand and landscape level elements include:
 - A. Lichen bearing trees
 - B. Connectivity or travel corridors.
 - C. Habitat created through silviculture practices. Silviculture practices are to be designed to meet caribou habitat objectives rather than timber objectives
6. **GWM C(1):** 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 C(1) 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 C(1) and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM C(1) 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 C(1) 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 C(1) because these are not activities managed under the *Forest and Range Practices Act*.

7. **GWM D(1):** 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 D(1) 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 D(1) and can proceed without an exemption from the Ministry of Environment. Where either the conditions outlined in GWM D(1) 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 D(1) persons conducting guided adventure tourism activities should also consider the operational guidance that has been developed and available in the document referenced above.

8. **Adaptive Management:** The Mountain Caribou Science Team identified key uncertainties related to mountain caribou ecology and the efficacy of proposed recovery actions. Government is committed to supporting the implementation of an adaptive management strategy. Both the implementation and effectiveness of management actions will need to be monitored. Implementation efforts will need to be monitored closely and assessed to determine whether the strategy needs to be modified in order to meet recovery goals. In addition, research addressing knowledge gaps should be supported. The Recovery Implementation Plan includes the development of adaptive management and effectiveness monitoring plans for habitat, recreation and predator-prey management efforts.

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
5708 SOUTH CAMPUS DRIVE
CHICAGO, ILLINOIS 60637
TEL: 773-936-3700
FAX: 773-936-3700

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
5708 SOUTH CAMPUS DRIVE
CHICAGO, ILLINOIS 60637
TEL: 773-936-3700
FAX: 773-936-3700