

APPENDIX D – Wildlife Orders and Notices

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ORDER – CATEGORY OF SPECIES AT RISK

The following order applies to the province of British Columbia and takes effect on the 6th day of May, 2004.

This order is given under the authority of section 11 (1) of the *Government Actions Regulation* (B.C. Reg. 17/04).

The Minister of Water, Land and Air Protection has determined that the list of species of wildlife in schedule 1 are a category of species at risk that may be affected by forest or range management on Crown land and require protection in addition to that provided by other mechanisms.

Schedule 1

English Name

Scientific Name

Fish

Vananda Lake Limnetic Stickleback

Gasterosteus sp. 16

Vananda Lake Benthic Stickleback

Gasterosteus sp. 17

Amphibians

Great Basin Spadefoot

Spea intermontana

Tiger Salamander

Ambystoma tigrinum

Red-legged Frog

Rana aurora

Rocky Mountain Tailed Frog

Ascaphus montanus

Northern Leopard Frog

Rana pipiens

Coastal Giant Salamander

Dicamptodon tenebrosus

Coastal Tailed Frog

Ascaphus truei

Coeur d'Alene Salamander

Plethodon idahoensis

Reptiles

"Great Basin" Gopher Snake

Pituophis catenifer deserticola

Birds

Ancient Murrelet

Synthliboramphus antiquus

Burrowing Owl

Athene cunicularia

ORDER – CATEGORY OF SPECIES AT RISK AND
LIST OF IDENTIFIED WILDLIFE

Flammulated Owl
Great Blue Heron
Lewis's Woodpecker
Long-billed Curlew
Marbled Murrelet
"Queen Charlotte" Goshawk
Sage Thrasher
Short-eared Owl
Spotted Owl
"Interior" Western Screech-Owl
White-headed Woodpecker
Yellow-breasted Chat

Otus flammeolus idahoensis
Ardea herodias fannini
Melanerpes lewis
Numenius americanus
Brachyramphus marmoratus
Accipiter gentilis laingi
Oreoscoptes montanus
Asio flammeus
Strix occidentalis
Otus kennicottii macfarlanei
Picoides albolarvatus
Icteria virens

Mammals

Keen's Long-eared Myotis
Pacific Water Shrew
Fringed Myotis
Badger
Vancouver Island Marmot
Caribou (3 populations - mountain, boreal and northern)
Spotted Bat
Grizzly Bear
Wolverine (2 subspecies)

Myotis keenii
Sorex bendirii
Myotis thysanodes
Taxidea taxus jeffersonii
Marmota vancouverensis
Rangifer tarandus caribou

Euderma maculatum
Ursus arctos
Gulo gulo luscus
Gulo gulo vancouverensis

Plants

Scouler's Corydalis
Tall Bugbane

Corydalis scouleri
Cimicifuga elata

Note: For a list of species distribution by Forest District please refer to Appendix 13 of the *Accounts and Measures for Managing Identified Wildlife*.


Signed this 3 day of May, 2004
Bill Barisoff, Minister
Ministry of Water, Land and Air Protection



March 2, 2006

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN
THE NORTH ISLAND – CENTRAL COAST FOREST DISTRICT**

This Notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Licence Planning and Practices Regulation* (B.C. Reg. 21/04).

The following Notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk outlined in Schedule 1.

Approved Wildlife Habitat Areas are not included in the indicators of amount, distribution and attributes for each of the species outlined in Schedule 1. As per section 7(3) of the *Forest Planning and Practices Regulation*, forest tenure holders are exempt from the obligation to specify a result or strategy in relation to the objective set out in section 7(1) of the *Forest Planning and Practices Regulation*, for approved Wildlife Habitat Areas.

This Notice applies to the North Island – Central Coast Forest District.

This Notice replaces the Notice issued for the North Island – Central Coast Forest District on December 30, 2004.

Schedule 1

1) Coastal Tailed Frog (*Ascaphus truei*)

Amount:

1. 1549 ha not exceeding an impact to the mature timber harvesting landbase of 183 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Coastal Tailed Frog the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Coastal Tailed Frog in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

Species:
Coastal Tailed Frog

Attribute	Characteristics
Size	Approximately 20 ha (depending on number and length of suitable stream reaches). Larger areas may be appropriate in watersheds with unstable terrain (class 4-5). Areas should include at least two streams or stream reaches (i.e., S4 to S6) with previous detections of tailed frogs. The area should include a 30 m core area buffered by a 20m management zone on both sides of occupied stream reaches.
Habitat Attributes	Tailed frog aquatic habitats are generally characterised by year round flow, non fish bearing (S4-S6), intermediate gradient (>2.5%), coarse substrates (>6.4 cm), stable channel beds and forest cover (generally associated with structural stage S6 or S7). Retain 100% of forest cover within the core area. Within the management zone maintain 70% basal area with appropriate structure to maintain riparian forest, important structural elements (e.g., coarse wood debris,) water quality and temperature (5 to 18 degrees), and naturally dispersed water flows.
Elevation	From sea level to 2140 m.

2) Great Blue Heron (*Ardea herodias fannini*)

Amount:

1. 240 ha not exceeding an impact to the mature timber harvesting landbase of 36 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Great Blue Heron in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Great Blue Heron in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

Species:
Great Blue Heron

Attribute	Characteristics
Size	Typically 80 ha to accommodate nesting areas/colonies, but may also target foraging areas. The core area should be approximately 12 ha and should include known nesting trees, foraging areas and flight paths. The boundary of the core area should be a 200 m radius around the aforementioned features. A management area should be captured to include a 300 m radius surrounding the core area.
Tree Features	Nests occur in fragmented forests, contiguous forest and isolated trees.
Tree Species	Red alder, black cottonwood, Douglas fir, Big-leaf maple, lodgepole pine, Sitka spruce, western white pine, hybrid white spruce, ponderosa pine, western red cedar, western hemlock.
Structural Stage	5 (young forest), 6 (mature forest), 7 (old forest).
Elevation	Sea level to 1100 m.

3) Marbled Murrelet (*Brachyramphus marmoratus*)

Amount:

1. An amount equal to the total amount of currently suitable nesting habitat in the non-contributing landbase. Government policy for determining the amount of suitable nesting habitat is provided in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004);
2. Within Tree Farm License 37, a total of 7,100 ha of suitable nesting habitat within the non-contributing landbase;
3. An amount of suitable Marbled Murrelet nesting habitat within Old Growth Management Areas consistent with the direction from landscape unit planning; and
4. An amount of suitable nesting habitat to a maximum net mature timber harvesting landbase impact of 1434 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

Species:
Marbled Murrelet

Attribute	Characteristics
Size	Maintain a balanced range of patch sizes including a mix of large (>200 ha), medium (50-200 ha) and small (<50 ha) patches within managed forests. The area should include vertical canopy complexity,
Tree Features	Large branches or branches with deformities, and presence of mossy platforms
Tree Species	It is unlikely that Marbled murrelets select particular tree species, however certain species are more likely to provide large horizontal platforms suitable for nesting. This includes yellow cedar, western hemlock, Sitka spruce, Douglas-fir and western red cedar. Less likely species include mountain hemlock and amabilis fir.
Nesting Habitat Features	Suitable nesting habitat includes old seral stage coniferous forests, providing large trees with platforms (limbs or deformities >15cm diameter) with variable canopy structure and small gaps in the canopy. Readily nest on steep slopes but is not essential if forest canopies are non-uniform.
Tree Size	Most nesting trees in BC are >200 yr. Nest trees are typically >40 m tall and nest heights are typically >30 m. Nest limbs range in size from 15-74 cm diameter.
Structural Stage	7: old forest (>250 yr - age class 9, but 8 is acceptable if older forest is not present and the age class 8 provides platform limbs and other nest attributes).
Additional information	Table 3 of the IWMS Version 2004 species account for Marbled Murrelet provides detailed information about the habitat features that are associated with most likely, moderately likely and least likely habitat within each of the Marbled Murrelet Conservation regions.

