

Sustainable Resource Management Plan

Biodiversity Chapter for Soo Landscape Unit



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1.0 Introduction

This report provides background information used during the preparation of the Sustainable Resource Management Plan and associated proposed legal objectives for the Soo Landscape Unit (LU). Specifically, this report forms the biodiversity conservation chapter of the plan. A description of the landscape unit, discussion on significant resource values, and an old growth management area (OGMA) summary and rationale are provided.

Biological diversity or biodiversity is defined as: *'the diversity of plants, animals and other living organisms in all their forms and levels of organization, and includes the diversity of genes, species and ecosystems as well as the evolutionary and functional processes that link them'*¹.

British Columbia is the most biologically diverse province in Canada. In British Columbia, 115 species of known vertebrates and 364 vascular plants are listed for legal designation as threatened or endangered². The continuing loss of biological diversity will have a major impact on the health and functions of ecosystems and the quality of life in the province (Resources Inventory Committee, 1998).

Planning for OGMA and Wildlife Tree Patch (WTP) biodiversity values is recognized as a high priority for the province. LU planning is an important component of the *Forest Practices Code of British Columbia Act* (FPC) which allows legal establishment of objectives to address landscape level biodiversity values. Implementation of LU Planning is intended to help sustain certain biodiversity values. Managing for biodiversity through retention of old growth forests is not only important for wildlife, but can also provide important benefits to ecosystem management, protection of water quality and preservation of other natural resources. Although not all elements of biodiversity can be, or need to be, maintained on every hectare, a broad geographic distribution of old growth ecosystems is intended to help sustain the genetic and functional diversity of native species across their historic ranges.

The Squamish Forest District has completed draft LU boundaries and assigned draft Biodiversity Emphasis Options (BEO) in accordance with the direction provided by government. There are 20 LUs within this district. Through a ranking process (see Appendix I) the Soo LU was rated as a Low BEO. Current government direction requires that priority biodiversity provisions, including the delineation of Old Growth Management Areas and Wildlife Tree Retention (WTR), be undertaken immediately. This work was completed in partnership between the Ministry of Sustainable Resource Management (MSRM) and forest licensees holding tenure within the LU. Funding was provided by the Forest Investment Account and MSRM. Input was also provided by Ministry of Water, Land and Air Protection (MWLAP).

Input from First Nations was gathered during consultation between MSRM and individual First Nations. Comment from the public and other agencies was sought during the 60 day public review and comment period. A summary of public comments is included in Appendix III. Refer to the attached map for the location of OGMA's and old growth representation from protected areas.

Supporting documentation regarding government policy, planning processes and biodiversity concepts are provided in the 1995 *Biodiversity Guidebook*, the 1999 *Landscape Unit Planning*

¹ Definition of biodiversity is from page 2 of the Forest Practices Code *Biodiversity Guidebook* (September, 1995).

² BC Species and Ecosystems Explorer. 2003. Victoria, British Columbia. Available at: <http://srmapps.gov.bc.ca/apps/eswp/>

Guide (LUPG), the *Vancouver Forest Region Landscape Unit Planning Strategy (1999)*, as well as *Sustainable Resource Management Planning Framework: A Landscape-level Strategy for Resource Development*.

2.0 Landscape Unit Objectives

Landscape Unit objectives will be legally established within the framework of the FPC and as such will become Higher Level Plan objectives. Other operational plans must be consistent with these objectives.

The Soo LU received a Low BEO through the biodiversity value ranking and BEO assignment processes completed earlier (See Appendix I). Table 1 lists the percentage of the LU’s productive forest area by natural disturbance type (NDT) required for old seral representation. The percentage of cutblock area required as WTR for each of the LU’s Biogeoclimatic Ecosystem Classification (BEC) units are also listed. The target figures listed in Table 1 are derived from Appendix 2 of the *Landscape Unit Planning Guide (LUPG)*. Assignment of a lower BEO does not imply that wildlife and biodiversity values are low, rather, it is a reflection of these values relative to other areas in the Soo Timber Supply Area (TSA) and Tree Farm Licence 38. These objectives apply only to provincial forest lands within the LU.

Table 1. Required Levels for Old Seral Representation and Wildlife Tree Retention

BEC Unit and NDT ¹	Productive Forest Ha	LUPG Old Seral Representation Target ²		WTR Objective ³ (% of cutblock area)
		%	Ha	%
CWHds1 (NDT 2)	3733.5	>9	>336	8
CWHms1 (NDT 2)	12,536.1	>9	>1,128	7
MHmm2 (NDT 1)	5,133.2	>19	>975	3
Totals	21402.8		2,439	

1 NDT = Natural Disturbance Type. Refer to LUPG, Appendix 2.

CWHds1: Coastal Western Hemlock biogeoclimatic zone, southern dry subarctic variant

CWHms1: Coastal Western Hemlock biogeoclimatic zone, southern moist subarctic variant

MHmm2: Mountain Hemlock biogeoclimatic zone, leeward moist maritime variant

2 % of total productive forest area within BEC variant, as per LUPG.

3 WTR objectives. Refer to the LUPG, Appendix 3.

Old seral representation targets listed in Table 1 have been met through the delineation of OGMA’s throughout the Soo LU. Refer to the attached Soo LU map for the location of OGMA’s and old growth representation from parks, to Appendix V for OGMA attributes and to Table 2 for a breakdown of non-contributing (NC), constrained Timber Harvesting Landbase (THLB) and unconstrained THLB components.

Table 2. Non - Contributing, Constrained THLB and Unconstrained THLB Components of the Soo LU OGMA

BEC Variant	Total Old Seral Representation ¹	Non-Contributing ² Area in OGMA				Constrained THLB ³ in OGMA*		Unconstrained THLB ⁴ in OGMA	
	Ha	Park Ha	%	Other Ha	%	Ha	%	Ha	%
CWHds1	340.0	65.5	19.3	124.4	36.6	29.7	8.7	120.4	35.4
CWHms1	1133.5	60.6	5.3	819.7	72.3	63.7	5.6	189.4	16.7
MHmm2	977.7	385.4	39.4	585.1	59.8	7.2	0.7	0	0
TOTAL	2451.1	511.5	20.8	1529.2	62.4	100.5	4.1	309.8	12.6

Note: any differences in totals are due to rounding.

1 This column represents the actual amount of OGMA established based on targets from Table 1.

2 Non-Contributing Area in OGMA = productive forest land that does not contribute to the allowable annual cut (AAC), subject to 100% netdown.

