**DRAFT - For discussion/example purposes only. 30 Apr 2020.**

Biophysical Attribute Descriptions

The biophysical attributes for fisher critical habitat are categorized by the types of habitat used by fisher in accordance with seasonal and life-stage activity which include broad scale biogeoclimatic zones, Reproductive Denning Habitat, Resting Habitat, and Movement Habitat. Biophysical attributes will vary between “fisher habitat zones”, subsequently, this information is provided in the below tables by “fisher habitat zone”.

Fisher Critical Habitat

1. In this section:
   1. “range of fishers” includes the natural resource districts:
      1. Coast: Sea to Sky, Sunshine Coast, Campbell River, North Island – Central Coast
      2. North: Mackenzie, Stuart Nechako, Prince George, Coast Mountains, Nadina
      3. South: 100 Mile House, Cariboo – Chilcotin, Quesnel, Rocky Mountain, Selkirk, Cascades, Okanagan Shuswap, Thompson Rivers
   2. “fisher habitat zone” means an area that is within the range of fishers and is located in a biogeoclimatic zones or subzone that is:
      1. Sub-boreal Habitat Zone: Moist or wet; SBS: SBSwk, SBSmk, SBSmm, SBSmw;
      2. Sub-boreal Habitat Zone: Dry; SBS: SBSdw, SBSdh, SBSd
      3. Dry Forest Habitat Zone: SBPSxc, SBPSmc, SBPSdc, SBPSmk, IDFdk, IDFdc, IDFmw, IDFdw, IDFww, MSxc, MSxk, MSdv, MSdm, MSdk, MSdc
   3. “fisher territory” means the area providing a female fisher with all her habitat requirements. Size requirements vary by fisher habitat zone:
      1. Sub-boreal Habitat Zone, Moist or wet: 50-km²
      2. Sub-boreal Habitat Zone, Dry: 25-km²
      3. Dry Forest Habitat Zone: 30-km²

Fisher Critical Habitat Categories

1. Fisher Critical Habitat has the following categories as follows: [Table 1 would follow here]
   1. Reproductive Denning Habitat: cavities required to successfully give birth and rear young.
   2. Resting Habitat: Rust broom sites: secure locations required during daily activity bouts.
   3. Resting Habitat: Cavity sites: secure locations required during daily activity bouts.
   4. Resting Habitat: Coarse woody habitat: secure locations required during daily activity bouts.
   5. Movement Habitat: required to safely travel between important habitats within and between territories

Protection of fisher critical habitat

To avoid destruction of critical habitat, an authorized person who carries out a primary forest activity must conduct the primary forest activity at a time and in a manner that is unlikely to destroy, damage, or have a material adverse effect on fisher habitat.

1. To avoid a material adverse effect an agreement holder must meet the following:
   1. Within a 12-year period the net area of harvesting within a fisher territory can not exceed 10%
   2. If an agreement holder completes harvesting in one or more cutblocks, the holder must ensure that, the total area each habitat category affected by the cutblocks does not fall below that values described in Table 2 within the area related to the cutblocks.
   3. The minimum reserve tree requirements in fisher habitat zones are as follows (Insert Table 3 here).
   4. Subject to d, if minimum reserve tree requirements cannot be met within the stand the deficiencies will be made up by the next largest available tree to provide for recruitment.

Table 1. Habitat Category Descriptions (at stand level)

|  |  |  |  |
| --- | --- | --- | --- |
| Fisher Habitat Categories | Sub-boreal Habitat Zone - Moist or wet | Sub-boreal Habitat Zone – Dry | Dry Forest Habitat Zone |
| Reproductive Denning Habitat | * Black cottonwood (Act) leading, secondary, or tertiary species (or hybrid spruce (Sx) as only species) * Crown closure ≥30% * QMD\_125 ≥28.5 cm * Basal area ≥29.7 m²/ha * Stand age ≥125 years | * Act leading, secondary, or tertiary species (or hybrid spruce (Sx) as only species) * Crown closure ≥20% * QMD\_125 ≥28 cm * Basal area ≥28 m²/ha * Stand age ≥125 years | Black cottonwood (Act) denning stands:   * Act leading or secondary species. * Stand age ≥135 years   Trembling aspen (At) denning stands:   * At leading or secondary species * Stand age ≥135 years   Douglas-fir (Fd) denning stands:   * Fd as only species * Crown closure ≥20% * QMD\_125 ≥34.3 cm * Stand age ≥207 years |
| Resting Habitat: Rust broom sites | |  | | --- | | * Hybrid spruce (Sx) leading, secondary, or tertiary species. * Crown closure ≥30% * QMD\_125 ≥22.7 cm * Basal area ≥35 m²/ha * Stand age ≥135 years * Stand height ≥23.7 m | | |  | | --- | | * Sx leading, secondary, or tertiary species * Crown closure ≥25% * QMD\_125 ≥19.6 cm * Basal area ≥32 m²/ha * Stand age ≥72 years | | |  | | --- | | * Sx leading, secondary, or tertiary species * Crown closure ≥40% * QMD\_125 ≥20.1 cm * Stand age ≥83 years | |
| Resting Habitat: Cavity sites | |  | | --- | | * Act or At leading, secondary, or tertiary species * Crown closure ≥25% * QMD\_125 ≥30 cm * Basal area ≥32 m²/ha * Stand height ≥35 m | | |  | | --- | | * Act or At leading, secondary, or tertiary species * Crown closure ≥25% * QMD\_125 ≥30 cm * Basal area ≥32 m²/ha * Stand height ≥35 m | | Not described for this habitat zone |
| Resting Habitat: Coarse woody habitat | |  | | --- | | * QMD\_125 ≥22.7 cm * Stand age ≥135 years * Stand height ≥23.7 m | | |  | | --- | | * QMD\_125 ≥22.7 cm * Stand age ≥135 years * Stand height ≥23.7 m | | * Hybrid spruce (Sx) or Trembling aspen (At) >25% of stand (SPECIES\_PCT) * Stand age ≥100 years |
| Movement Habitat | * Total cover ≥50% (≥30% shrub and ≥20% tree cover) | * Total cover ≥50% (≥30% shrub and ≥20% tree cover) | * Total cover ≥50% (≥30% shrub and ≥20% tree cover) |