4) "Queen Charlotte" Goshawk (*Accipiter gentilis laingi*)

Amount:

1. 277 ha not exceeding an impact to the mature timber harvesting landbase of 128 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for "Queen Charlotte" Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
 - areas of suitable goshawk breeding habitat to minimize overlap between goshawk home ranges (approximately 5-8 km separation).
2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for "Queen Charlotte" Goshawk in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

Species:
Queen Charlotte Goshawk

Attribute	Characteristics
Nesting and PFA Area	Approximately 200 ha in size.
Stand Features (Nesting and PFA)	Structural stage 5-7 (>45yrs), multi-layered canopies, structurally diverse, canopy closure (greater than 50%), large diameter trees (for the locale), snags and coarse woody debris (CWD), typically not along forest/non-forest edges. Not near urban areas and generally on the lower 2/3 of slopes where slope gradient is <40%.
Tree Species (Nesting and PFA)	Western hemlock, Douglas fir, Sitka spruce, Western red cedar, amabilis fir and red alder.
Structural Stage	5 (young forest - is used but is generally not preferred), 6 (mature forest) and 7 (old forest).
Elevation (Nesting and PFA)	Areas managed for nesting must generally be below 900 m.

5) Grizzly Bear (*Ursus arctos*)

Amount:

1. Within the Mid Coast TSA, 16,000 ha not exceeding an impact to the timber harvesting landbase of 6,046 ha;
2. Within TFL 39 Block 7, 1320 ha not exceeding an impact to the timber harvesting land base of 126 ha; and
3. Within the Mid Coast TSA, 1700 ha not exceeding an impact to the mature timber harvesting landbase of 170 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - a) Within the Mid Coast TSA, areas of suitable habitat of the size, spatial distribution and connectivity consistent with the distribution of Grizzly Bear polygons as per TSR 1 and 2.
 - b) Within TFL 39 Block 7, areas of suitable habitat of the size, spatial distribution and connectivity consistent with the distribution of Grizzly Bear polygons as per Management and Working Plan #8.
 - c) Within the Mid Coast TSA:
 - areas of suitable habitat of the size, spatial distribution and connectivity. identified in the species account for Grizzly Bear in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
 - The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Grizzly Bear in the

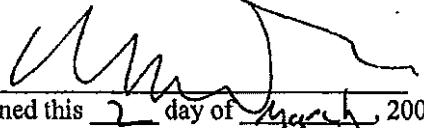
*Accounts and Measures for Managing Identified Wildlife in the Identified
Wildlife Management Strategy Version 2004.*

Attributes:

- a) Within the Mid Coast TSA the amount referenced above should include attributes consistent with those areas identified for Grizzly Bear habitat identified in TSR 1 and 2;
- b) Within TFL 39 Block 7 the amount referenced above should include attributes consistent with those areas identified for Grizzly Bear habitat identified in management and Working Plan #8; and
- c) Within the Mid Coast TSA, attributes consistent with those identified below:

**Species:
Grizzly Bear**

Attribute	Characteristics
Size	1-500 ha, depending on the area of use, extent of seasonal habitat and buffer size required.
Critical patch habitats	Critical patch habitats include beaches and beach margins, estuaries, rich non-forested fens, the edges of forested and non-forested bogs, herb-dominated patches on avalanche chutes with adjacent forest (particularly south-facing ones), herb-dominated subalpine parkland meadows, skunk cabbage swamps, floodplain ecosystems, and areas where bears fish for spawning salmon. Den cavities and surrounding stands are also considered critical. Non-forested critical habitats include a core area and buffer of forested cover. Forested critical habitats are not buffered.
Denning Habitat Features	Hibernating habitats tend to be high elevation areas that are sloped with dry, stable soil conditions that remain frozen throughout the winter. Dens are typically located on steep north-facing slopes, areas where vegetation will stabilize the den roof and where snow will accumulate for insulation. Dens are rarely re-used but Grizzly bears will often return to the same vicinity to dig new dens.
Foraging Habitat Features	Habitat selection is strongly influenced by meeting nutritional requirements, access to mates, thermal cover (i.e., dens), social interactions and the presence and activities of people. Habitat requirement vary greatly as some bears are more transient while others are more resident. Both residents and transients select patches or complexes of habitats within landscapes.
Structural Stage	Generally, foraging is more abundant in non-forested sites, sites with partial forest or sites with many tree gaps in older forest. Closed forest sites near quality habitat may be used for security and day bedding areas. Many or all structural stages can be used seasonally or for specific needs and as such, forage type is not necessarily tied to one particular structural stage.
Elevation	All elevations from sea level estuaries to high alpine meadows and talus slopes.


Signed this 2 day of March 2006
Rod Davis, Director Ecosystems Branch
Ministry of Environment



**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN
THE CAMPBELL RIVER FOREST DISTRICT**

This Notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Licence Planning and Practices Regulation* (B.C. Reg. 21/04).

The following Notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk outlined in Schedule 1.

Approved Wildlife Habitat Areas are not included in the indicators of amount, distribution and attributes for each of the species outlined in Schedule 1. Considering that approved WHA exist in the area covered by this notice, and consistent with section 7(3) of the *Forest Planning and Practices Regulation*, forest tenure holders are exempt from the obligation to specify a result or strategy in relation to the objective set out in section 7(1) of the *Forest Planning and Practices Regulation*, for those areas under approved Wildlife Habitat Areas. This exemption will be considered for further application as other wildlife related actions are established in the District.

This Notice applies to the Campbell River Forest District, excluding parks and protected areas.

Schedule 1

1) "Queen Charlotte" Goshawk (*Accipiter gentilis laingi*)

Amount:

1. 1743 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 764 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for "Queen Charlotte" Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
 - areas of suitable breeding habitat to minimize overlap between goshawk home ranges (approximately 6-8 km separation).
2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for "Queen Charlotte" Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE CAMPBELL RIVER
FOREST DISTRICT**

Attributes:

1. Use the species account for “Queen Charlotte” Goshawk in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify the attributes of suitable nesting and foraging habitat and goals for the management of wildlife habitat areas.

2) Marbled Murrelet (*Brachyramphus marmoratus*)

Amount:

1. An amount of suitable nesting habitat equivalent to a net mature timber harvesting landbase impact of 1431 ha.
2. An amount of habitat in the non-contributing landbase equal to the total amount of currently suitable nesting habitat in the non-contributing landbase.
3. Government policy for determining the amount of suitable nesting habitat is provided in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable nesting habitat of the size and spatial distribution identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

1. Use the species account for Marbled Murrelet in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify the attributes of suitable nesting habitat and goals for the management of wildlife habitat areas.

3) Red-legged Frog (*Rana aurora*)

Amount:

1. 50 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 30 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE CAMPBELL RIVER
FOREST DISTRICT**

- areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Red-legged Frog in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
- 2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Red-legged Frog in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

1. Use the species account for Red-legged Frog in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify suitable breeding and foraging habitat and goals for the management of wildlife habitat areas.

4) Keen's Long-eared Myotis (*Myotis keenii*)

Amount:

1. 40 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 30 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Keen's Long-eared Myotis in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Keen's Long-eared Myotis in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).

Attributes:

1. Use the species account for Keen's Long-eared Myotis in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify important habitat and habitat features and goals for the management of wildlife habitat areas.

5) Great Blue Heron (*Ardea herodias fannini*)

Amount:

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE CAMPBELL RIVER
FOREST DISTRICT**

1. 160 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 24 ha.

Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Great Blue Heron in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Great Blue Heron in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).

Attributes:

1. Use the species account for Great Blue Heron in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify suitable nesting habitat and goals for the management of wildlife habitat areas.

6) Coastal Tailed Frog (*Ascaphus truei*)

Amount:

1. 80 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 20 ha.

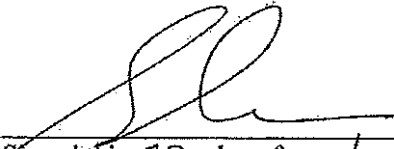
Distribution:

1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Coastal Tailed Frog in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004).
2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Coastal Tailed Frog in the *Accounts and Measures for Managing Identified Wildlife* in the Identified Wildlife Management Strategy Version 2004.

Attributes:

1. Use the species account for Coastal Tailed Frog in the *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) to identify suitable breeding and foraging habitat and goals for the management of wildlife habitat areas.

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE CAMPBELL RIVER
FOREST DISTRICT**



Signed this 27 day of July, 2004
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection



ORDER – CATEGORY OF UNGULATE SPECIES

The following order applies to the province of British Columbia and takes effect on 6th day of May, 2004.

This order is given under the authority of section 11 (3) of the *Government Actions Regulation* (B.C. Reg. 17/04).

The Minister of Water, Land and Air Protection has determined that the list of ungulate species identified in schedule 1 are a category of ungulate species for which an ungulate winter range may be required for the winter survival of the identified species.

