BRITISH COLUMBIA

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, ± 100 m elevation).