

## Appendix 8 – Unresolved General Management Objectives and Strategies

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As indicated in Chapter 4, this Appendix contains a complete listing of all strategies still under discussion at the time of the deadline for CCLCRMP completion table. This appendix does not include objectives and strategies specifically addressed in the EBM Handbook.

This listing is provided for information only and on the clear understanding that (i) these have not been agreed to, (ii) they are listed only to demonstrate the full range of potential strategies under discussion, (iii) the list is not a complete list of the strategies discussed or contemplated by the Completion Table during its deliberations, and (iv) the final strategies for each objective as determined through government-to-government decisions may include some or all of the strategies as listed below, either as is or amended, and/or additional and/or entirely different strategies. It is to be noted that the objectives as listed below are as agreed to in Chapter 4 of the Completion Table Report – it is only the listed strategies themselves that were outstanding at the deadline for completion.

### **4.2.2 HYDRORIPARIAN AND AQUATIC ECOSYSTEMS**

#### **Aquatic Eco-systems**

Objective: Designate and protect sensitive and high value watersheds

### **4.2.3 FISH AND WILDLIFE HABITAT**

#### **Red/Blue Listed, Regionally Rare, and Focal Species Habitat**

- Implement and designate Ungulate Winter Ranges (UWRs) for mountain goats, deer and moose (as per the Forest and Range Practices Act or FRPA).
- Designate Wildlife Habitat Areas (WHAs) as per the Identified Wildlife Management Strategy (IWMS) for marbled murrelets, northern goshawks, grizzly bears, tailed frogs and other IWMS wildlife.
- Plan and provide for a wide variety of habitats for fish and wildlife in forested and non forested ecosystems.

#### **Critical Wildlife Habitat Features**

- No herbicide, pesticide or fungicide application in high value wildlife habitat or within UWRs, WHAs or IWMS or SARA identified species habitats.

#### **Raptor, Waterfowl, Furbearer and Bat Species**

- A. Manage forest, land and resource developments to sustain a diversity of raptor, waterfowl, furbearer and bat species.

- MWLAP will develop and recommend Best Management guidelines for habitat management and protection of raptors, waterfowl, furbearers and bats to the EBM Council in consultation with First Nations and local communities.
- Protect identified critical habitat features for raptors, furbearers, bats and waterfowl.
- Where WLAP has identified the bat sub-species present (ssp), known hibernacula, maternity colonies, roosting sites, adjacent foraging areas, movement corridors, and habitat management requirements for the bat ssp will be identified.
- Industrial access in and around wetlands will be minimize during the breeding season (consult with the First Nations, local communities and WLAP staff for breeding season time frames depending on species present).
- Eagle nests identified at the site scale will be managed to minimize impacts from logging and other resource developments.
- Reduce use of insecticides during nesting, moulting, hatching and fledgling time

### **Inventory**

- Establish precautionary levels for fish and wildlife populations based on inventory.

### **Critical Habitat**

#### **A. Protect critical habitat for Marbled Murrelet (MAMU)<sup>1</sup> .**

- Suitable habitat for MAMU will be designated as WHAs as outlined the IWMS and other MAMU initiatives.
  - Maintain an appropriate quantity and quality of MAMU nesting habitat as per recommendations.
  - Where feasible, locate suitable nesting habitat to also meet the objectives for biodiversity e.g., red-listed plant communities, wildlife tree patches, old growth retention areas and riparian reserves.
  - Maintain larger contiguous areas of mature or old forest where possible to avoid fragmentation of habitat.
  - Patch size distribution should consider the potential for optimizing the functional integrity of MAMU habitat.
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#### **B. Protect critical nesting and foraging habitat for Northern Goshawk (NOGO).**

- Suitable habitat for NOGO will be designated as Wildlife Habitat Areas as outlined in the IWMS.
  - Maintain all known NOGO nest areas with sufficient mature and old growth forest to allow continued occupancy and successful reproduction.
  - Maintain sufficient foraging habitat adjacent to nest areas to allow continued occupation of the breeding territory.
  - Plan to include nest areas in Ungulate Winter Ranges (UWRs), OGMAs, and other retention areas.
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#### **C. Maintain critical habitat for moose, deer and goats<sup>2</sup>.**

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<sup>1</sup> For more information, see the MAMU habitat suitability map from Phase 1 at:  
<ftp://ftp.env.gov.bc.ca/dist/rmd/landuse/lrmp/ccoast/maps/jpeg/mamu400.jpeg>

<sup>2</sup> For more information on Goats, see the Goat habitat suitability map from Phase 1 at:  
<ftp://ftp.env.gov.bc.ca/dist/rmd/landuse/lrmp/ccoast/maps/jpeg/goats400.jpeg>