Schedule 1

English Name	Scientific Name
Mule and black-tailed deer	<i>Odocoileus hemionus</i>
White-tailed deer	<i>Odocoileus virginianus</i>
Elk	<i>Cervus elaphus</i>
Mountain Goat	<i>Oreamnos americanus</i>
Caribou	<i>Rangifer tarandus</i>
Bighorn sheep	<i>Ovis canadensis</i>
Thinhorn sheep	<i>Ovis dalli</i>
Moose	<i>Alces alces</i>


Signed this 3 day of May, 2004
Bill Barisoff, Minister
Ministry of Water, Land and Air Protection



**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE
SPECIES IN THE KINGCOME TIMBER SUPPLY AREA**

This notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Planning and Practices Regulation* (B.C. Reg. 21/04).

The following notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of the ungulate species outlined in Schedule 1.

This Notice applies as specified within the Kingcome Timber Supply Area.

Schedule 1

Kingcome Timber Supply Area

Ungulate Species:

Black-tailed deer, Roosevelt elk, Mountain goat and Moose

Amount:

Not exceeding an impact to the timber harvesting landbase of 772 ha:

- I) a maximum of 658 ha for Black-tailed deer;
- II) a maximum of 1094 ha for Roosevelt elk;
- III) a maximum of 25,206 ha for Mountain goat; and
- IV) a maximum of 28.5 ha for Moose.

Distribution:

The amount of habitat referenced above must be distributed to provide:

I) Black-tailed deer, Roosevelt elk and Moose

- Individual winter ranges of suitable size (minimum 40 ha, but where possible > 80 ha). Smaller areas 20-40 ha are generally considered too small, but may be worth maintaining if other larger alternatives do not exist.
- Deer winter ranges located in areas of high capability. Deer winter range capability is usually highly variable in coastal watersheds, and it is always best to locate individual winter ranges in areas of highest capability. In areas of relatively uniform habitat capability, individual deer winter ranges can generally be separated by approximately 2 to 5 km. Distribution will be largely dependent upon deer habitat capability within the

watershed, and the size of the individual winter ranges. Deer winter ranges located on southerly aspects; moderate to steep slopes (40-100%); low-moderate elevations (< 1000 m); minimal shading from adjacent mountains; and presence of rock outcrops or bluffs.

- Suitable distribution of individual elk winter ranges which will be highly variable depending on elk habitat capability within the watershed and the size of the individual winter ranges. Elk winter ranges located at low elevation valley bottoms (<1000m).
- Suitable distribution of individual moose winter ranges which will be highly variable depending on moose habitat capability within the watershed and the size of the individual winter ranges. Moose winter ranges located at low elevation valley bottoms (<1000m), particularly floodplain riparian habitats.

II) Mountain goat

- Winter ranges of the size and spatial distribution typical of ungulate winter ranges for Mountain Goat in the Kingcome TSA considering the attributes listed below.
- Goat winter ranges located in areas of accessible and abundant forage in close proximity to escape terrain: areas of low snow-loading that allow goats to access available forage: forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; elevations <1200 m; areas that provide high quality forage.

Attributes:

I) Black-tailed deer

Critical black-tailed deer winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy deer winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Preferred topographic features: southerly aspects; moderate to steep slopes (40-100%); low-moderate elevations (< 1000 m); minimal shading from adjacent mountains; and presence of rock outcrops or bluffs.
- 3) Preferred winter forage species: Western redcedar; Douglas-fir; Deer fern; Huckleberry; Salal; and Arboreal lichens.

II) Roosevelt elk

Critical Roosevelt elk winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy elk winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Preferred topographic features: low elevation valley bottoms. During deep snow packs (>30cm), moderately steep 10-50% slope southerly aspects at low-moderate elevations (<1000 m), with minimal shading from adjacent mountains, and the presence of rock outcrops or bluffs may be preferred.
- 3) Preferred winter forage species: grasses; sedges; Deer fern; Twinflower; Willows; Cottonwood; Elderberry; Devils club; Salal; Dull Oregon-grape; Western redcedar; Western Hemlock; Salmonberry and Huckleberry.
- 4) Preferred foraging habitats during mild winters; natural openings and recent clear cuts. When snow depths exceed 30cm; densely canopied mature or old-growth forests on floodplains or moderately steep southerly slopes are preferred for foraging.

III) Moose

Critical moose winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy moose winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice. In addition, critical winter habitat includes areas exhibiting use by moose during critical winter months as evidenced by direct observation, winter pellet groups, dropped antlers, or trail networks.
- 2) Preferred topographic feature is low elevation valley bottoms, particularly floodplain riparian habitats. During deep snow packs (> 60cm), flat to moderately steep (0-50% slope) southerly aspects adjacent to the floodplain at low-moderate elevations (<1000 m), with minimal shading from adjacent mountains utilized.
- 3) Preferred winter forage species include: willows; cottonwood; red osier dogwood; twinberry; elderberry; western redcedar; salmonberry, huckleberry, grasses, sedges and arboreal lichen litterfall.

- 4) Preferred foraging habitats during mild winters are deciduous dominated stands (particularly on floodplains), natural openings and recent clear cuts. When snow depths exceed 60cm; densely canopied mature or old-growth forests on floodplains or moderately steep southerly slopes adjacent to floodplains are preferred for foraging.

IV) Mountain Goat

Critical mountain goat winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features are required to satisfy mountain goat winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Escape terrain: rock outcrops or cliffs that provide good visibility for vigilant goats and are sufficiently rugged to be generally inaccessible to predators; slopes >60% and <175% preferred.
- 3) Accessible and abundant forage in close proximity to escape terrain: areas of low snow-loading that allow goats to access available forage: forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; elevations <1200 m; areas that provide high quality forage.
- 4) Evidence of winter use by mountain goats or use by mountain goats in nearby areas (<1250 m across slope, $\pm$ 100 m elevation).



**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE
SPECIES IN THE MID COAST TIMBER SUPPLY AREA**

This notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Planning and Practices Regulation* (B.C. Reg. 21/04).

The following notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of the ungulate species outlined in Schedule 1.

This notice applies as specified within Mid Coast Timber Supply Area.

Schedule 1

Mid Coast Timber Supply Area

Ungulate Species:

Black-tailed deer and Mountain Goat

Amount:

I) Black Tailed Deer:

A maximum of 68,150 ha of Crown forested landbase.

II) Mountain Goat:

A maximum of 156,629 ha located within the non contributing land base.

Distribution:

I) Black-tailed Deer

1. Within inner coast area stands the amount identified above is distributed by landscape unit within the CWH ds2 and CWH ms2 biogeoclimatic variants with fir-leading and red cedar as a sub component, according to the attributes identified below; and
2. Within outer coast area stands the amount identified above is distributed by landscape unit within the CWH vm1, CWH vm2 and CWH vh2 biogeoclimatic variants with red cedar-leading and yellow cedar as a secondary component, according to the attributes identified below; and

II) Mountain Goat

- Winter ranges of the size and spatial distribution typical of ungulate winter ranges for Mountain Goat in the Mid Coast TSA considering the habitat attributes identified below.
- Goat winter ranges located in areas of accessible and abundant forage in close proximity to escape terrain; areas of low snow-loading that allow goats to access available forage: forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; elevations <1200 m; areas that provide high quality forage.

Attributes:

I) Black-tailed deer

Critical black-tailed deer winter habitat includes:

- 1) 25% of stands greater than 250 years at all times within the area identified above and consistent with the distribution identified above.
- 2) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy deer winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 3) Preferred topographic features: southerly aspects; moderate to steep slopes (40-100%); low-moderate elevations (< 1000 m); minimal shading from adjacent mountains; and presence of rock outcrops or bluffs.
- 4) Preferred winter forage species: Western redcedar; Douglas-fir; Deer fern; Huckleberry; Salal; and Arboreal lichens.

II) Mountain Goat

Critical mountain goat winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features are required to satisfy mountain goat winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Escape terrain: rock outcrops or cliffs that provide good visibility for vigilant goats and are sufficiently rugged to be generally inaccessible to predators; slopes >60% and <175% preferred.

- 3) Accessible and abundant forage in close proximity to escape terrain: areas of low snow-loading that allow goats to access available forage: forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; elevations <1200 m; areas that provide high quality forage.
- 4) Evidence of winter use by mountain goats or use by mountain goats in nearby areas (<1250 m across slope, $\pm$ 100 m elevation).



**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF
WILDLIFE HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE
SPECIES IN THE STRATHCONA TIMBER SUPPLY AREA**

This notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9(3) of the *Woodlot Planning and Practices Regulation* (B.C. Reg. 21/04).

The following notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of the ungulate species outlined in Schedule 1.

This Notice applies as specified within the Strathcona Timber Supply Area, excluding parks and protected areas.

