



ORDER – MINOR AMENDMENT TO UNGULATE WINTER RANGE #U-2-015
Mountain Goat – Sunshine Coast Forest District

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

1. The delegated decision maker, being satisfied that
 - i. the following area contains habitat that is necessary to meet the winter habitat requirements for Mountain Goat (*Oreamnos americanus*); and
 - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment;

orders that

- a) the areas shown in the map set out in the attached Schedule A (U-2-015) and contained in the ungulate winter range (UWR) spatial layer stored in the Geographic Warehouse (WHSE_WILDLIFE_MANAGEMENT.WCP_UNGULATE_WINTER_RANGE_POLY) are established as ungulate winter range U-2-015 for Mountain Goat. The centre point of the line on the attached Schedule A is what establishes the UWR; and
- b) 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 Geographic Warehouse (WHSE_WILDLIFE_MANAGEMENT.WCP_UNGULATE_WINTER_RANGE_POLY), the areas as detailed in the UWR spatial layer will take precedent.

2. The delegated decision maker, being satisfied that
 - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve the winter habitat of Mountain Goat; 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-2-015.
3. GWM 6 outlined in Schedule 1 is established and applies to a 1500 meter specified area surrounding each ungulate winter range unit.
 4. Pursuant to section 7(3) of the *Forest Planning and Practices Regulation* a person required to prepare a forest stewardship plan is exempt from the obligation to prepare results or strategies in relation to the objective set out in section 7(1) of the *Forest Planning and Practices Regulation* for mountain goat winter range in the Toba Community Forest Agreement area (formerly Tree Farm License 10).

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.

Director means the Director of Resource Management, South Coast Region of the Ministry of Forests, Lands & Natural Resource Operations (FLNR).

Incursion means new timber harvesting or road construction that is located within a UWR unit where no harvesting or road building is otherwise permitted to occur.

Productive forest area means forest included as either contributing, partial contributing or non-contributing.

UWR unit means a portion of “UWR U-2-015” that is a discrete polygon.

Schedule 1 – General Wildlife Measures

1. Primary forest activities are not permitted within the ungulate winter range.
2. GWM 1 does not apply if:
 - a) timber harvesting within an UWR unit is necessary to create guyline tiebacks for safe timber harvesting provided that trees that fall within the UWR unit (measured at +/- 5m) are retained on site to function as coarse woody debris, unless the felled tree poses a forest health risk;
 - b) timber harvesting is for the purposes of traditional and cultural activities, as authorized under a Free Use Permit issued under the *Forest Act*;
3. Do not use pesticides, except for:
 - a) the use of *Bacillus thuringiensis var kurstaki* for the control of western spruce budworm;
 - b) the use of beetle pheromones for the control of bark beetles; or
 - c) the application of herbicides for control of invasive plants or noxious weeds.
4. Where primary forest activities are authorized within an UWR unit they must be undertaken during a period extending from 1 June to 15 November of a calendar year to prevent disturbance to mountain goats.
5. GWM 4 does not apply to ground based fertilization and ground based tree planting.
6. Do not conduct helicopter yarding activities within a specified area of 1500 m line-of-sight from an UWR unit boundary from 15 November to 1 June.

7. GWM 6 does not apply if the Regional FLNR office is notified prior to the activity commencing and a written rationale that supports one or more of the conditions listed is made available upon request:
- a) distance between the activity and the location of mountain goats within the UWR unit is greater than 1500 m line-of-sight; or,
 - b) snow accumulation within the area of the UWR unit being used by mountain goats is less than 30 cm between 15 November to 21 December or between 1 May to 1 June.
8. Where primary forest activities are planned immediately adjacent to any UWR unit with >30 ha productive forest area, GWM 1 does not apply to the area of an incursion along the UWR unit boundary if:
- a) the incursion is required to provide for a logical harvesting boundary or a logical road or trail location that utilizes a physical feature or administrative boundary; and
 - b) the area of the incursion, or multiple incursions cumulatively, do not exceed:
 - i. 1 ha of productive forest area in UWR units with >30 ha and ≤50 ha productive forest area; or
 - ii. 2 ha of productive forest area in UWR units with >50 ha to ≤100 ha productive forest area; or
 - iii. 3 ha or 1% of productive forest area, whichever is greater, in UWR units with >100 ha productive forest area;
 - c) the incursion exceeds 0.5 ha, and the area of the incursion is replaced with an equivalent or greater area of equal or better habitat contiguous to the UWR unit such that there is no net loss; and the incursion does not affect the intent or integrity of the UWR unit; and
 - d) boundaries of the incursion and any replacement habitat are provided to the Director (via ESRI shape files) prior to the commencement of primary forest activities associated with the incursion.