3 Constrained THLB in OGMA = Timber Harvesting Land Base that cannot fully contribute to the AAC due to site sensitivity or the need to manage for other resource values.

4 Unconstrained THLB in OGMA = THLB area (productive forest land) that is available for harvesting.

*30 ha of the 100.5 ha from the constrained THLB are part of the THLB. The remaining 70.5 ha are part of the non-contributing OGMA area.

3.0 Landscape Unit Description

3.1 Biophysical Description

The Soo LU covers a total area of 62,515 ha, encompassing the Soo River and Rutherford Creek watersheds. These rivers drain into the Green River, which flows into the Lillooet River. Of the total LU area, 21,685 ha (35%) is within the Crown forest land base, and 9,461 ha of Crown forest is within the THLB. The remaining 40,830 ha (65%) are non-forested (rock, alpine, and water) or non-Crown (private land) and have been excluded from any OGMA contributions and calculations.

The Soo LU lies within the Pacific Ranges Ecoregion, Eastern Pacific Ranges ecoregion. The majority of the LU is located north-west of Highway 99 between Whistler and Pemberton. The Soo River and Rutherford Creek headwaters are fed by the Pemberton Icefield. The lowest elevation climate in this LU is characterised by warm and dry summers with winters that are cool and moist, resulting in moderate snowfalls. Temperature decreases and moisture increases along with the elevation. At high elevations, the summers are short, cool and moist while winters are longer, moist and cold with high snowfall levels.

There are four BEC variants within the Soo LU. These fall into three NDTs³. The Mountain Hemlock *leeward* moist maritime variant (MHmm2) falls within NDT 1, the Coastal Western Hemlock *southern* dry subarctic variant (CWHds1) and CWH *southern* moist subarctic variant (CWHms1) are within NDT 2, and the Alpine Tundra (ATunp) is in NDT 5.

³ NDT1 encompasses those ecosystems with rare stand initiating events. NDT2 includes ecosystems with infrequent stand initiating events. NDT5 is Alpine Tundra or other parkland ecosystems that are not considered forested. For a more complete description of NDTs see the *Biodiversity Guidebook* (1995).

Lower elevation, productive and gentle terrain sites have been extensively altered by forest harvesting, fires, mining and other disturbance factors. The low level of old seral forest remaining within the lower elevation BEC variant reflects this disturbance history. The Soo LU has, however, met most of the old growth representation targets within productive forest mainly from the non-contributing landbase.

3.2 Significant Resource Values

The Soo LU contains a variety of natural, social and cultural values. Some private land exists in the LU and major transportation and hydro routes are located in the eastern part. There are no major urban settlements within the LU although the resort community of Whistler is located to the south. Road access is based on the main forest roads along the Soo River and Rutherford Creek.

Fish Wildlife and Biodiversity: The Soo LU contains a wide range of natural resource values and features. The Soo, Green and Rutherford Rivers contain large and small wetlands, extensive rock bluffs, alpine meadows and avalanche tracks.

Three species of Identified Wildlife are known to occur within the Soo LU: grizzly bear, mountain goat, and bull trout. Grizzly bears are usually restricted to more remote portions of the LU such as the forested or lush alpine headwater areas of the Soo and Rutherford rivers, although occasional sightings of grizzlies within other portions of the LU have been reported. Grizzly bears in the Soo LU are part of the threatened Squamish-Lillooet grizzly bear population unit for which a Recovery Plan has yet to be written. In general, the Recovery Plan once completed will include objectives and strategies to protect and/or enhance grizzly bear habitat values. Provisions exist within the Identified Wildlife Management Strategy to protect some critical foraging or security habitat within Wildlife Habitat Areas (WHA). Designation of WHAs may occur as necessary or as part of the Recovery Plan to protect additional grizzly habitat. Grizzly bear habitat was considered during OGMA selections in the Soo LU.

Seventeen Mountain goat winter range (GWR) habitat areas have been identified and approved by MWLAP throughout the Soo LU. OGMAs have been placed within and adjacent to the areas constrained by this resource value where forests are suitable. These winter ranges were incorporated into OGMAs to maximise overlap between OGMA delineation and specific wildlife habitat requirements. However, since GWR habitats typically occur on steep, rocky, southerly aspect sites, not all old growth stands within GWR areas have been included to ensure biodiversity representation was not concentrated in a particular stand type.

The Green River supports anadromous species up to Nairn Falls, and resident bull trout above the falls. The Soo River is a relatively low productivity stream due to high seasonal run off and low levels of instream nutrients, although it still supports introduced resident rainbow trout throughout its low gradient reaches. Most of the Rutherford stream system also supports resident rainbow trout.

A stable population of moose reside in the Soo River valley and a large critical moose winter range exists along the Soo River wetland area. MWLAP is planning to include this winter range as UWR under the FPC, although the winter range boundaries are not yet confirmed. Several OGMAs were identified in riparian forests within the winter range area.

A small amount of deer winter range habitat is also present in the Soo LU, it is located at the east end of Rutherford Creek near the confluence with Green River. There are no deer winter ranges in the Soo valley or further west in the Rutherford mainly due to excessive snow depths during winter months.

Northern Spotted Owls have not been observed in the Soo LU although the Spotted Owl Recovery Plan has established a Special Resource Management Zone (SRMZ) along the Green River. Even though there is no long term owl habitat (LTOH) presently identified by the recovery plan, the intent of this SRMZ is to provide future recolonization opportunities when the owl population increases.

Protected Areas: There are sections of three provincial parks in the Soo LU. A small part of the Callaghan Lake Provincial Park is located along the southwestern boundary. Garibaldi Park is located in the eastern section of the LU and the southern end of Nairn Falls Park is located north of the junction of the Ryan Creek and Green River.

Timber Resources: Commercially valuable tree species in the Soo LU are best described by elevation gradients. Lower elevation forests are dominated by Douglas-fir, lodgepole pine and western red cedar with lesser amounts of western hemlock. Mid elevation forests are dominated by western hemlock, Douglas-fir, and amabilis fir. Western red cedar and lodgepole pine are less common. High elevation forests are comprised of amabilis fir, mountain hemlock, and subalpine fir. Lesser amounts of Douglas-fir and western hemlock also occur.