Schedule 1

Strathcona Timber Supply Area

Ungulate Species:

Black-tailed deer, Roosevelt elk and Mountain goat

Amount:

13,280 ha, not exceeding an impact to the timber harvesting landbase of 7448 ha.

Distribution:

The amount of habitat referenced above must be distributed to provide:

I) Black-tailed deer and Roosevelt elk

- Individual winter ranges of suitable size (minimum 40 ha, but where possible > 80 ha). Smaller areas 20-40 ha are generally considered too small, but may be worth maintaining if other larger alternatives do not exist.
- Deer winter ranges located in areas of high capability. Deer winter range capability is usually highly variable in coastal watersheds, and it is always best to locate individual winter ranges in areas of highest capability. In areas of relatively uniform habitat capability, individual deer winter ranges can generally be separated by approximately 2 to 5 km. Distribution will be largely dependent upon deer habitat capability within the watershed, and the size of the individual winter ranges.

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE SPECIES IN THE
STRATHCONA TIMBER SUPPLY AREA**

- Suitable distribution of individual elk winter ranges which will be highly variable depending on elk habitat capability within the watershed and the size of the individual winter ranges.

II) Mountain goat

- Winter ranges of the size and spatial distribution typical of ungulate winter ranges for Mountain Goat in the Strathcona TSA

Attributes:

I) Black-tailed deer

Critical black-tailed deer winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy deer winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Preferred topographic features: southerly aspects; moderate to steep slopes (40-100%); low-moderate elevations (< 1000 m); minimal shading from adjacent mountains; and presence of rock outcrops or bluffs.
- 3) Preferred winter forage species: Western redcedar; Douglas-fir; Deer fern; Huckleberry; Salal; and Arboreal lichens.

II) Roosevelt elk

Critical Roosevelt elk winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features satisfy elk winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Preferred topographic features: low elevation valley bottoms. During deep snow packs (>30cm), moderately steep 10-50% slope southerly aspects at low-moderate elevations

**NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE
HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE SPECIES IN THE
STRATHCONA TIMBER SUPPLY AREA**

(<1000 m), with minimal shading from adjacent mountains, and the presence of rock outcrops or bluffs may be preferred.

- 3) Preferred winter forage species: grasses; sedges; Deer fern; Twinflower; Willows; Cottonwood; Elderberry; Devils club; Salal; Dull Oregon-grape; Western redcedar; Western Hemlock; Salmonberry and Huckleberry.
- 4) Preferred foraging habitats during mild winters; natural openings and recent clear cuts. When snow depths exceed 30cm; densely canopied mature or old-growth forests on floodplains or moderately steep southerly slopes are preferred for foraging.

III) Mountain Goat

Critical mountain goat winter habitat includes:

- 1) Stand structure features providing snow interception cover that results from large, well-developed crowns; small openings within a variable overstorey canopy that averages 50-90% closure; and multiple canopy layers within an understorey of shade tolerant conifers. Old-growth coniferous forest habitats with appropriate topographic features are required to satisfy mountain goat winter range requirements in moderate and deep snow pack zones; minimum 10 m height coniferous forests in the low snowpack zone may suffice.
- 2) Escape terrain: rock outcrops or cliffs that provide good visibility for vigilant goats and are sufficiently rugged to be generally inaccessible to predators; slopes >60% and <175% preferred.
- 3) Accessible and abundant forage in close proximity to escape terrain: areas of low snow-loading that allow goats to access available forage; forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; elevations <1200 m; areas that provide high quality forage.
- 4) Evidence of winter use by mountain goats or use by mountain goats in nearby areas (<1250 m across slope, $\pm$ 100 m elevation).


Signed this 27 day of July, 2004
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection



TFL 37

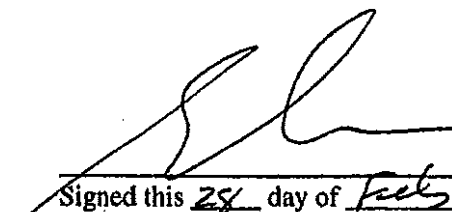
ORDER - AMENDMENT TO UNGULATE WINTER RANGE #U1-001, UNIT 12

The following order applies to the area identified within the attached Schedule A and takes effect on the 28 day of Feb, 2005.

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

The Deputy Minister of Water, Land and Air Protection orders that:

1. the boundary of Unit 12 in ungulate winter range U-1-001 is amended as shown on the attached map "Amendment to UWR U-1-001, Unit 12" and replaces the boundary approved for Unit 12 of U-1-001 on October 18, 2004 for black-tailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus elaphus roosevelti*); and
2. the objectives established for U1-001 on September 13, 2001 titled "Objectives for the Management of TFL 37 Ungulate Winter Ranges" and the general wildlife measures established for ungulate winter range U-1-001 on October 18, 2004 apply to the amended boundary of Unit 12, U-1-001.


Signed this 28 day of Feb, 2005
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection



ORDER – UNGULATE WINTER RANGE #U1-001

The following order applies to the area identified within the attached Schedule A and takes effect on the 18 day of Oct., 2004.

This order is given under the authority of sections 7(2) and 10(1) of the *Government Actions Regulation* (B.C. Reg. 17/04).

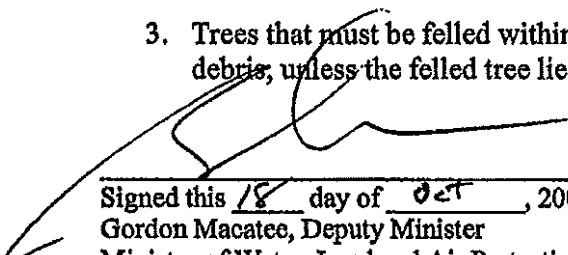
The Deputy Minister of Water, Land and Air Protection orders that:

1. the ungulate winter range shown in the attached Schedule A (#U1-001) is established;
2. the ungulate winter range in the attached Schedule A is established for black-tailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus elaphus roosevelti*); and
3. the general wildlife measures outlined in Schedule 1 are established for the ungulate winter range in the attached Schedule A;
4. the ungulate winter range shown in the attached Schedule A replaces ungulate winter range U1-001 for TFL 37 established on September 13, 2001.
5. the objectives established for U1-001 on September 13, 2001 titled "Objectives for the Management of TFL 37 Ungulate Winter Ranges" apply to the ungulate winter range shown in the attached Schedule A.

Schedule 1

A. General Wildlife Measures

1. Road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads within the UWR will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range. An exemption is not required for these activities.
2. Where required to address worker safety, felling of danger trees, felling for guy line anchors, felling of tail hold anchor trees within an UWR along adjacent cutblock boundaries will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range. An exemption is not required for these activities.
3. Trees that must be felled within an UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR.


Signed this 18 day of Oct, 2004
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection

Schedule B

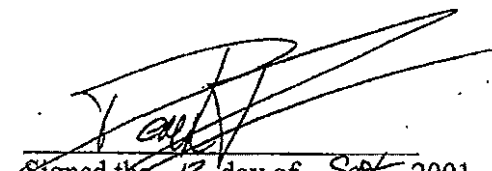
**OBJECTIVES FOR THE MANAGEMENT OF
TFL 37 UNGULATE WINTER RANGES**

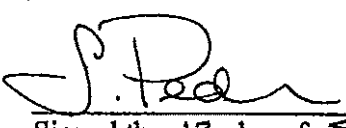
Objective 1: To maintain or enhance the existing combination of topographic and vegetative features defining high quality winter range within the designated ungulate winter ranges.

Objective 2: To allow road construction within the designated ungulate winter ranges only to the extent that no other practicable option exists and the quality of the winter ranges will not be significantly affected.

Objective 3: To allow harvesting (excluding salvage) within the designated ungulate winter ranges only to the extent the harvesting will enhance the quality of the winter ranges.

Objective 4: To allow salvage harvesting within the designated ungulate winter ranges only if the recovery of damaged timber is necessary and the quality of the winter ranges is not reduced by salvage harvesting.


