

ORDER – Ungulate Winter Range
#U-2-013 - Mountain Goat –
Tree Farm Licence 39 (Block 5) (Campbell River Forest District)

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

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 Goat (*Oreamnos americanus*), and
 - ii. that 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-2-013) and contained in the ungulate winter range (UWR) spatial layer stored in the Geographic Warehouse (WHSE_WILDLIFE_MANAGEMENT.WCP_UNGULATE_WINTER_RANGE_SP) are established as an ungulate winter range U-2-013 for Mountain Goat. The centre point of the line on the attached Schedule A is what establishes the UWR boundary, 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_SP), 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 Mountain Goat and the 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-2-013,
- b) GWM #4 outlined in Schedule 1 is established and applied to the area specified in that GWM,
- c) for the purposes of section 2(3)(a) of the *Government Actions Regulation*, the GWMs outlined in Schedule 1 apply to minor tenures, and
- d) the GWMs outlined in Schedule 1 do not apply for the purposes of exploration, development and production activities when these activities have been authorized for the purpose of subsurface resource exploration, development or production by the *Mineral Tenure Act*, the *Coal Act*, the *Mines Act*, the *Petroleum and Natural Gas Act*, the *Pipeline Act* or the *Geothermal Resources Act*.

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.

functioning winter range includes the forested component of a winter range (not escape terrain) and is defined as areas of mature forest or old-growth forest suitable for Mountain Goat use during winter. Key attributes include forest stands that are situated within 400m of escape terrain, have well developed crowns that provide snow interception cover, are situated on warm aspects (110 – 270 degrees), support the presence of key mountain goat forage species, and wherever practicable are in patches larger than 40 ha in size.

incursion means timber harvesting or road construction that is located within an ungulate winter range unit boundary where no harvesting or road building is otherwise permitted to occur.

productive forest land base means forest included as either contributing, partial contributing or non-contributing land base as derived from TFL 39 Management Plan 8.

Regional Manager means the Ministry of Environment Regional Manager, Resource Stewardship and Parks Division, West Coast Sub Region

UWR unit means a portion of UWR U-2-013 that is a discrete polygon.

Schedule 1 – General Wildlife Measures

1. Do not harvest or salvage timber, or construct roads, including trails or landings.
2. Timber harvesting may occur within the UWR to the extent necessary to create guyline tiebacks and tailhold anchors for timber harvesting, provided that trees that fall within the UWR boundary are retained on site to function as coarse woody debris.
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; and
 - c) the application of herbicides to control for invasive plants or noxious weeds.

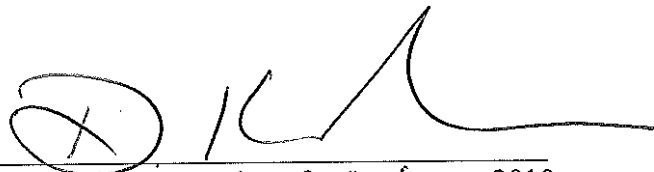
4. Helicopter yarding within a Specified Area of 500 meters horizontal distance of an established mountain goat winter range may only take place from May 1 to October 31 of a calendar year.
5. Where timber harvesting or road construction are planned immediately adjacent to any UWR unit with >30 ha productive forest area, GWM 1 does not apply to the area of an incursion along the UWR unit boundary if:
 - a) the incursion is to provide for a logical harvesting boundary or a logical road or trail location that utilizes a physical feature or administrative boundary;
 - b) the area of the incursion, or multiple incursions cumulatively, do not exceed: (See Table 1)
 - 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, the area of the incursion must be 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;
 - d) the incursion as per GWM 5 a) or b), and any replacement habitat as per GWM 5 c) are provided to the Regional Manager (via shape files in ArcMap format) prior to the commencement of primary forest activities associated with the incursion.
6. Where timber harvesting or road construction are planned immediately adjacent to any UWR unit with >30 ha non productive (NP) forest area, GWM 1 does not apply to the area of an incursion along the UWR unit boundary if:
 - a) the incursion is to provide for a logical harvesting boundary or a logical road or trail location that utilizes a physical feature or administrative boundary;
 - b) the area of the incursion, or multiple incursions cumulatively, do not exceed: (See Table 1)
 - i. 1 ha of NP area in UWR units with >30 ha and ≤50 ha NP forest area; or
 - ii. 2 ha of NP area in UWR units with >50 ha to ≤100 ha NP forest area; or
 - iii. 3 ha or 1% of NP area, whichever is greater, in UWR units with >100 ha NP forest area;
 - c) the incursion exceeds 0.5 ha, the area of the incursion must be 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;
 - d) the incursion as per GWM 6 a) or b), and any replacement habitat as per GWM 6 c) are provided to the Regional Manager (via shape files

in ArcMap format) prior to the commencement of primary forest activities associated with the incursion.

