BRITISH COLUMBIA

NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE SPECIES IN TREE FARM LICENSE 48

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

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 Tree Farm License 48.

Schedule 1

Tree Farm License 48

Ungulate Species:
Rocky Mountain elk, Moose, Mule deer, White-tailed deer, Stone's sheep, Woodland caribou (northern ecotype)

Amount:

1) A maximum of 5,607 ha, not exceeding an impact to the timber harvesting landbase of 1,280 ha (UWR within the Dunlevy Creek Management Plan area); and,
2) A maximum of 3,042 ha not exceeding an impact to the timber harvesting landbase of 1,744 ha (UWR areas outside the Dunlevy Creek Management Plan area).

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

- Low-, mid- and high elevation ungulate winter range within the Dunlevy Creek Special Management Zone on the north shore of Williston Lake within the Peace Foothills ecosection.
- Winter ranges for elk, mule deer and moose within the following Resource Management Zones (RMZ's):
    - Major River Corridors Special Management Zone - Pine/Murray 3A, Sukunka River EB-3C
    - Agriculture/Settlement Resource Management Zone – Progress 7G
    - South Peace Enhanced Resource Management- Burnt River 4F
    - Multi-Values Foothills General Resource Management- Bullmoose Creek 5F

Attributes – Dunlevy Low Elevation:

I) Rocky Mountain Elk

1) Critical stand structure features: early seral foraging habitat interspersed with suitable security cover (e.g. dense forests with well developed shrub layers) and thermal cover (coniferous forest stands).

2) Topographic features: warm aspect (135^o to 284^o) slopes of 15^o to 45^o (Class 1) or 45^o to 70^o (Class 2); low elevations (< 1000 m) for Class 1 habitat; mid- to high elevations (<2000 m) for Class 2 habitat.

3) Winter forage species: graminoids; forbs; and to a lesser extent shrubs (preferred species include willow spp., pasture sage, Saskatoon, prickly rose, high-bush cranberry, soopolallie) and conifers.

4) Foraging habitat: warm aspects; prescribed burn areas; open, grassy slopes; early seral vegetation communities dominated by preferred winter foraging species.

5) Snow interception cover: coniferous stands at least 10 m in height with a canopy closure 60-90%.

6) Thermal/security cover: vegetative or topographic features (e.g. warm aspect slopes); coniferous stands >3 m tall and 100m wide; or structurally complex forest stands with high canopy closure (>70%); size range of 2.6 – 10.5 ha; structural stages 5, 6 and 7 in BWBS for security cover.

II) Mule Deer

1) Critical stand structure features: early seral foraging habitat interspersed with deciduous leading to coniferous leading forests.

2) Topographic features: moderate to steep warm aspect (135^o to 284^o) slopes (40-100%); low elevation.

3) Winter forage species: trees and shrubs (preferred browse species include aspen, willows, Saskatoon, red-osier dogwood, choke cherry, bearberry, dwarf birch, rose, juniper and snowberry); graminoids; and forbs.

4) Foraging habitat: moderate to steep warm aspect slopes (40-100%); prescribed burn areas; open, grassy/low shrub dominated slopes; early seral vegetation communities dominated by preferred winter foraging species.

5) Snow interception cover: coniferous stands at least 10 m in height with a canopy closure 60 - 90%.

6) Thermal/security cover: vegetative or topographic features (e.g. warm aspect slopes); structurally complex forest stands for security (e.g. mature – old forest stands with dense shrub understorey); dense young stands (>10 m tall) and old forest stands for thermal.

III) White-tailed Deer

1) Critical stand structure features: early seral foraging habitat interspersed with deciduous leading to coniferous leading forests.

2) Topographic features: gentle to moderate warm aspect (135^{o} to 284^{o}) slopes (20-70%); low elevation.

3) Winter forage species: trees and shrubs (preferred browse species include willows, Saskatoon, red-osier dogwood, soopolallie, highbush cranberry, rose); graminoids; forbs; arboreal lichens.

4) Foraging habitat: gentle to moderate warm aspect slopes (20-70%); open, grassy/shrub dominated slopes; early seral vegetation communities dominated by preferred winter foraging species; foraging habitat in close proximity to thermal/security.

5) Snow interception cover: coniferous stands at least 10 m in height with a canopy closure 60 - 90%.

6) Thermal/security cover: vegetative or topographic features (e.g. warm aspect slopes); structurally complex forest stands for security (e.g. mature – old forest stands with dense shrub understorey); dense young stands (>10 m tall) and old forest stands for thermal.

IV) Moose

1) Critical stand structure features: semi-open successional stages of forest habitat with an abundance of browse; preference for sub-climax stages of forest succession dominated by deciduous trees and shrubs (structural stages 3, 6 and 7).

2) Topographic features: early winter - low elevation valley bottoms (< 900 m) to high elevation sub-alpine/alpine (>1500 m) depending on snow pack; late winter – low elevation (< 900 m) valley bottoms; flat to moderately sloped terrain (< 40%); moose move to lower elevations once snow depths exceed 40 cm; snow depths > 70 cm can restrict movement.

3) Forage species: shrubs (preferred species include willow spp., paper birch, red-osier dogwood, aspen); graminoids and forbs where available.

4) Foraging habitat: floodplains/riparian habitat; regenerating burns; cut blocks; other areas with abundant preferred browse.

5) Thermal/escape cover: dense patches of coniferous cover interspersed with foraging habitat; or young coniferous stands that allow solar radiation but cut the wind.

V) Stone's Sheep

1) Topographic features: low to high elevation (900 m to 2000 m); alpine ridges and mountains; steep (>70% to >100 %) escape terrain; rugged terrain with windswept, vegetated slopes interspersed with rocky outcrops or cliffs; south to west-facing slopes.

2) Winter forage species: optimal plant communities include *Elymus-Agrpyron/Festuca* and *Dryas-Festuca* .

3) Foraging habitat: vegetated, windswept south to west-facing slopes interspersed with rocky outcrops/cliffs; foraging habitat bordered by parkland forests of Engelmann spruce and sub-alpine fir; all sheep within 500 m of escape terrain.

4) Snow interception cover: sub-alpine forest types; overhanging ledges and the sheltered side of cliffs/rocky outcrops.

Attributes – Dunlevy Mid Elevation

VI) Stone's Sheep (refer to Stone's Sheep attributes in *Dunlevy Low Elevation*)

Attributes – High Elevation

VII) Stone's Sheep (refer to Stone's Sheep attributes in *Dunlevy Low Elevation*)

VIII) Woodland caribou (northern ecotype: Graham herd)

1) Critical stand structure features: sub-alpine habitat – mature/old coniferous leading stands in the ESSF biogeoclimatic (BEC) zone; abundance of arboreal and terrestrial lichens; well-developed shrub layer.

2) Topographic features: steep, windswept slopes and alpine ridges (sub-alpine/alpine); elevation >1400 m.

3) Winter forage species: terrestrial and arboreal lichens; conifers, shrubs and graminoids to a lesser extent.

4) Foraging habitat: combination of windswept alpine and high elevation coniferous dominant forests (ESSF BEC zone) where there is an abundance of terrestrial and arboreal lichens.

5) Thermal/escape cover: topographic features to put distance between predators/moose and caribou, use of sub-alpine and alpine for overwintering habitat.

Attributes – Other TFL

I) **Rocky Mountain Elk** (refer to Rocky Mountain Elk attributes in *Dunlevy Low Elevation*)

II) **Mule Deer** (refer to Mule Deer attributes in *Dunlevy Low Elevation*)

III) **Moose** (refer to Moose attributes in *Dunlevy Low Elevation*)