- Based on inventory, high value moose, deer, and mountain goat winter range will be confirmed and established as UWRs as per the Forest and Range Practices Act (FRPA).
  - Appropriate silvicultural techniques will be applied to forest developments within and adjacent to identified winter range areas.
  - Ensure ongoing inventory and monitoring.
  - Winter range areas will be located to incorporate forest interior conditions and where possible combined with WHAs, OGMAs and other retention areas.
  - Provide high suitability snow interception cover and foraging opportunities at landscape and stand scale.
  - Manage for abundant shrub species which are preferred browse species.
  - Do not use aerial herbicide applications in winter ranges.
  - Sanitation or salvage activities may occur within winter ranges.
  - Maintain or enhance forage production (manage for the desired plant community) in mountain goat winter ranges.
  - Important mountain goat habitats (mineral licks, natal areas, etc.) adjacent to or near escape terrain and available forage will be maintained.
  - Maintain forest cover adjacent to escape terrain.
  - Avoid the promotion of recreational activity in winter ranges.
  - Heli-skiing may be permitted within identified mountain goat winter habitat provided the area is unoccupied.
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D. Protect critical habitat for Kermode bears in the Tolmie Landscape unit (and others if applicable).

- The province to work with forest licensees, First Nations and the community to develop critical Kermode bear foraging habitat mitigation and restoration requirements by:
    - classifying and mapping bear habitat at an appropriate scale;
    - evaluating seasonal habitats and develop seasonal capability and suitability ratings;
    - modifying capability/ suitability ratings for habitat alteration; and
    - modifying habitat suitability ratings for patch-specific attributes.
  - The province to work with forest licensees, First Nations and communities to develop operational guidelines for bear patch mitigation and restoration. Guidelines shall address roadway rehabilitation, use of prescribed fire, silviculture treatments for small clustered stands, stand tending to lower than normal stem densities, etc.
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E. Protect critical habitat for Tailed Frogs.

- Suitable habitat for tailed frogs will be designated as WHAs as outlined in the IWMS.
  - In streams designated as WHAs for tailed frogs, maintain water quality, flow regimes and sediment free undisturbed areas.
  - Maintain structural elements of mature forest adjacent to tailed frog WHAs (e.g. large woody debris and cover for shade to maintain cool moist temperatures).
  - Maintain wind firmness, stable channel beds with coarse rocky substrates and coarse woody debris in tailed frog WHAs.
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#### 4.2.4 GRIZZLY BEAR

**Population** – Maintain the abundance and diversity of Grizzly Bears in the LRMP area.

- If populations fall below minimum viable population estimates for the plan area as a whole, management will be coordinated with planning areas outside of the Central Coast area.
  - Bear mortality from all human causes is not to exceed 4% of the estimated population.
  - Less than 30% of bear mortality is female.
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**Forage** – Maintain adequate forage for grizzly bears within managed forest stands by maintaining productive understories and natural levels of downed wood.

- Limit Crown closure within regenerating stands.
  - Retain 50 – 100% of existing pieces of large woody debris, where supply of coarse woody debris is shown through assessment to be adequate at the watershed scale less than 100% can be retained.
  - Assess the implications to bear foraging of reduced large woody debris in second growth stands..
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**Habitat** – Maintain the function of and connectivity amongst critical grizzly bear habitats<sup>3</sup>, including functional visual (security) and resting (bedding) cover.

- No alteration of critical habitats, unless no practicable alternative exists. Where alteration within critical habitats is unavoidable the developer must assess risks to grizzly bears and implement strategies to minimize or mitigate impacts.
  - Configure areas of forested cover within altered critical habitat to provide interior forest conditions that minimize wind exposure, provide shading, maintain natural drainage patterns, and prevent the introduction of prolific understory growth<sup>4</sup>.
  - Critical grizzly bear foraging habitat mitigation and restoration requirements will be developed by:
    - classifying and mapping grizzly bear habitat at an appropriate scale;
    - evaluating seasonal habitats and develop seasonal capability and suitability ratings;
    - modifying capability/ suitability ratings for habitat alteration;
    - modifying habitat suitability ratings for patch-specific attributes;
    - consultation with First Nations and local communities.
  - Where necessary, undertake measures to protect the ecological function of effective critical habitat. For example:
    - Maintain natural drainage patterns;
    - Prevent disruption of the natural distribution of snow avalanching;
    - Prevent wind-throw within critical habitats by leaving wind-firm buffers.
  - Maintain natural light levels.
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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.

Timber supply impacts of forest cover within critical habitat were modelled based on a 50m buffer equivalent in TSR II

**Access** – Minimize road-induced displacement and mortality risk of bears within or adjacent to critical habitats.

- No new active roads within 100 m of critical habitat, unless no practicable alternative exists.
- Where roads must be built within 100m of critical habitat , the developer must implement strategies to minimize or mitigate risk of bear displacement and mortality. One such strategy is visual screening of habitat from roads.

### **Area Specific Direction (Map 12, Appendix 1)**

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A. **Access** – Minimize mortality risk to bears related to motorized road access at the watershed scale in the Saloompt, Nusatsum, Clayton, Talchako/Gyllenspetz and Smitley/Noeick landscape units.

- Deactivate all shore-accessible non public roads once operations become fallow. The developer must implement strategies to minimize or mitigate risk to bear mortality if deactivation is not desired.
- Consider closing access in sub-basins of important grizzly bear river valleys for 50 years after stands reach the free-to-grow stage (i.e. rotate forest activity among several sub-basins).

Strive to minimize the number of connected road networks through access planning.