Signed this 29 day of July, 2016
Allan Johnsrude, Regional Executive Director, South Coast Region
Ministry of Forests, Lands & Natural Resource Operations

Appendix 1:

The following information is provided as background information and support to the Order establishing UWR U-2-015. 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. Authority to consider an exemption from these GWMs is provided in Section 92(1) of the *Forest Planning and Practices Regulation* and section 79(1) of the *Woodlot License Planning and Practices Regulation*. An exemption may be provided if the Minister's delegate 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.

An exemption application should be submitted to the Minister's delegate with a rationale describing the nature of the problem and options to integrate winter range conservation with proposed forest and/or range practices. 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 for timing window exemptions will normally be made within 10 calendar days; all other exemption determinations will normally be made within 14 calendar days of arrival at the FLNR regional office. Incomplete packages will be returned to the proponent for re-submission. A template for exemption requests is available at:

<http://www.env.gov.bc.ca/wld/frpa/index.html>

3. For GWM 1, exemptions would only normally be considered if they result in enhancing quality of the winter range habitat as determined by the Director; or for road construction where there is no other practicable option. "Enhancing quality" means improvement of second growth young forest stands to increase future snow interception cover for ungulates (e.g. thinning dense young forested stands to improve crown size over time), or other innovative habitat enhancement techniques.

4. GWM 1 does not apply to road maintenance, road deactivation, or brushing within the right-of-way on existing roads or trails in the UWR. These activities should be carried out in a

manner that will not affect the intent or integrity of the UWR.

5. In areas within the UWR that are under permit or are declared that have not yet reached free to grow, the potential for use of herbicide should consider the long-term objective within the UWR unit (e.g. accelerate tree growth to maturity in the shortest time frame possible; and provide/maintain forage opportunities for ungulates). To achieve both objectives, herbicide use should be restricted to spot treatment within 1 m of desirable conifers.
6. The wording for GWM 7 varies slightly from the wording approved in the Sunshine Coast TSA Goat Order (U-2-003), upon which this Order was based. The main difference is that the term “low probability of goat occupancy” and its corresponding definition have been removed. This is because all of the Toba goat winter ranges have been verified as occupied during winter from either 2008 and 2009 surveys or from historic surveys conducted by government wildlife biologists. The qualified professional when considering issues around timing restrictions should consider that all of the winter ranges are indeed occupied. A description of the winter ranges and summary of inventory results is available from the FLNR district office in Powell River.
7. For GWM 7, the intent is to increase flexibility for helicopter yarding activities within the 1500 meter setback and timing window through assessment and recommendations by qualified professionals. Criteria were developed such that when the conditions are met, the risk to mountain goat fitness is low or moderate based on the physical condition of mountain goats and the severity of winter conditions at the time the activity is to take place. A rationale, prepared by a qualified professional, should be made available to government upon request and should include:
 - a. Introduction: description of the area and information known about the local mountain goat population (including if nannies and kids were observed) and habitat use, as well as a description and timing of the proposed helicopter-logging activity.
 - b. Methods: description and timing of reconnaissance survey and related activities, methods for snow depth measurements and related activities, with reference to appropriate standards (e.g., Resources Inventory Standards Committee 2002). Given that aerial reconnaissance can be invasive and that a high proportion of mountain goats remain undetected, the costs and benefits of conducting aerial reconnaissance should be carefully considered before proceeding.
 - c. Results: Findings in relation to occupancy of the UWR by mountain goats at survey time, location of mountain goats within the UWR, and/or snow conditions.
 - d. Description of the condition(s) being met: mitigating factors (i.e., actual line-of-sight distances to mountain goats or snow conditions) that, in the opinion of the professional, will ensure that the GWM is met.
 - e. Additional risks and proposed mitigation: a description of any uncertainties and related risks, as well as additional practices that should be considered to mitigate the risks. These considerations should include (but are not limited to):
 - i. The spatial and temporal context of other human-related activities that might increase the risk of the proposed helicopter-logging activity to mountain goats;