According to the latest data base, approximately 56% of the total 9461 ha in THLB is considered early seral or immature forest. Mature forests (>80-250 years old in CWH and >120-250 years in MH) occupy about 18% of the THLB, and old forests (>250 years old) occupy about 26% of the THLB area. The actual area remaining in mature and old forest is less than that shown by mapping since recent disturbances have not been incorporated into the data set. Continued access to commercially valuable timber, including future second growth, is an important concern for licensees and is also necessary to ensure economic viability for the forest industry.

The Soo LU is within the Soo TSA. It is predominantly under forest licence tenures administered by Western Forest Products Limited (Rutherford Creek and south slopes of the Green River towards Mount Currie) and Richmond Plywood Corporation (north slopes of the Soo River drainage). Halray Logging Ltd. holds a chart area along the southern slopes of the Soo River and BC Timber Sales (formerly Small Business Forest Enterprise Program) occupy development areas on both sides of the Green River.

Community Water Systems: There are no community watersheds located within the Soo LU.

First Nations: The Soo LU is located within the traditional territory of the Mt. Currie and Squamish First Nations. There is evidence of traditional use in several areas within this LU. Culturally Modified Trees (CMT) have also been previously identified in some areas.

Between 1996 and 1997, an Archaeological Overview Assessment model was developed by Millennia Research on behalf of Ministry of Forests (MOF) to indicate where archaeological sites are most likely located. This was done to minimize potential impacts by forestry operations on

culturally important areas. The model was useful in predicting the potential location (i.e. high or moderate potential) of habitation sites, trails and Culturally Modified Trees (CMTs).

The maps produced from the model were reviewed to determine if potential archaeological potential sites or travel routes were captured in OGMAs. In the Soo LU, there is considerable overlap between OGMAs and old forest stands that exhibit a moderate to high potential for habitation sites, these are mostly located on lower slope or valley bottom areas near small lakes and along the major stream systems. Several OGMAs also overlap with forest stands showing moderate to high potential for CMTs. Overlaps between OGMAs and potential trails is restricted to the main Green River valley.

Private Land: Three parcels of private land occur within the Soo LU. These areas are located along the Soo River and near the Green River in the southern section of the LU. Private land is an important consideration when establishing OGMAs. Some of the private land has been altered from its natural state and this change may influence the ecology of adjacent Crown forest lands. Where private and Crown land interfaced, these factors were considered during OGMA delineation.

Mining and Mineral Exploration: Subsurface resources (minerals, coal, oil, gas and geothermal) and aggregate resources are valuable to the province, but are difficult to characterise due to their hidden nature. The Ministry of Energy and Mines (MEM) has rated the metallic mineral potential of this LU as very high (portions of the Soo River and Rutherford Creek) and moderately high (remainder of LU). The aggregate resource potential has been rated by MEM as mostly low with small pockets of moderate and high in Rutherford creek and along Green River.

The Soo LU has 11 mineral tenures located in 3 clusters. One cluster is near the headwaters of Rutherford Creek, another in central Rutherford Creek and the largest in the lower Soo River. The selection of OGMAs followed the intent of avoiding placement over existing tenure holders; however three OGMAs partly overlap with one tenure in the Soo River.

The establishment of OGMAs will not have an impact on the status of existing aggregate, geothermal, oil and gas, and mineral permits or tenures. Exploration and development activities are permitted in OGMAs. The preference is to proceed with exploration and development in a way that is sensitive to the old growth values of the OGMA; however, if exploration and development proceeds to the point of significantly impacting old growth values, then the OGMA will be moved.

Independent Power Projects: One small scale power generation facility exists on the Soo River and another is currently being developed at the mouth of Rutherford Creek. The Rutherford project has limited water storage requirements and links directly to the BC Hydro line along Highway 99. The new project is expected to be completed in 2004.

Recreation: Situated within easy access of the Resort Municipality of Whistler and the Village of Pemberton, the Soo LU supports a wide variety of outdoor recreation uses in the summer and winter. Summer and fall activities include hiking, kayaking, canoeing, rafting, angling, camping, hunting, motorised recreation, backpacking, mountaineering and rock climbing. Winter activities are somewhat more restricted but include heli skiing, backcountry ski and snowboard touring, and snowmobile use

Commercial backcountry recreation activities (e.g. heli skiing, horseback riding, ATVs, snowmobiles, and guided angling) are becoming more popular within this LU, with more development expected in the future.

4.0 Biodiversity Management Goals and Strategies

4.1 General Management Goals

Biodiversity management goals and strategies describe, in specific terms, the outcomes that the LU objectives are to achieve. They also describe the rationale for the selection of OGMA, some of the ecological features that OGMA are to include, and some of the compromises made to balance the management of all values present in the LU. While LU objectives are legally binding, management goals and strategies are not.

The biodiversity ranking process identified biodiversity values within the Soo LU that must be managed. The delineation of OGMA cannot be undertaken without recognition of these values because OGMA delineation is the most effective provision of the Forest Practices Code LU planning initiative for managing biodiversity.

The development of biodiversity management goals and strategies is important not only for the conservation of biodiversity, but also to allow the development of strategies to mitigate short and long-term LU planning impacts on timber supply. For example, OGMA delineation was not guided strictly by age class or allowable annual cut (AAC) contributions, as this approach could result in the inclusion of stands of marginal biodiversity value and significant timber supply impact within OGMA. Individual forested polygons were assessed according to their specific attributes during the OGMA delineation process.

OGMA include suitable forested stands within and adjacent to high value wildlife habitats such as GWR and moose wintering or foraging areas to maximise overlap between old growth representation and specific wildlife habitat requirements. Areas previously identified as Environmentally Sensitive Areas for wildlife were included in OGMA where they provided mature or old forest representation or included under-represented ecosystem types. As a result, some younger forest stands have been included in OGMA to enlarge patch sizes or to increase valley bottom to upland linkages.

Efforts were made during preparation of this LU plan to ensure OGMA were distributed throughout the LU and not concentrated in a particular drainage or mapsheet. This is in keeping with the coarse filter approach of biodiversity management whereby representative old growth stands are protected in order to maintain ecosystem processes and specific wildlife habitat requirements, which may be poorly understood.

In all cases, detailed air photo review was performed to confirm the forest cover attributes and suitability of a given stand for OGMA inclusion. All mature and old OGMA have been reviewed for desirable old forest characteristics through local field knowledge and a helicopter survey. Younger recruitment OGMA were reviewed for full stocking and will continue to develop old forest characteristics as they age.