Signed the 13 day of Sept, 2001
Derek Thompson, Deputy Minister
Ministry of Water, Land and Air Protection


Signed the 13 day of Sept, 2001
Larry Pedersen, Chief Forester
Ministry of Forests



ORDER – UNGULATE WINTER RANGE #U1-008

On being satisfied that the establishment of the ungulate winter range dealt with in this order is necessary to meet the habitat requirements of the ungulate species, and that the management objectives dealt with in this order are necessary to maintain the ungulate species within those areas, and under the authority of section 69 (1) (a) and (b) of the Operational and Site Planning Regulation, B.C. Reg. 107/98, the Deputy Minister of Water, Land and Air Protection orders that

1. the ungulate winter range shown in the map set out in the attached Schedule A (#U1-008) is established;
2. the ungulate winter range referred to in section 1 is approved for black-tailed deer (*Odocoileus hemionus columbianus*) and mountain goat (*Oreamnos americanus*); and
3. the following practices are established as management objectives inside the ungulate winter range referred to in section 1:

Goal

To maintain or enhance the existing combination of topographic and vegetative features within the designated ungulate winter ranges. ~~Forest management activities must ensure that adjacent ungulate winter ranges are not adversely affected by foreseeable impacts including wind throw and fire.~~

Objective 1

MWALP Statutory Decision Maker recognizes that industrial access is required through specific UWRs listed in (a) and may be required in UWRs in general as identified in (b) to access timber beyond the UWR. These industrial activities may include specific land modification activities such as road construction, road maintenance, road deactivation, bridge and culvert construction, construction of rock quarries and gravel pits, felling of danger tree along road right of ways.

- a) UWR units 1, 2, 3, 7, 12, 22, 28, 31, 32, 33, and 36 require future logging road access through them and a variance for this activity will not be required from the MWALP Statutory Decision Maker or designate. The holder of TFL 45 ^{will} ensure that UWR values are maintained and will be incorporated into road construction plans.
- b) If due to unforeseen circumstances, road access is required through an UWR not listed in (a), and no other practicable option exists, approval for road access that is consistent with the UWR management objectives will be provided by the MWALP Statutory Decision Maker or designate as long as the quality of the UWR value is not significantly affected or can be mitigated.

Objective 2

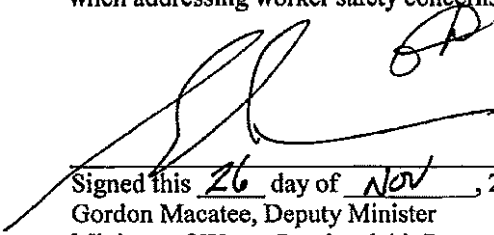
Harvesting is not to occur within the designated ungulate winter ranges, with the exception of objective 1 and 4, unless a variance is approved by the MWALP Statutory Decision Maker or designate. A variance would only normally be considered for the purposes of enhancing the quality of the winter range.

Objective 3

Salvage harvesting is not to occur within the designated ungulate winter ranges, unless a variance is approved by the MWALP Statutory Decision Maker or designate.

Objective 4

Road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads to address worker safety is allowed. Felling of danger trees, felling for guy line clearance, felling of tail hold anchor tress along cutblock boundaries to address worker safety is allowed. Any trees that must be felled within a UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR. The holder of TFL 45 agrees to ensure that UWR values are maintained and will be incorporated when addressing worker safety concerns.



Signed this 26 day of Nov, 2003
Gordon Macatee, Deputy Minister
Ministry of Water, Land and Air Protection



ORDER – Ungulate Winter Range #U-5-004
North Island-Central Coast Forest District
Mid Coast TSA

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

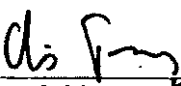
The Deputy Minister of Environment orders that:

1. The ungulate winter range shown in the map set out in the attached Schedule A (#U-5-004), and boundaries contained in the GIS file are *tuwra_bc*, are established;
2. The ungulate winter range in the attached Schedule A is established for mountain goats (*Oreamnos americanus*);
3. The general wildlife measures outlined in Schedule 1 are established for the ungulate winter range in the attached Schedule A;
4. For the purposes of Section 92(1) of the *Forest Planning and Practices Regulation*, the management intent of the general wildlife measures established by this order is protecting the representation of winter habitat for mountain goats within the ungulate winter ranges established by this order;
5. Where there is any discrepancy between the ungulate winter range boundaries as shown in the attached Schedules A and the GIS file *tuwra_bc*, the boundaries as detailed in the GIS file will take precedent. The boundaries are established as the centre point of the line delineating the ungulate winter range;
6. The general wildlife measures 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*;
7. Pursuant to Section 7(3) of the *Forest Planning and Practices Regulation* a person who is required to prepare a forest stewardship plan is exempt from the requirement to prepare results or strategies in relation to the objective set out in Section 7(1) of the *Forest Planning and Practices Regulation* for the winter survival of mountain goats in the Mid Coast Timber Supply Area;
8. Where it becomes evident that any component of this order is in conflict with initiatives to implement government's land use policy for the Mid Coast Timber Supply Area, this order will be subject to amendment or rescission to the extent of the identified conflict;
9. The ungulate winter range and general wildlife measures established by this order are in effect until December 31, 2009 at which time they will be reviewed and a determination made whether to continue, amend or rescind these measures; and
10. The general wildlife measures outlined in Schedule 1 do not apply to First Nations who are undertaking traditional use of forest resources.

Schedule 1 – General Wildlife Measures

1. Subject to General Wildlife Measure 2, timber harvesting shall not occur within the designated ungulate winter ranges established by this order.
2. A person may carry out timber harvesting activities within the boundaries of individual ungulate winter range polygons established by this order, but may not impact the total area of ungulate winter range in a landscape unit by more than 10%.
 - (i) For information purposes, the Regional Manager, Ministry of Environment, Environmental Stewardship Division, Cariboo Region must be notified of timber harvesting activities to be carried out within individual ungulate winter range boundaries.
 - (ii) Maps of timber harvesting areas within ungulate winter ranges established by the order must be available to an official of the Ministry of Forests and Range or Ministry of Environment upon request.
3. Forest practices will not result in construction of new roads, trails, or landings in the ungulate winter range established by this order except where:
 - (a) the intent of these general wildlife measures will be achieved, or
 - (b) there is no other practicable option, and
 - (c) an exemption is granted under section 92(1) of the Forest Planning and Practices Regulation.
4. Where downed or damaged timber prevents goats from accessing an established winter range, an exemption from the requirement to comply with General Wildlife Measure 1 may be granted by the Minister of Environment or delegate.
5. An exemption from the requirement to comply with these general wildlife measures is not required for the purposes of activities related to safety matters, including but not limited to:
 - (a) felling of danger trees, guy line anchors, or tail hold anchor trees along adjacent cut block boundary,
 - (b) road maintenance, road deactivation,
 - (c) brushing and clearing on roads within wildlife habitat areas,
 - (d) construction of heli-drop sites on or along forest roads.
6. (a) Trees that must be felled under GWM 5, within an ungulate winter range established by this order, must be left as felled to provide coarse woody debris.
(b) Despite (a), a felled tree that lies in whole, or in part, outside an ungulate winter range may be harvested.
7. Activities that occur within a goat UWR shall not be undertaken when ungulate winter ranges established by this order are occupied by mountain goats during the period November 1 to April 15.
8. If primary forest activities are scheduled between November 1 and April 15, and are situated within 500 meters of a goat winter range during severe winter conditions, an assessment will be carried out by a qualified professional to determine whether the activities should commence, and what conditions should apply, in order that the activities do not result in material adverse disturbance of wintering goats.

9. Range developments such as but not limited to, watering holes, fences, salt blocks, corrals, access roads or livestock trails, will be constructed in a manner that does not result in increased risk of impact to the habitat of wintering mountain goats that may be caused by concentrating livestock in the ungulate winter ranges established by this order.


Signed this 27th day of Feb, 2007
Chris Trumphy, Deputy Minister
Ministry of Environment

Appendix 1

This Appendix is not part of this Order and is intended only to provide information that pertains to matters addressed by this Order. There is no requirement to comply with the information provided in this Appendix.

In this Appendix:

"Severe winter conditions" are to be determined on a case by case basis by the *Forest Act* agreement holder in consultation with the minister's delegate considering current winter weather conditions. Mild winter conditions reduce the need for timing restrictions on operations within or proximal to goat winter habitat.

"Occupied" is determined by site specific evidence of goat presence (visual recording, sign, trails) during the specified time period.

"Line of sight" refers to unobstructed view line direct from centre of winter range to area of activity. Topographic features and forest cover may screen wintering goats from flight paths or operations that otherwise result in material adverse disturbance.