Table 2. Minimum amounts of Fisher Habitat Category thresholds per area surrounding cutblocks

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| --- | --- | --- | --- |
| Fisher Habitat Categories | Sub-boreal Habitat Zone - Moist or wet | Sub-boreal Habitat Zone – Dry | Dry Forest Habitat Zone |
| Female Territory Size | Minimum hectares of habitat needed per 50-km² | Minimum hectares of habitat needed per 25-km² | Minimum hectares of habitat needed per 30-km² |
| Reproductive Denning Habitat | |  | | --- | | 247 ha (4.9%) | | |  | | --- | | 129 ha (5.2%) | | 232 ha (7.7%) |
| Resting Habitat: Rust broom sites | |  | | --- | | 1095 (21.9%) | | |  | | --- | | 544 ha of (21.8%) | | 420 ha (14.0%) |
| Resting Habitat: Cavity sites | |  | | --- | | 10 ha (0.2%) | | |  | | --- | | 15 ha (0.6%) | | Not described for this habitat zone |
| Resting Habitat: Coarse woody habitat | |  | | --- | | 1,410 ha (28.2%) | | |  | | --- | | 371 ha (14.8%) | | 450 ha (15.0%) |
| Movement Habitat | |  | | --- | | 3060 ha (61.2%) | | |  | | --- | | 770 ha (30.8%) | | 1634 ha (54.5%) |

Table 3. To provide retention of structural attributes, the following minimum retention targets must be met. If structures of the identified descriptions are not available, retain the next available smaller classes to provide for recruitment.

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| --- | --- | --- | --- |
| Fisher Habitat Categories | Sub-boreal Habitat Zone - Moist or wet | Sub-boreal Habitat Zone – Dry | Dry Forest Habitat Zone |
| Reproductive Denning Habitat | Act ≥90 cm dbh (18 stems/ha) | Act ≥90 cm dbh (0.3 stems/ha) | Act ≥90 cm dbh or At ≥44 cm dbh or Fd ≥65 cm dbh or non-merchantable Pl ≥35 cm dbh (0.5 stems/ha) |
| Resting Habitat: Rust broom sites | Sx ≥39 cm dbh with rust brooms (4.7 stems/ha) | Sx ≥39 cm dbh with rust brooms (3.3 stems/ha) | Sx ≥27 cm dbh with rust brooms (stems/ha) |
| Resting Habitat: Cavity sites | Act ≥77 cm dbh or At ≥59 cm dbh (9.9 stems/ha) | Act ≥77 cm dbh or At ≥59 cm dbh (2.0 stems/ha) | Not described for this habitat zone |
| Resting Habitat: Coarse woody habitat | Single pieces of CWD ≥35 cm diameter, ≥7 m in length, elevated 25-50 cm above ground (2.7 pieces/ha), | Single pieces of CWD ≥35 cm diameter, ≥7 m in length, elevated 25-50 cm above ground (1.7 pieces/ha), | Single pieces of CWD ≥20 cm diameter, ≥10 m in length, elevated 25-50 cm above ground (10.0 pieces/ha) |
| Resting Habitat: Coarse woody habitat - Man-made piles | piles >3 m x 5 m x 2 m high, with >30% of pieces being >20 cm diameter >3 m long (0.5 piles/ha) | piles >3 m x 5 m x 2 m high, with >30% of pieces being >20 cm diameter >3 m long (0.5 piles/ha) | piles >3 m x 5 m x 2 m high, with >30% of pieces being >20 cm diameter >3 m long (0.5 piles/ha) |