4.2. Specific Biodiversity Management Goals and Strategies

4.2.1 Biodiversity Management Goals

1. Delineate old growth management areas predominantly in the non-contributing portion of the Provincial forest to maintain the full old seral representation targets for each BEC variant according to the following targets (from Table 1) and as per the attached map:
 - a) CWHds1 target of >9%, or >336 ha;
 - b) CWHms1 target of >9%, or at least 1128 ha;
 - c) MHmm2 target of >19%, or at least 975 ha.
2. Maintain areas that are representative of natural ecosystem patterns and ecosystem mosaics.
3. Maintain a wide range of ecosystem types and species composition.
4. Include rare, unique or under-represented stand types within OGMAs where possible and when compatible with other biodiversity goals.
5. Aggregate OGMAs when possible, both within and across BEC variants, to implement additional biodiversity management provisions like connectivity and forest interior habitat.
6. Place OGMAs where site location and topographic features provide the highest wildlife habitat and biodiversity value, such as UWRs, stream confluences, adjacent to slide-tracks, wetlands and other features when suitable old growth is present.

4.2.2 Biodiversity Management Strategies

- A. Delineate OGMAs that include existing stands of old growth (250+ years old) or particularly high biodiversity value older mature stands (generally 140 to 250 years old) that will provide old growth attributes in as short a time frame as possible (Goals 1 and 2).
- B. Include unique stands and habitat types within OGMAs (Goals 1, 2, 3 and 4).
- C. Delineate OGMAs that are as large and contiguous as possible, while ensuring that they contain a wide range of sites and habitat types (Goals 2, 3, 4, 5, 6).
- D. Establish OGMAs that are adjacent to biologically valuable non-forest habitats (e.g. lakes, wetlands and slide-tracks) (Goal 6).
- E. Retain veteran trees within harvesting areas to levels typical of densities found following natural disturbances as a focus of stand level biodiversity management, in accordance with the wildlife tree retention objective. Retention of dominant trees as veteran recruits is recommended where veterans are not present in the stand (Goal 2).

4.3. OGMA Boundary Mapping

OGMA boundaries were delineated to include complete forest stands (i.e. forest cover polygons) and follow natural features whenever possible to improve the ease of OGMA mapping and reduce operational uncertainty. OGMA mapping was based on a 1:20000 scale TRIM base, which forms the legal standard for measurement. Procedures for operating within OGMA boundaries are discussed in the OGMA Amendment policy.

4.4. Auditing Wildlife Tree Retention

The percent required for wildlife tree retention described in Table 1 does not have to be fully implemented on a cutblock-by-cutblock basis. Instead, the retention target may apply over a larger area within the LU (e.g. FDP or equivalent), so long as the retention target is met each 3 year period. The intent is to provide limited flexibility for retention at the cutblock level provided that the legally required percentage is met across the subzone. Since wildlife tree retention is a stand level biodiversity provision, wildlife tree patches are also to be distributed across each subzone and the landscape unit.

5.0 Mitigation of Timber Supply Impacts

The Soo LU plan has been developed to maximise the effectiveness of the FPC biodiversity management provisions while minimising impacts on timber supply.

Specific measures adopted to minimise impacts of Soo LU planning to the timber supply include the following:

The timber tenure holders were directly involved in OGMA selection. Wherever possible, attempts were made to locate OGMA boundaries so as to minimise impacts on current or future timber harvesting opportunities, while ensuring suitable old growth representation was achieved.

Wildlife ESAs, constrained areas, UWR, lower productivity sites, areas of difficult access and marginal economics were included within OGMA boundaries where possible and where compatible with biodiversity objectives.

Old and mature forested stands that are operationally constrained and have specific wildlife habitat values were included in OGMA boundaries where compatible with current policy and biodiversity management objectives. This reflects a general principle to maximise overlap between constraints when delineating OGMA boundaries.

Areas to be included in OGMA boundaries were assessed for timber values and existence of road infrastructure for future harvest access. Stands at the periphery of habitat areas with a high degree of fragmentation were not included in OGMA boundaries due to their lowered habitat suitability and ease of industrial access.

During the LU planning process, careful consideration was made to ensure that timber access was not cut off by OGMA delineation. Access corridors were left out of OGMA boundaries and OGMA boundaries were delineated to simplify adjacent management.

Approved Forest Development Plans for Forests Licences A19216, A19217 and A20479 and BC Timber Sales were reviewed during OGMA delineation to avoid proposed or approved developments.

OGMA boundaries used natural features wherever possible to ensure they could be replicated “on the ground”. OGMA were delineated to include complete stands of timber (forest cover polygons) wherever possible to reduce operational uncertainty and increase ease of OGMA mapping.

While OGMA placement within the NC landbase is consistent with the LUPG, placement avoided areas in the NC with potential harvest opportunities as long as the OGMA targets could still be met. To ensure that OGMA will function as coarse filters for biodiversity management (Biodiversity Guidebook, 1995), areas otherwise suitable for forest harvesting were sometimes included in OGMA to ensure spatial distribution.

Many non-contributing areas are not included as OGMA at this time, mostly due to their young age class and absence of old growth characteristics. For example, narrow riparian strips were not included as OGMA due to their inability to fulfil the coarse filter function. Such riparian areas may contribute to meeting wildlife tree patch requirements for adjacent cutblocks. Periodic assessment and revision of OGMA may be required as stand succession proceeds.

5.1 OGMA Amendment Procedure

An MSRM Coast Region policy has been developed to give direction to proponents (forest tenure holders) when applying for amendments to OGMA legal objectives. Amendment procedures cover such things as minor or major amendments for resource development (e.g. roads, bridges, boundary issues, rock quarries & gravel pits) or relocation of OGMA. The policy also discusses acceptable management activities and review procedures. The procedure has been approved by the Director of the Coast Region and forms an integral part of this landscape unit plan.

Appendix I: Biodiversity Emphasis Option Ranking Criteria

BEO Ranking Criteria Rationale

98/05/13

Application of the Landscape Unit Ranking Criteria

The three categories of Biodiversity Emphasis Option (BEO) ranking criteria that have been developed for the Squamish Forest District are scored and considered in a separate manner. The first set of criteria, the ecological values, are to be scored first, determining an initial BEO ranking for the District's landscape units (LU). In ranking the LUs, the LU with the highest ecological values score is ranked number one, the next highest, number two. The timber values are scored next, with their resultant scores being used as tie-breakers for LUs that have generated similar scores through the ecological values criteria. Timber values scores rank in an opposite manner: out of two or more LUs that have similar ecological value scores, the LU with the lowest timber value score will be ranked highest. Thirdly, the other values criteria are scored, and they are used as tie-breakers for LUs that have scored similarly in both ecological and timber values. Higher other values scores rank the LU higher.

