



MATERIAL SUPPORTING THE NOTICE, BUT NOT PART OF THE NOTICE.

INFORMATION CONCERNING WILDLIFE HABITAT FOR THE WINTER SURVIVAL OF UNGULATE SPECIES IN THE LAKES TIMBER SUPPLY AREA

This document is intended to provide background information and support to the legal framework of the notice of indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species in the Lakes TSA. This document is not part of the legal notice. Its purpose is to provide additional information for consideration by delegated decision makers and by those persons required to prepare results and strategies consistent with section 7(1) of the Forest Planning and Practices Regulation or act in a manner consistent with section 9(3) of the *Woodlot Planning and Practices Regulation*.

Lakes Timber Supply Area

Amount:

The amounts included for mule deer and moose are based on information contained within TSR 2 (2001). The two tables below summarize the area and forest cover requirements applied for deer and moose in TSR 2.

Areas subject to habitat management requirements — Lakes TSA TSR2 (2001)

Wildlife species	Total forest ¹ subject to habitat requirements (green-up and old-forest) (ha)	Timber harvesting land base (subject to green-up requirements) (ha)
Deer	10,877	1,332
Moose ²	218,142	156,427

Forest cover requirements for habitat — Lake TSA Analysis Report (March 2001)

Resource emphasis	Maximum allowable disturbance (% area)	Green-up height (m) / age (years)	Minimum retained area (%)	Minimum age for retention (years)	Land base to which constraints apply
High value winter habitat					
— Moose and deer (thermal and forage)	33	3 m / 17 yrs	30	101	Timber harvesting land base for green-up
— Deer (very high)	25	5 m / 27 yrs	50	101	Crown forested area for old-age forest

Moose – Based on recent modeling and mapping by MWLAP and by the Lakes-Morice IFPA for the Morice TSA (draft) a re-evaluation of moose winter range mapping as it is currently mapped in the Lakes LRMP, appears to be necessary. WLAP will work with MOF and industry to make necessary revisions to maps and objectives.

Mule Deer - Based on recent modeling and mapping by the Lakes-Morice IFPA for the Morice TSA (draft) a re-evaluation of moose winter range mapping as it is currently mapped in the Lakes LRMP, appears to be necessary. WLAP will work with MOF and industry to make necessary revisions to maps and objectives. Most mule deer winter on private land. However remnants of forested crown land surrounding private land provide the only cover deer in some cases. There is no degree of certainty that forest cover currently provided on private land will exist in that condition in the future. It is therefore critical to optimize cover objectives on adjacent crown land remnants.

Distribution:

Figures and spatial information (shapefiles) to support the amount and distribution statements are included in the folders titled “Figures” and “Spatial Data” on the following ftp site:

[ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc_data/Approved_FRPR_sec7_WLPPR_sec9_Notices_and_Supporting_Info/Ungulate_Winter_Range/Timber_Supply_Areas/Lakes TSA/Supporting_Info/](ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc_data/Approved_FRPR_sec7_WLPPR_sec9_Notices_and_Supporting_Info/Ungulate_Winter_Range/Timber_Supply_Areas/Lakes_TSA/Supporting_Info/)

Inclusion of draft and proposed Ungulate Winter Range boundaries in the supporting information does not prejudice the review and comment that may be ongoing around these Ungulate Winter Ranges. Where Ungulate Winter Ranges have not been through the full review and comment process, MWLAP will continue to work with affected parties to address the Ungulate Winter Range boundaries.

Figure 1 shows suitability mapping that has been completed for mule deer and moose in the TSA.

Attributes:

1) Mule Deer

In addition to trying to maintain desired attributes within mule deer winter ranges, the following guidance should be considered in development planning:

- In most areas of the Lakes TSA deer winter range has been modified for agricultural purposes. In areas where only remnants of forested winter range occur adjacent to private land, consideration should be given to retaining these remnant forests in a condition where they can still function as snow interception cover. There is rarely certainty that private lands will remain forested.
- On most winter ranges aim to retain at least 40% of the range in snow interception cover.

- When selecting forest stands for snow interception cover, give preference to stands that are located over beneficial topographic features such as benches, ridges, and slope breaks. Select the oldest(*) stands available with Douglas Fir or Pine as leading species, and with optimum canopy structure. Select stands adjacent to good forage producing areas.
- In order to retain snow interception characteristics of a stand aim to retain a crown closure of 70%.
- Promote ground forage production through logging by slashing winter forage shrubs that have grown out of reach to deer.
- Avoid promoting motorized winter recreation activities on mule deer winter range.
- Use closures and blockages to minimize the amount of open road (i.e. 4x4 accessible) in mule deer winter range. Four wheel drive access should be precluded on all roads that are not required to be active.
- Where road closures are not feasible manage roadsides for visual buffers.

(*)Large tree size can be used a surrogate for age.

2) Moose

In addition to trying to maintain desired attributes within moose winter ranges, the following guidance should be considered in development planning:

- To meet thermal and hiding cover requirements for moose, maintain a minimum of 25% of winter range area with stands >7 m high or greater at all times (throughout rotation). Maintain crown closure of mature forests >30%. Ensure patches are large enough to allow 50 m from a forest opening. This cover is best situated adjacent to non-forested feeding areas (natural openings, wetlands, cut-blocks).
- Limit vehicular road access to winter range areas to reduce human disturbance and illegal harvest (access restrictions, gates, deactivation).
- Where road closures are not feasible manage roadsides for visual buffers.
- Avoid converting deciduous leading stands to coniferous leading stands. Conifer groups in a deciduous leading stand should not be harvested. Likewise patches of deciduous in conifer leading stands should not be logged if possible.

- Allow successional processes to evolve on high value forage producing sites, particularly those portions of cut-blocks which are closest to cover. High value forage producing sites are generally located on moist, rich sites, and riparian areas. Limit brushing and weeding activities to individual crop trees, modify crop tree spacing, and reduce stocking standards if necessary to maintain high value forage production for moose.

Lakes LRMP – Higher Level Plan:

The Notice does not include Tweedsmuir Entiako caribou. The objective set by government for planning under FRPA for Tweedsmuir Entiako caribou is outlined in the Lakes LRMP HLP. Person preparing an FSP need to plan consistent with this objective.

Future intent:

1) Mountain goats

An amount for mountain goat has not been included in the Notice. Based on new modeling and telemetry data since TSR 2, additional mountain goat range has been identified in the Lakes TSA (see Figure 2). Total land-base occupied by “primary and secondary known” is approximately 15799 ha. Approximately 2985 ha total land-base is occupied by “primary known” only. It is expected that a very high majority of this will be located over the non-contributing land-base (i.e. rock, NP, and non-commercial forest). Much of this area will also be occupied by polygons which will not meet, yet to be determined minimum size criteria.

A type 3 ungulate winter range submission is planned for some date in the future to correct any deficiencies in current LRMP maps and to establish objectives and strategies. WLAP will work with FS and industry to refine new maps.

2) Takla caribou

An amount for Takla caribou has not been included in the Notice. Neither TSR 2 or the Lakes LRMP allocated any budget towards the management of Takla caribou. A type 3 ungulate winter range submission will be proposed by the Ministry of WLAP at some time in the future. The intended range will be in accordance with the draft UWR submission prepared by Min. of WLAP, Omineca Region (Figure 1), and with consideration for the draft Morice LRMP.