- ii. The size and configuration of the UWR, in relation to the helicopter yarding activity, that might influence the likelihood and consequence of movement off the range, and/or restrict movement of goats within the range;
 - iii. Population composition (i.e. nanny and kid groups versus billy goats). Coastal nannies often kid within UWR habitats, and nannies are often in poor body condition due to the physiological cost of lactation during the kidding period (approx May 25-June 7);
 - iv. Minimizing the intensity and duration of helicopter activity;
 - v. Provisions to suspend activities if snow depth or distribution changes substantially (e.g., if snow depths reaches 30 cm); and/or;
 - vi. Monitoring of mountain goats and subsequent operational responses if mountain goat distribution and/or behaviour changes.
- f. The document “Recommended Guidance for Heli-logging Activities Near Ungulate Winter Ranges Established for Mountain Goats in the Sunshine Coast Timber Supply Area” (October 2011) should be referred to when implementing GWM 7 and is available from the Ecosystems Biologist, Regional Operations, South Coast Region.
8. The intent of GWM 8 is to facilitate pre-authorized boundary exemptions for those UWR units with >30 ha productive forest area provided that FLNR is notified prior to the incursion taking place. To be clear this GWM is expected to be used infrequently, to a maximum of 3 ha or 1%, and the intent is not to allow incursions to be repeated over and over.

Examples of incursions include a cut-block, road, trail or landing that overlaps an UWR boundary and: a) that the intent of the UWR boundary was to follow a creek/road and in some areas the boundary extends slightly beyond the creek/road due to a GIS mapping error and creates the overlap; or b) unintentional overlap occurs with an engineered primary forest activity that becomes evident when comparing map scales (e.g. 1:20000 vs 1:5000); or c) *Forest Act* agreement holders can demonstrate that the block, road, trail or landing are located in a logical location and the incursion does not exceed the amount allowed.

In almost all instances the amount of incursion is anticipated to affect a small area. No replacement area is required when the discrepancy is: a) caused by GIS boundary mapping error since the intent of the winter range has not been altered; or b) the cumulative overlap is <0.5 ha. In other situations, the intended result is that where a boundary amendment is suggested by a *Forest Act* agreement holder and when the reduction is measurable (≥ 0.5 and ≤ 3 ha or <1% measured cumulatively in any UWR unit), it will result in no net loss to the winter range. Delineation of equal or better UWR habitat, in quantity and quality, will be required. A biological assessment to replace habitat should be conducted by a qualified professional with appropriate training and experience for the work being completed. If replacement habitat is required and equal or better habitat is not available contiguous to the UWR unit in question then the incursion cannot proceed under this GWM. Boundary amendments meeting the conditions identified in GWM 8 will be periodically reviewed by FLNR and Ministry of Environment (MoE) and the UWR boundary officially amended under the *Government Actions Regulation*. In any instances where the conditions in GWM 8 cannot be met, proposed primary forest activities will require an exemption as outlined under section

2 and 3 in this Appendix.

As determined by the 2012 allowable annual cut confirmation exercise, UWR units with <30 ha productive forest area (i.e. TO4, TO44, TO49, TO50, TO55, TO58, TO60, TO62, TO65, TO66, TO67) are excluded from GWM 8 (b)(i) because of potential adverse impacts to the small amount of existing snow interception cover from an incursion. An exemption request for any of these UWR units should be submitted to the Director as outlined under section 2 in this Appendix.

In addition to reporting incursions to the Director prior to commencement of activities as per GWM 8 (d), it is the proponent's responsibility to keep accurate records of each occurrence. Records must also be made available to a FLNR or MoE official upon request.

9. These GWMs do not apply to persons who must comply with the *Worker's Compensation Act* and the regulations under that Act (e.g. danger tree felling). Consistent with section 2(3) of the *Forest Planning and Practices Regulation*, exemptions from these GWMs are not required to meet safety requirements.
10. Where roads in the UWR are temporary and no longer required, they should be permanently deactivated. Proponents should notify the Director when deactivation of temporary roads is complete.