The criteria are being applied in a separate, priority manner placing ecological values as the first priority because the entire BEO ranking process is designed to determine which LUs have biodiversity values that most require the additional biodiversity provisions of Higher and Intermediate BEOs. This is consistent with the FPC *Higher Level Plans: Policy and Procedures* October 31, 1996 (HLPPP) Section 5.10.2 Assignment of Biodiversity Emphasis Options - Chief Forester Direction - Policy, subsection 5, page LU15.

The FPC HLPPP offers two separate directions regarding protected areas and their affect on a LU's BEO ranking and assignment. In Section 5.10.2, page LU14 it states that first, higher BEOs should be assigned to LUs where ecosystems are poorly represented within existing protected areas, and then, further on it states that higher BEOs should be assigned for LUs adjacent to protected areas. Planning has followed the second direction because the Squamish Forest District received more protected area forest ecosystem representation than some other Districts making ecosystem representation a lesser priority, and the location of some of the protected areas do offer easily achievable opportunities for connectivity.

1) Ecological Values

Ecological Values criteria, assess which of the District's Landscape Units require higher levels of biodiversity provisions.

a) LU NDT 2 OG Representation Opportunity (Current state)

Landscape Units should rank higher if they have greater amounts of old growth forest because they have more potential to meet the seral stage requirements of the Biodiversity Guidebook, and have a greater number of biodiversity management options available. This criterion assesses the present amount of old growth, not recruitable areas. Old growth representation is assessed by the remaining percentages of old growth within the NDT2 areas of the LUs. NDT1 representation does not need to be considered because of logging history; if NDT1 is depleted, NDT2 will be more so. NDT1 is considered where NDT2 makes up less than

10% of the LU's THLB. Percentages used to assign scores for this criterion are based on the percentages required for old seral stage representation for each BEO in NDT2.

b) Recruitment Potential to Manage for Old Growth

LUs that are underrepresented in old growth may have age class 8 stands that may be recruited to provide old growth management areas of suitable habitat to meet the old seral stage biodiversity management requirements. If so, they are better suited to meeting the biodiversity requirements of a higher-level BEO and should be given a higher ranking. The percentages used to assign scores for this criterion, as in A above, are based on the percentages required for old seral stage representation for each BEO in NDT2.

c) Ecosystem Complexity

The greater the number of BEC units within a Landscape Unit, the greater the potential is that the LU provides habitat for a wider range of species compared to a LU with less BEC units. It is also more likely that a LU with numerous BEC units will be habitat for species that require a wider range of habitat. LUs with potential to be habitat for a larger number of species earn a higher ranking for biodiversity values.

d) Specific Wildlife Habitat Requirements

LUs that contain species that require specific habitat, ecosystems or ecosystem complexes are likely to require higher levels of habitat provision. LUs with species present that have been identified as being regionally significant, threatened or endangered may need to have habitat provided for them out of the operable landbase at higher than minimal levels, so these LUs will receive higher biodiversity rankings. Higher or Intermediate BEOs provide a greater range of habitat management options.

e) Sensitivity to Forest Development

Conversion of natural forest stands to even-aged management regimes reduces the range of habitats available to support an area's natural diversity of species. This reduction in habitat is greater in NDT 1 which is naturally uneven-aged, than in NDT 2 which is naturally even-aged. The greater the proportion of NDT 1 within a LU, the more the LU requires a higher BEO to provide habitat management options.

f) Connectivity

In addition to the presence of Old Growth, its spatial distribution is very important when assessing the biodiversity management options that remain within a LU. Higher BEO ranking scores will be given under this criterion to those LUs that have old seral stage forest in large contiguous stands, or in areas where harvesting has not disrupted natural connectivity due to natural patchy non-contiguous patterns.

g) Complex Ecosystems

LUs that contain large floodplains, estuaries, wetlands and herbaceous slidetrack/forest complexes generally provide habitat to a wider range of species than those LUs that do not. LUs that contain significant habitat features, in a District-wide context, will receive higher BEO ranking scores from this criteria to increase their eligibility to receive a BEO that will provide opportunities for maintenance of appropriate representation and linkages.

h) Inoperable Land Habitat and Biodiversity Representation

This criterion assesses the need for increasing the LU's priority and emphasis for biodiversity management by determining how much of a LU's biodiversity objectives can be met by default through habitat located in protected and constrained areas.

2) Timber Values Criteria

Timber values criteria assess the relative timber values of the District's Landscape Units and consider short and long-term contributions of the LU to the TSA in terms of value and volume. In the event of a tie of ecological criteria scores at the division between BEO assignment, Timber Values Criteria will be assessed to establish the BEO ranking. In order to minimise the impact on the timber supply in the long term, the LU with the lower timber value score will be given the higher BEO ranking.

a) Potential Timber Productivity

This criterion compares the products of LU average site index multiplied by THLB area. This represents the potential of the LU to produce timber. This criterion is intended to minimise impacts on the long-term timber supply.

b) Timber Maturity

This criterion gives higher ranking to LUs that have greater amount of mature timber available for harvest. This criterion is intended to minimise the impacts on timber supply in the short term.

c) Timber Value

This criterion assigns scores based on the relative value of timber harvested from the various LUs. Information associated with timber value appraisal would be considered. This criterion is intended to make LUs where timber values are high more likely to have a lower BEO ranking. Higher scores increase the BEO ranking of the Landscape Unit.