Table 1: TFL 39 Block 5 Goat Winter Ranges with Total Hectares and Total Productive Forest (GWM 5).

Total Non Productive Forest (GWM 6) = Total Hectares – Total Productive Forest

UWR ID	Netdown	Total Hectares	Total Productive Forest (ha)
PH 01	100	257.9	56.2
PH 02	100	135.1	63.1
PH 03	100	194.2	83.7
PH 04	100	44.9	26.6
PH 05	100	90.2	35.7
PH 06	100	108.8	62.0
PH 07	100	68.1	26.9
PH 07B	100	10.3	4.0
PH 08	100	109.8	73.8
PH A2	100	104.8	31.8
PH A3	100	58.2	11.5
PH A4	100	56.3	10.8
PH CW 01	100	123.9	90.4
PH CW 02	100	202.2	80.0
PH CW 03	100	259.1	73.5
PH HO 01	100	177.3	85.2
PH HO 02	100	64.8	54.5
PH HO 03	100	292.4	96.8
PH HO 04	100	151.8	54.7
PH HO 05	100	57.6	5.0
PH HO 06	100	65.3	24.9
PH HO 08	100	169.2	37.3
PH HO 09	100	145.2	32.4
PH HO 10	100	197.6	48.0
Totals		3144.9	1168.6



Signed this 12 day of Oct, 2010
 Doug Konkin, Deputy Minister
 Ministry of Environment

Appendix 1:

The following information is provided by the Ministry of Environment as background information and support to the order establishing UWR U-2-013. 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;

(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 general wildlife measures (GWMs) is provided in Section 92(1) of the *Forest Planning and Practices Regulation*. In instances where it is not practicable to comply with these measures, a person proposing to conduct forestry activities should consider seeking an exemption from the requirements to comply with the applicable GWMs.

An exemption application should be submitted to the Ministry of Environment's Regional Manager at the Lower Mainland Regional office – located at 10470 152 Street Surrey, BC V3R 0Y3 (a template for exemption requests is available from the Regional Manager Ministry of Environment).

3. With respect to GWM 2, portions of trees that fall onto a road, landing, or outside the ungulate winter range boundary may be harvested concurrent with primary forest activities. Care should be taken that harvesting does not result in a material adverse impact to the UWR.
4. With respect to GWM 4, exemptions for operating within the restricted timing window:
- May be granted on a biweekly, weekly, or daily basis, dependent on time of year, weather conditions and presence of goats;
 - For activities involving significant or sustained disturbance such as helicopter yarding, road construction with heavy equipment, drilling or blasting, closer monitoring may be required if approved, as these activities are most likely to result in material adverse disturbance to goats;

- Should only be considered in early or late winter since longer extensions are most likely to result in material adverse disturbance to mountain goats;
 - Should be evaluated according to the historical intensity of mountain goat use of an area, type of work proposed, current weather conditions and short and long term weather forecasts;
 - Should include results of a brief aerial survey, conducted by the proponent using a qualified biologist, to confirm that goats are not present in the area of interest. Survey results should accompany the exemption request. MoE regional staff may be able to participate in surveys which should be done near the beginning/end of the normal timing window. If any sign of mountain goat activity (tracks or animals) is noted within 500 m of the proposed operational area, proponents should seriously consider whether their planned activity will result in a material adverse disturbance to goats, and if so the exemption request should not be submitted. It should be noted that helicopter flights in themselves can cause material adverse disturbance to wintering goats and that repeated overflights of occupied goat winter range habitats should not occur.
5. It should be recognized that the 500 m Specified Area in GWM 4 is a risk-tolerant approach based on socio-economic considerations in TFL 39 (Block 5). Existing literature and professional opinion indicates that behavioural effects of disturbance occur at distances up to 1500 m. Little is currently known regarding the biological significance of such behavioural effects. MoE will monitor to determine impacts to goats; if impacts are substantial then MoE will revisit the 500 m setback.