1. Within 1500 meters of occupied goat winter range, road building involving blasting should be avoided during severe winter conditions between November 1 and April 15.
2. Subject to weather conditions, safety considerations, assessment by qualified professional, and screening provided by topographic features or forest cover, helicopter logging activities should be avoided in the vicinity of occupied goat winter ranges, during severe winter conditions between November 1 and April 15.
3. Improvements in land resource inventory and scientific information may lead to amendment(s) consistent with the *Government Action Regulation* of the goat ungulate winter ranges and associated measures including:
 - a) the addition of new, or deletion of existing, goat winter range polygons
 - b) the adjustment of goat winter range boundaries and
 - c) modification of a specific measure to address operational constraints while protecting goat populations and their habitat.
4. Authority to consider an exemption from these general wildlife measures is provided in Section 92(1) of the *Forest Planning and Practices Regulation*. In instances where the intent of the general wildlife measures can be achieved, or where it is not practicable to comply with these measures, a person choosing to conduct primary forest activities may consider seeking an exemption from the requirement to comply with the general wildlife measures applicable to the matter at hand.

An exemption application should be submitted to the Minister's delegate (Regional Manager – Ministry of Environment, Environmental Stewardship Division, Cariboo Region) with a rationale describing the nature of the problem, and options that integrate protection of the representation of mountain goat winter habitat with the

proposed forest 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. Exemption requests without supporting information will be returned to the proponent for resubmission. Forest practices must not commence prior to granting of the exemption, which may occur by facsimile to be followed up by written copy.

In cases where an exemption is being sought on the basis of section 92(1)(a) of the *Forest Planning and Practices Regulation*, it would be appropriate that a qualified professional biologist certify that intended forest practices will achieve the intent of the general wildlife measure(s) from which exemption is being sought. A rationale supporting the professional certificate would inform the exemption decision.

Upon receipt of an exemption application with supporting information, a determination will normally be made within 10 working days. If there are matters requiring clarification, the exemption applicant will be normally be contacted within 5 working days of receipt.



ORDER – Specified Area for Ungulates # U-5-005
North Island-Central Coast Forest District
Mid Coast TSA

This order is given under the authority of section 9(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004).

The Deputy Minister of Environment orders that:

1. The Specified Areas shown in the map set out in the attached Schedule A (#U-5-005) are established;
2. The Specified Areas in the attached Schedule A are established for coastal black-tailed deer (*Odocoileus hemionus columbianus*);
3. The general wildlife measures outlined in Schedule 1 are established for the Specified Areas in the attached Schedule A;
4. For the purposes of Section 92(1) of the *Forest Planning and Practices Regulation*, the management intent of the general wildlife measures established by this order is the protection of the ecological representation of suitable winter habitat for coast black-tailed deer within the Specified Areas established by this order;
5. Where there is any discrepancy between the Specified Area boundaries as shown in the attached Schedule A and the GIS file *tuwra_bc*, the boundaries as detailed in the GIS file will take precedent. The boundaries are established as the centre point of the line delineating each specified area;
6. The general wildlife measures 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*;
7. 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 black-tailed deer in the Mid Coast Timber Supply Area;
8. Where it becomes evident that any component of this order is in conflict with initiatives to implement government's land use policy for the Mid Coast Timber Supply Area, this order will be subject to amendment or rescission to the extent of the identified conflict; and
9. The general wildlife measures outlined in Schedule 1 do not apply to First Nations who are undertaking traditional use of forest resources.

Schedule 1 – General Wildlife Measures

In this Schedule:

“Designated deer winter habitat” means the areas of deer winter habitat designated by a *Forest Act* agreement holder, within the Specified Areas and within a landscape unit, for the purposes of complying with the general wildlife measures set out in this order.

- 1) The amount of designated deer winter habitat to be maintained in any one landscape unit is:
 - a) the required percentage of the cumulative area of Specified Area polygons within each landscape unit, as described in the general wildlife measures applicable to that landscape unit.
 - b) to be maintained on any locality within the boundaries of Specified Areas established in each landscape unit that meet forest age specifications, and the provisions of general wildlife measure 2 of this order.
- 2) In addition to the specifications of other general wildlife measures established by this order, a stand of trees that is identified as designated deer winter habitat in a Specified Area must:
 - a) be of a patch shape and size sufficient to provide interior forest conditions with canopy conditions that will provide snow interception and thermal cover,
 - b) provide herb and shrub forage communities that include species such as Western Red Cedar, Douglas Fir, Hemlock, Deer fern, Huckleberry, Salal, or arboreal lichens,
 - c) exhibit crown closure of between 56% and 85% (crown closure classes 6, 7, 8),
 - d) be comprised of forest stands that are leading in Douglas-fir, Sitka spruce or hemlock; and
 - e) to the extent practicable, be distributed in patches 2 to 5 km apart across a landscape unit.
- 3) A person carrying out primary forest activities in a landscape unit set out in Table 1 must maintain as designated deer winter habitat, a minimum of 25% of the Specified Area in that landscape unit, in forest cover of an age greater than 141 years.

Table 1	
Ape	Labouchere
Bella Coola	Nascall
Braden	Neechanz
Crag	Nekite
Dean	Owikeno
Don Peninsula	Roscoe
Doos/Dallery	Sheep Passage
Draney	Smokehouse
Ellerslie	Sutslem/Skowquiltz
Evans	Swindle

Jump Across	Talchacko/Gyllenspetz
Killipi	Twin
King Island	Washwash
Kwatna/Quatlana	Young
Kynoch	

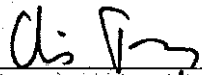
- 4) Subject to general wildlife measure 5, a person carrying out primary forest activities in a landscape unit set out in Table 2 must maintain as designated deer winter habitat, a minimum of 20% of the Specified Area in that landscape unit, in forest cover of an age greater than 141 years.
- 5) A person carrying out primary forest activities in a landscape unit set out in Table 2 will, within 80 years of the date of this order, maintain as designated deer winter habitat, a minimum of 25% of the Specified Area in that landscape unit, in forest cover of an age greater than 141 years.

Table 2	
Kilbella/Chuckwalla	Lower Kimsquit
Sumquolt	

- 6) Subject to general wildlife measures 7 and 8, a person carrying out primary forest activities in a landscape unit set out in Table 3 must maintain as designated deer winter habitat, a minimum of 20% of the Specified Area in that landscape unit in forest cover of an age greater than 121 years.
- 7) A person carrying out primary forest practices in a landscape unit set out in Table 3 will, within 80 years of the date of this order, maintain as designated deer winter habitat, a minimum of 25% of the Specified Area in that landscape unit in forest cover of an age greater than 141 years.
- 8) If necessary to achieve the minimum 20% target set out in general wildlife measure 6,
- (a) a recruitment strategy may specify alternate elevation, crown closure, species composition or age class criteria for stands proposed to be retained for the purpose of maintaining designated deer winter habitat, and
 - (b) where such a recruitment strategy may require amendment of Specified Area boundaries, amendment of this order will be considered.

Table 3	
Clayton	South Bentinck
Machmell	Smitley/Noeick
Nusatsum	Taleomey/Asseek
Salloompt	Upper Kimsquit
Sheemahant	Clyak

- 9) Persons carrying out primary forest practices in a Specified Area established under this order must locate on a map the stands of trees that are designated deer winter habitat. Maps showing the location of stands of trees that are designated deer winter habitat must be available upon request to an official of the Ministry of Forests and Range or the Ministry of Environment.
- 10) Where primary forest activities are to be carried out in a stand that is designated deer winter habitat, a person proposing to carry out the primary forest activities must identify and map an alternate stand or stands as designated deer winter habitat consistent with the general wildlife measures of this order. Records of such revisions to stands of trees that are designated deer winter habitat must be available upon request to an official of the Ministry of Forests and Range or the Ministry of Environment.
- 11) Unless there is no other practicable option, and subject to general wildlife measure 10, construction of roads, trails or landings must not occur within stands that are designated deer winter habitat.
- 12) An exemption from the requirement to comply with these general wildlife measures is not required for the purposes of activities related to safety matters, including but not limited to:
- (a) felling of danger trees, guy line anchors, or tail hold anchor trees along adjacent cut block boundary,
 - (b) road maintenance, road deactivation,
 - (c) brushing and clearing on roads within stands that are designated deer winter habitat.
 - (d) construction of heli-drop sites on or along roads.
- 13) Trees that must be felled within a stand that is designated deer winter habitat must be left onsite to provide coarse woody debris. A felled tree that lies in whole, or in part, outside the designated stand may be harvested.
- 14) Range developments such as but not limited to, watering holes, fences, salt blocks, corrals, access roads or livestock trails, will be constructed in a manner that does not result in impact to the suitability of deer winter habitat that may be caused by concentrating livestock in the ungulate winter ranges established by this order.


Signed this 29th day of Feb., 2007
Chris Trumpy, Deputy Minister
Ministry of Environment

Appendix 1

Note that this Appendix is not part of this Order and is intended only to provide information that pertains to matters addressed by this Order. There is no requirement to comply with the information provided in this Appendix.