3) Other Resource Values

Resource Values besides ecological and timber values are considered with these criteria. The need for higher or lower BEO ranking is assessed based on the effects of other resource uses on biodiversity, and the impacts of provisions for other resource use on timber supply.

a) Visual Sensitivity

This criterion assigns higher scores for a LU if it is more visually sensitive to overlap the impacts of constraining VQOs with higher BEO assignments in order to minimise any reductions to the TSA's AAC.

b) Recreation/Tourism Significance and Capability

This criterion assigns higher scores for a LU if it has higher recreation values, for present and future use, in order to overlap the impacts of recreational and biodiversity provisions to minimise reductions to the TSA's AAC.

c) Mining, Hydro and Urbanisation

Mining, Hydro (damming, pipelines, generation sites, and rights of way) and urbanisation have potential to interfere with biodiversity management options and objectives. This criterion will assign lower scores where this potential exists.

d) Cultural Heritage Significance

This criterion assigns higher scores to LUs with higher cultural heritage significance. Based on consultation with affected First Nations and availability of traditional use and archaeology information. A review of the Archaeological Overview Assessment of the LU area was conducted to determine where there may be situations where an OGMA could overlaps with significant areas or potential sites

Criteria for Landscape Unit Biodiversity Emphasis Option Assignment

Draft Landscape Unit Ranking criteria is based on three separate sets of criteria. **Ecological Values Criteria** are first used to establish an initial ranking. **Timber Values Criteria** are then applied to LUs with similar Ecological Values scores. LUs with similar scores following the Timber Values ranking will be further assessed through the **Other Resource Values Criteria**. This ranking process is consistent with the direction within the FPC Higher Level Plans: Policy and Procedure, Chapter 5, section 5.10.

Landscape Unit Ranking and BEO Assignment

Final BEO designations are shown in Table A below and were based on initial consideration of the draft BEOs. The draft BEOs were derived from the original ecological ranking, and the timber values rating criteria. Ecological values rankings within 2 points of each other were assumed to have the same relative score and the timber values ranking was used to break any ties. Final BEO designation was based on discussions between Ministry of Environment, Lands and Parks (now called MWLAP) and MOF planning staff. In regards to the allocation of High, Intermediate and Low BEOs, an attempt was made to achieve a 10-45-45 percent distribution for High, Intermediate and Low BEOs respectively. The final distribution was 10% High, 46% Intermediate and 44% Low. It should be noted that THLB area reported is derived from the Regional Landscape Unit Plan (RLUP) which used an older dataset made using PAMAP. The THLB numbers used in the body of the report used a more recent dataset created in ArcInfo and are considered more accurate.

Table A: Final BEO for 20* LUs Based on Ecological and Timber Values

Final BEO	LU	LU #	Original Ecological Ranking	Draft BEO	Timber Values Rating	THLB Area (ha)	% of Total THLB**
High	Birkenhead	319	1 st	High/Int.	Moderate	6,768.0	4.19
High	Railroad	318	3 rd	Intermediate	Moderate	5,816.8	3.60
High	Sloquet (portion)	316	2 nd	High	High	3,574.8	2.21 (2.21/6.39)
							Total = 10.00
Intermediate	Gates	320	2 nd	High	Low/Mod.	7,330.7	4.54
Intermediate	Sloquet (portion)	316	2 nd	High	High	6743.1	4.18 (4.18/6.39)
Intermediate	Lower Squamish	307	4 th	Intermediate	Moderate	3,875.4	2.40
Intermediate	Upper Lillooet	317	5 th	Intermediate	Low	2,305.5	1.43
Intermediate	Lizzie	321	5 th	Intermediate	Low	7,004.1	4.34
Intermediate	Billygoat	308	6 th	Intermediate	Moderate	8,386.7	5.20
Intermediate	Elaho	303	6 th /7 th	Intermediate	High	16,691.9	10.34
Intermediate	Meager	302	7 th	Intermediate	Moderate	4,847.7	3.00
Intermediate	Tuwasus	310	7 th	Intermediate	Low	4,793.6	2.97
Intermediate	Rogers	301	8 th	Intermediate	Moderate	12,230.7	7.58
							Total = 45.98
Low	Indian	312	8 th	Intermediate	Moderate	5,802.3	3.59
Low	Upper Squamish	305	8 th	Low	High	19,922.2	12.34
Low	Whistler	314	9 th	Low	Low	4,255.1	2.64
Low	Mamquam	309	9 th	Low	Mod./High	14,420.3	8.95
Low	Soo	313	9 th	Low	Moderate	8,454.7	5.24
Low	East Howe	311	10 th	Low	Low	5,953.3	3.69
Low	Ryan	306	11 th	Low	Moderate	5,462.7	3.38
Low	Callaghan	315	12 th	Low	Moderate	6,761.7	4.19
							Total = 44.02

* Note: In conjunction with final BEO determinations and in response to concerns regarding timber impacts, the Upper Elaho and Lower Elaho LUs were merged into 1 landscape unit (Elaho LU). This reduced the total number of LUs within the District from 21 to 20.

** Note: The THLB areas were based on updated data available in 1999. THLB areas differed from the original information utilised for the initial BEO, which resulted in changes to the overall THLB and the proportion within each LU.

Appendix II: Wildlife Tree Retention Report

Wildlife tree retention (WTR) is managed at the stand level and maintains structural diversity within managed stands by retaining wildlife trees immediately adjacent to or within cutblocks. The WTR percentage was calculated as outlined in the LUPG (MOF/MELP 1999) for each BEC unit.

The table below shows how the percentage for wildlife tree retention was determined.

Landscape Unit Total Area (ha)	BEC Variant	Crown Forested Area (THLB + NC)	THLB (ha)	% of Subzone available for Harvest	% of THLB Harvested	% WTR
	ATp	287.3	0	N/A	N/A	N/A
	CWH ds1	3,733	2,223	60	48	8
	CWHms1	12,536	6,628	53	50	7
	MHmm2	5,133	610	12	46	3
62515		21,403	9,461			

BEC: Biogeoclimatic Ecosystem Classification

THLB: Timber Harvesting Landbase

APPENDIX III: OGMA SUMMARY AND RATIONALE – SOO LU

(See end of table for explanation of abbreviations)

OGMA #	BEC VARIANT	CONTRIB .CLASS	OGMA AREA	THLB AREA	COMMENTS	FDP	WILDLIFE
1	CWH ms 1	C	5.0	5.0	x-elevation linkage, riparian		Some grizzly values in aval chutes
1	CWH ms 1	N	56.7	0.0	x-elevation linkage, riparian, forest interior,		Some grizzly values in adjacent avalanche chutes
1	MH mm 2	N	80.0	0.0	x-elevation linkage, forest interior		Some grizzly values in aval chutes
3	CWH ms 1	C	7.1	7.1	Riparian, avalanche chutes		Some grizzly values in aval chutes
3	CWH ms 1	N	6.8	0.0	Riparian, avalanche chutes		Some grizzly values in aval chutes
3	MH mm 2	N	13.0	0.0	Riparian, avalanche chutes		Some grizzly values in aval chutes
6	CWH ms 1	C	5.0	5.0	x-elevation linkage		
6	CWH ms 1	N	25.9	0.0	x-elevation linkage		
6	MH mm 2	N	14.5	0.0	x-elevation linkage		
7	CWH ms 1	C	59.9	59.9	Riparian		High wildlife values, wetland forest
7	CWH ms 1	N	15.0	0.0	Riparian		High wildlife values, wetland forest
8	CWH ms 1	N	20.8	0.0	Riparian		High wildlife values, wetland forest
10	CWH ms 1	C	29.3	29.3	Large patch		GWR (partial)
10	CWH ms 1	N	32.8	0.0	Large patch		GWR (partial)
10	MH mm 2	N	0.3	0.0	Mapped as AT unp		GWR (all)
10	MH mm 2	N	69.1	0.0	Large patch		GWR (all)
11	CWH ms 1	N	14.5	0.0	Riparian		Moose winter range values
11	CWH ms 1	P	0.2	0.0	Riparian		Moose winter range values
13	CWH ms 1	C	2.5	2.5	Important spatially, large patch		
13	CWH ms 1	N	75.2	0.0	x-elevation linkage		
13	MH mm 2	N	10.7	0.0	x-elevation linkage		
14	MH mm 2	N	67.3	0.0	x-elevation linkage, riparian, forest interior		GWR (partial)
16	CWH ms 1	N	123.6	0.0	x-elevation linkage, large patch		
16	CWH ms 1	P	3.2	1.3	x-elevation linkage, large patch		
16	MH mm 2	N	64.8	0.0	x-elevation linkage, large patch		

OGMA #	BEC VARIANT	CONTRIB .CLASS	OGMA AREA	THLB AREA	COMMENTS	FDP	WILDLIFE
16	MH mm 2	P	6.3	2.5	x-elevation linkage, large patch		
17	CWH ms 1	N	2.6	0.0	Riparian		
18	CWH ms 1	C	6.8	6.8	Forest interior, rec use		
18	CWH ms 1	N	114.9	0.0	Lake riparian, forest interior, old growth cedar grove, rec use		
18	CWH ms 1	P	8.7	0.9	Lake riparian, forest interior, rec use		
18	MH mm 2	N	1.8	0.0			
20	CWH ds 1	C	16.8	16.8	Riparian, wetland		Moose winter range values
21	CWH ds 1	C	10.2	10.2	Riparian, wetland		Moose winter range values
22	CWH ds 1	N	1.4	0.0	Riparian		Moose winter range values
24	CWH ms 1	C	15.7	15.7	Recreation use		SRMZ
24	CWH ms 1	N	1.6	0.0	Recreation use		SRMZ
24	MH mm 2	N	0.8	0.0	mapped as AT unp, Garibaldi Park		
24	MH mm 2	N	172.6	0.0	Mainly in Garibaldi Park, rec use		Part SRMZ
25	CWH ds 1	N	6.9	0.0			Moose winter range values
27	CWH ds 1	P	2.4	1.0			
27	CWH ms 1	N	1.0	0.0			
27	CWH ms 1	P	14.1	6.3			
28	CWH ds 1	N	5.1	0.0	Riparian, separated from #29 by road		Moose winter range values
29	CWH ds 1	N	2.0	0.0	Adjacent to #28		
30	CWH ds 1	N	11.9	0.0			
30	CWH ms 1	N	2.8	0.0			
34	CWH ms 1	N	54.7	0.0	x-elev linkage, Garibaldi Park (all)		SRMZ
34	MH mm 2	N	131.7	0.0	x-elev linkage, Garibaldi Park (all)		Part SRMZ
35	CWH ms 1	N	3.9	0.0	Garibaldi Park (all)		Forest interior habitat. Part SRMZ
35	MH mm 2	N	1.2	0.0	Mapped as AT unp, Garibaldi Park (all)		Forest interior habitat
35	MH mm 2	N	75.3	0.0	Garibaldi Park (all)		Forest interior habitat. Part SRMZ
37	CWH ds 1	C	11.9	11.9	Riparian, recruitment		SRMZ
38	CWH ms 1	N	33.3	0.0	x-elevation linkage		Grizzly habitat in avalanche chutes
38	CWH ms 1	P	4.1	1.6	x-elevation linkage		Grizzly habitat in avalanche chutes

OGMA #	BEC VARIANT	CONTRIB .CLASS	OGMA AREA	THLB AREA	COMMENTS	FDP	WILDLIFE
38	MH mm 2	N	1.3	0.0	x-elevation linkage		Grizzly habitat in avalanche chutes
40	MH mm 2	N	0.3	0.0	x-elev linkage, mapped as AT unp		
40	CWH ms 1	N	18.0	0.0	Large patch		
40	CWH ms 1	P	2.1	0.8	Large patch		
40	MH mm 2	N	37.0	0.0	Large patch		
44	CWH ms 1	N	19.1	0.0			GWR (majority)
44	CWH ms 1	P	0.1	0.0			GWR (majority)
44	MH mm 2	N	4.1	0.0			GWR (majority)
46	CWH ms 1	C	8.6	8.6	x-elevation linkage		
46	CWH ms 1	N	20.9	0.0	x-elevation linkage		
46	MH mm 2	N	40.3	0.0	x-elevation linkage		
48	CWH ms 1	N	2.9	0.0	Remnant patch		Adjacent to GWR
49	CWH ms 1	N	2.2	0.0	Remnant patch		Adjacent to GWR
51	CWH ms 1	N	20.3	0.0			GWR (almost all). SRMZ
51	CWH ms 1	P	5.3	2.1			GWR (almost all). SRMZ
51	MH mm 2	N	17.4	0.0			GWR (almost all). SRMZ
51	MH mm 2	P	0.9	0.4			GWR (almost all). SRMZ
55	CWH ds 1	C	20.7	23.0			GWR (majority). SRMZ
55	CWH ds 1	N	0.5	0.0	Recruitment		GWR (majority). SRMZ
55	CWH ds 1	P	6.4	2.9			GWR (majority). SRMZ
55	CWH ms 1	C	17.3	17.3			GWR (all). SRMZ
55	CWH ms 1	N	0.1	0.0	Recruitment		GWR (all). SRMZ
55	MH mm 2	N	3.0	0.0			GWR (all). SRMZ
56	CWH ds 1	C	2.9	2.9	Riparian, mostly Nairn park		SRMZ
56	CWH ds 1	N	61.7	0.0	Riparian, mostly Nairn park		SRMZ
56	CWH ds 1	P	1.4	0.1	Riparian, mostly Nairn park		SRMZ
57	CWH ds 1	N	3.3	0.0	Riparian, links to #55		SRMZ
59	CWH ds 1	N	34.6	0.0	Combines with #84 for large patch		