- 1) The following criteria were used to identify areas that would be capable of providing deer winter habitat capability and were used to delineate the Specified Areas shown in Schedule A:

Attribute	Maritime	Sub-maritime
Aspect	135-270° and flat ground	135-270° and flat ground
Slope	≤ 80%	≤ 80%
Elevation	≤ 600 m	≤ 650m
Tree Age	≥ 141 (age classes 8, 9)	≥ 141 (age classes 8, 9)
Crown Closure	≥ 56% and ≤ 85% (cc classes 6, 7, 8)	≥ 56% and ≤ 85% (cc classes 6, 7, 8)
Tree Species	Douglas-fir OR Hemlock OR Sitka Spruce	Douglas-fir OR Hemlock OR Sitka Spruce
Thermal (sun/shade)	≥ 2	≥ 2

Other considerations:

- Capability polygons exclude all alienated lands including Parks.
 - Capability considerations did not extend to the hyper maritime climatic type
 - Polygons with areas that do not satisfy capability criteria, and that were less than 10 ha, were included in the area identified as capable of providing deer winter habitat.
- 2) Interior forest conditions that ameliorate temperature and snowmelt are achieved in areas greater than 50 m from a clear-cut edge. Therefore, deer winter habitat stands should be more than 100 m in width and greater than 40 hectares to produce Interior Forest Conditions. Designated stands may include topographic features such as rock outcrops or bluffs.
- 3) It is biologically preferable to distribute designated deer winter habitat at 2 - 5 km intervals throughout a landscape unit. However, if no other practicable alternatives exist within a landscape unit, designated deer winter habitat patches may be concentrated within areas of a landscape unit, with the intention that a person carrying out forest activities should achieve appropriate dispersal within 80 years.
- 4) The general wildlife measures provide flexibility for the purposes of enhanced integration of operational forestry considerations with requirements of wintering deer in each landscape unit. The provision is designed to allow the required amount of designated deer winter habitat in any one landscape unit to be delivered across the total area of Specified Areas in that landscape unit.

- 5) Some landscape units may be subject to the operations of multiple *Forest Act* agreement holders, and may include areas under Timber Licences. Cooperation between licence holders is strongly encouraged in order to design a mosaic of designated deer winter habitat that effectively complies with the established general wildlife measures. Timber Licences are capable of contributing to designated deer winter habitat requirements consistent with these general wildlife measures within the parameters of tenure rights associated with these licenses.
- 6) Improvements in land resource inventory and scientific information may lead to amendment of the Specified Areas and associated measures, including the:
 - a) addition or deletion of Specified Areas.
 - b) adjustment of Specified Area boundaries.
 - c) modification of general wildlife measures to address operational constraints while protecting the ecological representation of deer winter habitat.
- 6) Authority to grant an exemption from these general wildlife measures is provided in Section 92(1) of the *Forest Planning and Practices Regulation*. In instances where the intent of the general wildlife measures can be achieved, or where it is not practicable to comply with these measures, a person choosing to conduct primary forest activities may consider seeking an exemption from the requirement to comply with the general wildlife measures applicable to the matter at hand.

An exemption application should be submitted to the Minister's delegate (Regional Manager – Ministry of Environment, Environmental Stewardship Division, Cariboo Region) with a rationale describing the nature of the problem, and options that integrate protection of deer winter habitat representation with the proposed forest 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. Exemption requests without supporting information will be returned to the proponent for resubmission. Forest practices must not commence prior to granting of the exemption, which may occur by facsimile to be followed up by written copy.

In cases where an exemption is being sought on the basis of section 92(1)(a) of the *Forest Planning and Practices Regulation*, it would be appropriate that a qualified professional biologist certify that intended forest practices will achieve the intent of the general wildlife measure(s) from which exemption is being sought. A rationale supporting the professional certificate would inform the exemption decision.

Upon receipt of an exemption application with supporting information, a determination will normally be made within 10 working days. If there are matters requiring clarification, the exemption applicant will be normally be contacted within 5 working days of receipt.



ORDER – Wildlife Habitat Areas in Ministry of Environment Region 5 (Cariboo)
North Island-Central Coast Forest District
Mid Coast TSA

This order is given under the authority of sections 9(2) and 10(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004).

The Deputy Minister of Environment orders that:

1. The wildlife habitat areas shown in the map set out in the attached Schedule A (WHA numbers 5-120 to 5-123, 5-126 to 5-128, 5-131, 5-133, 5-136 to 5-150, 5-168 to 5-171; WHA numbers 5-172 to 5-188, 5-190 to 5-218, 5-224 to 5-277, 5-279 to 5-283, 5-285 to 5-305, 5-307 to 5-329, 5-331 to 5-351, 5-354 to 5-358, 5-361 to 5-442, 5-456 to 5-459; WHA Numbers 5-499 to 5-513, 5-515 to 5-525, 5-527 to 5-541), with boundaries as delineated in the GIS file *twha_bc*, are established.
2. The wildlife habitat areas in the attached Schedule A are established for Grizzly Bear (*Ursus arctos*);
3. The general wildlife measures outlined in Schedule 1 are established for the wildlife habitat areas set out in the attached Schedule A;
4. For the purposes of Section 92(1) of the *Forest Planning and Practices Regulation*, the management intent of the general wildlife measures established by this order is protection of the suitability of grizzly bear habitat within the wildlife habitat areas established by this order;
5. Where there is any discrepancy between the wildlife habitat area boundaries as shown in the Schedule A maps and the GIS file *twha_bc*, the boundary as delineated in the GIS file will take precedent. The boundary is established as the centre point of the line delineating each wildlife habitat area;
6. 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 Grizzly Bear in the North Island-Central Coast Timber Supply Area;
7. The general wildlife measures 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*;
8. Where it becomes evident that any component of this order is in conflict with initiatives to implement government's land use policy for the Mid Coast Timber Supply Area, this order will be subject to amendment or rescission to the extent of the identified conflict; and

9. The general wildlife measures set out in Schedule 1 do not apply to:
- a) First Nations who are undertaking traditional use of forest resources,
 - b) Cut blocks and roads that are listed in Table 1.0.

Table 1.0 – Cut blocks and road alignments associated with cut-blocks within the area of Forest License A16847

Landscape Unit	Cut Block
Neechanz:	N121, N122, N208, N170
Kilbella/Chuckwalla:	KH35, KH 36
Sheemahant:	S221H, a road segment to be located through WHA 5-204 to join with approved access alignments in the Lemolo Creek drainage of the Sheemahant watershed

Schedule 1 – General Wildlife Measures

1. Primary forest activities will result in protection of the forest cover and plant communities within the boundaries of the wildlife habitat areas established by this order.
2. Salvage of downed or damaged timber shall not be carried out within the wildlife habitat areas established by this order.
3. Forest practices will not result in construction of new roads, trails, or landings in the wildlife habitat areas established by this order except where:
 - (a) the intent of these general wildlife measures will be achieved, or
 - (b) there is no other practicable option, and
 - (c) an exemption is granted under section 92(1) of the Forest Planning and Practices Regulation.
4. Forest practices will result in the wind firmness of forest cover within the wildlife habitat areas established by this order.
5. Pesticides shall not be utilized to manage vegetation within the boundaries of the wildlife habitat areas established by this order
6. Range developments such as but not limited to, watering holes, fences, salt blocks, corrals, access roads or livestock trails, will be constructed in a manner that does not result in increased risk of mortality to grizzly bears that may be caused by concentrating livestock in the wildlife habitat areas established by this order.
7. An exemption from the requirement to comply with these general wildlife measures is not required for:
 - (a) the purposes of activities related to safety matters, including but not limited to:
 - (i) felling of danger trees, guy line anchors, or tail hold anchor trees along adjacent cut block boundary,
 - (ii) road maintenance, road deactivation,
 - (iii) brushing and clearing on roads within wildlife habitat areas.
 - (b) construction of heli-drop sites on or along roads, or where a qualified professional biologist determines that activities at the site will not result in material, adverse impact to the suitability of grizzly bear habitat.