OGMA #	BEC VARIANT	CONTRIB .CLASS	OGMA AREA	THLB AREA	COMMENTS	FDP	WILDLIFE
59	CWH ds 1	P	2.9	0.3	Combines with #84 for large patch, recruitment		
59	CWH ms 1	N	11.7	0.0	Combines with #84 for large patch, recruitment		GWR immediately upslope
61	CWH ms 1	N	78.1	0.0	Large patch, forest interior (excluded type is treed)		
61	CWH ms 1	P	0.7	0.1	Large patch, forest interior (excluded type is treed)		
61	MH mm 2	N	78.6	0.0	Large patch, forest interior (excluded type is treed)		
63	CWH ds 1	C	3.6	3.6	Large patch, recruitment		
63	CWH ds 1	N	22.3	0.0	Large patch, recruitment		
63	CWH ds 1	P	8.3	0.8	Large patch, recruitment		
63	CWH ms 1	C	17.8	17.8	Large patch, recruitment		
63	CWH ms 1	N	16.2	0.0	Large patch, recruitment		
63	CWH ms 1	P	7.5	1.0	Large patch, recruitment		
70	CWH ds 1	C	2.9	2.9	Riparian		SRMZ
70	CWH ds 1	P	4.3	0.4	Riparian		SRMZ
74	CWH ds 1	C	7.0	7.0	Riparian, recruitment		SRMZ
74	CWH ds 1	N	18.0	0.0	Riparian, recruitment		SRMZ
74	CWH ds 1	P	3.9	0.4	Riparian, recruitment		SRMZ
77	CWH ds 1	N	19.1	0.0			SRMZ
77	CWH ms 1	N	5.1	0.0			SRMZ
78	CWH ds 1	C	40.8	40.8	Riparian, recruitment, combines with #82		SRMZ
82	CWH ds 1	C	3.5	3.5	Riparian, recruitment, combines with #78		SRMZ
84	CWH ds 1	N	3.1	0.0	Combines with 59, large patch		GWR immediately upslope
84	CWH ms 1	N	8.9	0.0	Combines with 59, large patch		GWR immediately upslope
85	CWH ms 1	N	19.6	0.0	Comb. with #86 for larger complex		
85	MH mm 2	N	8.4	0.0	Comb. with #86 for larger complex		
86	CWH ms 1	N	7.6	0.0	Comb with #85 for larger complex		

OGMA #	BEC VARIANT	CONTRIB .CLASS	OGMA AREA	THLB AREA	COMMENTS	FDP	WILDLIFE
86	MH mm 2	N	4.4	0.0	Comb with #85 for larger complex		
89	CWH ms 1	N	1.3	0.0			Part SRMZ
89	MH mm 2	N	13.9	0.0			Part SRMZ
91	CWH ms 1	N	1.5	0.0			GWR (all). SRMZ
91	MH mm 2	N	1.3	0.0			GWR (all). SRMZ
95	CWH ms 1	N	4.3	0.0			GWR (small portion), rest is adjacent
95	MH mm 2	N	15.0	0.0			GWR (small portion), rest is adjacent
96	CWH ms 1	N	36.6	0.0			GWR (majority)
96	CWH ms 1	P	0.4	0.0			GWR (majority)
103	MH mm 2	N	11.2	0.0			GWR (majority), some Grizzly values in aval. chutes
104	CWH ms 1	P	17.3	6.9	Important spatially	Licensee agreed to	GWR (top 1/2)
105	MH mm 2	N	9.1	0.0			
106	MH mm 2	N	18.3	0.0	Important spatially		Grizzly values in adjacent aval chutes
108	CWH ms 1	N	10.6	0.0			Immediately adjacent to GWR
108	MH mm 2	N	3.4	0.0			Immediately adjacent to GWR
109	CWH ms 1	C	14.3	14.3		Licensee recommended	
109	CWH ms 1	N	9.1	0.0		Licensee recommended	
109	MH mm 2	N	0.2	0.0		Licensee recommended	

Abbreviations used in Appendix III:

Abbreviation	
x-elevation linkage	Cross elevational linkage
Ha	Hectares
GWR	Mountain Goat winter range
Aval. Chutes	Avalanche chutes
Rec.use	Recreation use
SRMZ	Special resource management zone (for spotted owl)
Comb	Combines

Appendix IV: Acronyms

AAC	Allowable Annual Cut
BEC	Biogeoclimatic Ecosystem Classification
BEO	Biodiversity Emphasis Option
CMT	Culturally Modified Tree
FPC	Forest Practices Code of British Columbia Act
GWR	Goat Winter Range
HLPPP	Higher Level Plans: Policy and Procedures
LTOH	Long Term Owl Habitat
LU	Landscape Unit
LUPG	Landscape Unit Planning Guide
MEM	Ministry of Energy and Mines
MOF	Ministry of Forests
MSRM	Ministry of Sustainable Resource Management
MWLAP	Ministry of Water, Land and Air Protection
NC	Non-contributing
NDT	Natural Disturbance Type, see Biodiversity Guidebook
OGMA	Old Growth Management Area
SRMZ	Special Resource Management Zone for Spotted Owl
THLB	Timber Harvesting Land Base
TSA	Timber Supply Area
UWR	Ungulate Winter Range
WTR	Wildlife Tree Retention

Appendix V: Public Consultation Summary

This Landscape Unit was advertised for public review and comment for 60 days from April 1, 2004 to June 1, 2004.

Prior to the public consultation period, MSRM met with the local forest licensees and consulted with First Nations. Meetings or conversations were also held with Ministry of Forests and Ministry of Water, Land and Air Protection during the development of the LU plan. Mineral tenure holders were advised of OGMA placement.

One letter was received from a local or regional council. Requests for changes to the OGMA locations were made, however they could not be accommodated due to the planning guidelines provided for Landscape Unit planning.

The Resort Municipality of Whistler submitted a letter regarding the Soo Landscape Unit plan. Two concerns (a request for broader biodiversity planning in the future and an increase in cross elevation connectivity) could not be met due to the scope of current LU planning policy. The other request was to move one OGMA out of a recreation area. It was not moved due to prior discussions with WLAP where this area was recommended for inclusion in OGMA. The total OGMA size is 125 ha and provides forest interior habitat, lake riparian and old forest attributes.