Signed this 27th day of Feb, 2007
Chris Trumpy, Deputy Minister
Ministry of Environment

Appendix 1

Table 2. WHA Tag numbers for the WHA polygons approved in this order

5-120	5-177	5-211	5-249	5-283	5-318	5-354	5-389	5-422	5-507
5-121	5-178	5-212	5-250	5-285	5-319	5-355	5-390	5-423	5-508
5-122	5-179	5-213	5-251	5-286	5-320	5-356	5-391	5-424	5-509
5-123	5-180	5-214	5-252	5-287	5-321	5-357	5-392	5-425	5-510
5-126	5-181	5-215	5-253	5-288	5-322	5-358	5-393	5-426	5-511
5-127	5-182	5-216	5-254	5-289	5-323	5-361	5-394	5-427	5-512
5-128	5-183	5-217	5-255	5-290	5-324	5-362	5-395	5-428	5-513
5-131	5-184	5-218	5-256	5-291	5-325	5-363	5-396	5-429	5-515
5-133	5-185	5-224	5-257	5-292	5-326	5-364	5-397	5-430	5-516
5-136	5-186	5-225	5-258	5-293	5-327	5-365	5-398	5-431	5-517
5-137	5-187	5-226	5-259	5-294	5-328	5-366	5-399	5-432	5-518
5-138	5-188	5-227	5-260	5-295	5-329	5-367	5-400	5-433	5-519
5-139	5-190	5-228	5-261	5-296	5-331	5-368	5-401	5-434	5-520
5-140	5-191	5-229	5-262	5-297	5-332	5-369	5-402	5-435	5-521
5-141	5-192	5-230	5-263	5-298	5-333	5-370	5-403	5-436	5-522
5-142	5-193	5-231	5-264	5-299	5-334	5-371	5-404	5-437	5-523
5-143	5-194	5-232	5-265	5-300	5-335	5-372	5-405	5-438	5-524
5-144	5-195	5-233	5-266	5-301	5-336	5-373	5-406	5-439	5-525
5-145	5-196	5-234	5-267	5-302	5-337	5-374	5-407	5-440	5-527
5-146	5-197	5-235	5-268	5-303	5-338	5-375	5-408	5-441	5-528
5-147	5-198	5-236	5-269	5-304	5-339	5-376	5-409	5-442	5-529
5-148	5-199	5-237	5-270	5-305	5-340	5-377	5-410	5-456	5-530
5-149	5-200	5-238	5-271	5-307	5-341	5-378	5-411	5-457	5-531
5-150	5-201	5-239	5-272	5-308	5-342	5-379	5-412	5-458	5-532
5-168	5-202	5-240	5-273	5-309	5-343	5-380	5-413	5-459	5-533
5-169	5-203	5-241	5-274	5-310	5-344	5-381	5-414	5-499	5-534
5-170	5-204	5-242	5-275	5-311	5-345	5-382	5-415	5-500	5-535
5-171	5-205	5-243	5-276	5-312	5-346	5-383	5-416	5-501	5-536
5-172	5-206	5-244	5-277	5-313	5-347	5-384	5-417	5-502	5-537
5-173	5-207	5-245	5-279	5-314	5-348	5-385	5-418	5-503	5-538
5-174	5-208	5-246	5-280	5-315	5-349	5-386	5-419	5-504	5-539
5-175	5-209	5-247	5-281	5-316	5-350	5-387	5-420	5-505	5-540
5-176	5-210	5-248	5-282	5-317	5-351	5-388	5-421	5-506	5-541

043

Appendix 2

Note that this Appendix is not part of this Order and is intended only to provide information that pertains to matters addressed by this Order. There is no requirement to comply with the information provided in this Appendix.

1. Authority to consider an exemption from these general wildlife measures is provided in Section 92(1) of the *Forest Planning and Practices Regulation*. In instances where the intent of the general wildlife measures can be achieved, or where it is not practicable to comply with these measures, a person choosing to conduct primary forest activities may consider seeking an exemption from the requirement to comply with the general wildlife measures applicable to the matter at hand.

An exemption application should be submitted to the Minister's delegate (Regional Manager – Ministry of Environment, Environmental Stewardship Division, Cariboo Region) with a rationale describing the nature of the problem, and options that integrate protection of grizzly bear habitat suitability with the proposed forest 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. Exemption requests without supporting information will be returned to the proponent for resubmission. Forest practices must not commence prior to granting of the exemption, which may occur by facsimile to be followed up by written copy.

In cases where an exemption is being sought on the basis of section 92(1)(a) of the *Forest Planning and Practices Regulation*, it would be appropriate that a qualified professional biologist certify that intended forest practices will achieve the intent of the general wildlife measure(s) from which exemption is being sought. A rationale supporting the professional certificate would inform the exemption decision.

Upon receipt of an exemption application with supporting information, a determination will normally be made within 10 working days. If there are matters requiring clarification, the exemption applicant will be normally be contacted within 5 working days of receipt.

2. Treatment of areas within an established WHA that have previously been subject to timber harvesting.

The Ministry of Environment respects that the Wildlife Habitat Areas established by this order include areas of managed forest plantations that are also areas important to conservation of grizzly bear habitat suitability. Long term removal of these areas from the timber harvesting land base could be detrimental to economic timber availability. Timber harvesting activities could be designed for these areas that would improve habitat conditions, and permit a level of commercial timber utilization. Work will be undertaken through 2007 with the forest sector to develop a GWM applicable to these plantation areas. This order will be amended to incorporate this GWM.

045



ORDER – UNGULATE WINTER RANGE #U-1-011

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

The Deputy Minister of Environment orders that:

1. the ungulate winter range shown in the map set out in the attached Schedule A (#U-1-011) is established;
2. the ungulate winter range is established for black-tailed deer (*Odocoileus hemionus columbianus*), Roosevelt elk (*Cervus elaphus roosevelti*), Mountain goat (*Oreamnus americanus*), and Moose (*Alces alces*);
3. the general wildlife measures outlined in Schedule 1 are established for the ungulate winter range in the attached Schedule A;
4. the specified area as outlined in general wildlife measure 7, Schedule 1, is established;
5. for the purposes of section 2(3)(a) of the *Government Actions Regulation*, the general wildlife measures outlined in Schedule 1 apply to minor tenures;
6. where there is any discrepancy between the ungulate winter range boundaries as shown in the attached Schedules A and the GIS file *tuwra_bc*, the boundaries as detailed in the GIS file will take precedent. The centre point of the line on the map denoting the ungulate winter range is what establishes the boundary;
7. pursuant to section 7(3) of the *Forest Planning and Practices Regulation* the person(s) required to prepare a forest stewardship plan are hereby exempted 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 the winter survival of ungulates in the Kingcome Timber Supply Area; and
8. the general wildlife measures 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*.

Schedule 1: General Wildlife Measures:

1. Road construction is not to occur within the designated ungulate winter ranges unless there is no other practicable option and an exemption is approved by the MOE designated authority.

An exemption is not required for the construction of future extension of road P10 in UWR Unit No. NAH- 07, the Nahwitti East Mainline road in the upland portion of UWR Unit No. NAH- 03 north of Nahwitti River and Basin Mainline road in Unit No. KLA-03. The extension of these roads will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat.

MOE recognizes that the lower boundary of the UWR Unit No. WAK-08 is proposed along the 620 metre above sea level elevation line in the northwest portion of this UWR. It is expected that road construction would occur below this elevation. Amendments to the UWR boundary will be considered if it is not practicable to construct the road below this elevation.

2. An exemption is not required for road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads within the Ungulate Winter Range. These activities will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range.

3. Harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE designated authority. An exemption would normally only be considered for the purposes of enhancing the quality of the winter range. An exemption is not required for harvesting of Western Red Cedar trees within UWR Unit No. UK1-09 by selective helicopter removal ("single-stem harvest"). Maximum opening size for this operation will be less than 0.1 hectare. Licensees will notify the regional office of Ministry of Environment prior to initiating operations such that monitoring to evaluate vegetation response and animal use may be considered.

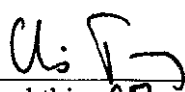
MOE recognizes that a 1 hectare helicopter drop zone is required for long term use in UWR Unit No. LKL-1. An exemption to general wildlife measure 3 will be considered subject to the extent of clearing and timing of use.

4. An exemption is not required for harvesting within the designated ungulate winter ranges when it is required to address worker safety: felling of danger trees, felling for guy line anchors, felling of tail hold anchor trees within an UWR along adjacent cutblock boundaries. Harvesting will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter ranges.

5. Trees that must be felled within an UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR.

6. Salvage harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE designated authority.

7. An authorized person who carries out a primary forest activity within 100m of a designated ungulate winter range, as per Schedule A, must ensure that the adjacent designated ungulate winter range is not materially adversely affected by foreseeable impacts of their activities.


Signed this 9th day of June, 2006
Chris Trumpy, Deputy Minister
Ministry of Environment

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