

Sunshine Coast Forest District  
Landscape Unit Planning

**Homathko Landscape Unit Plan**



**September 27, 2001**

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# **Homathko Landscape Unit Plan**

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# Legal Objectives for the Homathko Landscape Unit

Pursuant to section 4 of the Forest Practices Code of B.C. Act, the following are landscape unit objectives for the Homathko Landscape Unit.

## Objective 1

Maintain or recruit old growth ecosystem values, in old growth management areas, that are established as shown on the attached map dated September 27, 2001. No timber harvesting, including salvage and single-tree harvesting, is to occur within old growth management areas. Road construction is not to occur within old growth management areas unless no other practicable options exist, in which case replacement old growth management areas may be required.

## Objective 2

Maintain structural diversity within managed stands by retaining wildlife trees within the boundaries of each cut-block to meet targets for each BEC subzone in the landscape unit as indicated in the table below:

- All non-contributing areas with high value wildlife trees should be used first to achieve the overall cutblock target.
- Wildlife tree patches are to include the upper 10% of the diameter range of trees within the stand to be harvested.
- No harvesting, including salvage or single-tree harvesting, is to occur within established Wildlife Tree Patches.

**Wildlife Tree Retention by Biogeoclimatic  
Ecosystem Classification Subzone**

<b>BEC Subzone</b>	<b>Total Crown Forest Area (ha)</b>	<b>Total WTR (%)</b>
CWHds1	16011.5	9
CWHms1	12722.9	5
MHmm2	54064.4	4
<b>Totals</b>	<b>82798.8</b>	

**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, moist maritime subzone, leeward variant.

**WTR** = Wildlife Tree Retention

**BEC** = Biogeoclimatic Ecosystem Classification

# Sunshine Coast Forest District Landscape Unit Planning

## Landscape Unit Plan – Homathko, 201

### September 27, 2001

#### 1.0 Introduction

The Homathko Landscape Unit (LU) lies within the Pacific Ranges Ecoregion, Northern Pacific Ranges ecosection. Lower elevation, productive and gentle-terrain sites have, to a large degree, been disturbed by past harvesting, land clearing, fire and other factors. The relatively low levels of old seral forest representation within the Homathko's low elevation biogeoclimatic zones reflects this disturbance history. Despite the long harvest history, the Homathko LU can meet the levels of old growth representation recommended by the Landscape Unit Planning Guide.

The Homathko LU contains a wide range of significant natural resource values and features including a large estuary, a wide complex floodplain, massive rock bluffs, alpine meadows, wetlands, avalanche tracks, and active glaciers. Ecosystem complexity is high in this LU, with significant interior influence from the Chilcotin plateau in the headwaters affecting plant communities in the upper watershed. The Homathko LU contains many significant ecosystems including the Cumsack Slough wetland complex, the largest example of this habitat type in the entire Sunshine Coast. The Homathko LU is quite remote, situated at the head of Bute Inlet. These factors increase the complexity of resource management within the Homathko LU.

The Homathko LU contains several forms of ownership and tenure including: small amounts of private land, Crown forest, Indian reserve, forest licence (FL A19224 and FL A19229) tree farm license (TFL 43), and Provincial park. All of these forms of tenure influence LU management.

Four species of Identified Wildlife are present within the Homathko LU: the marbled murrelet (MAMU), mountain goat, grizzly bear, and the northern goshawk. As outlined in the Identified Wildlife Management Strategy (IWMS) the MAMU is to be managed through the placement of Old Growth Management Areas (OGMAs) within suitable MAMU habitat. This has been done in the Homathko LU, although the large amounts of non-contributing forest in the area have resulted in several large tracts of old growth forest otherwise suitable for MAMU nesting habitat not being captured in OGMA. Mountain goat winter range habitat has been identified previously by the Ministry of Environment, Lands and Parks (MELP) throughout the Homathko LU, and OGMAs have been placed within areas constrained by this resource value where suitable. OGMAs have also been placed to maximize overlap with other high value wildlife habitats such as black tailed deer winter range, bald eagle nesting areas, unique habitats and riparian areas where appropriate.

The distribution of OGMAs and other old seral representation areas will have to be reviewed periodically. Wildfires and other natural disturbance may occur within OGMAs with varying effects on their effectiveness in providing appropriate biodiversity attributes. Each instance will have to be considered separately. In many cases old seral forest may be for suited for biodiversity following a fire with its high density of large snags. Some specific old seral habitat features may be lost due to natural disturbance, and this OGMA may need to be replaced. In the early 1990's, large wildfires burned several areas in the Homathko LU, reducing the amount of

old growth forest available for OGMA placement, particularly on the east side of the lower river. While these areas are not currently suitable as OGMA, it is expected that portions of these burned areas will recruit old growth characteristics over time and should be re-assessed as succession proceeds. Burned areas typically provide good forage availability for ungulates such as deer and mountain goats; the rocky, south aspect sites that have burned in the Homathko LU significantly overlap with ungulate winter range habitat.

Refer to Appendix III for a detailed listing of OGMA forest polygon composition by biogeoclimatic variant.

## 2.0 Landscape Unit Objectives

The Homathko LU received a “Higher” Biodiversity Emphasis Option (BEO) through the biodiversity value ranking and the BEO assignment processes (see Appendices I, II & IV). Table 1, below, lists the percentages of the LU’s productive forest area per natural disturbance type (NDT) designated for old seral representation as OGMA. The percentages of cutblock area required as Wildlife Tree Patches (WTP) for each of the LU’s biogeoclimatic ecological classification (BEC) units are also listed. The target figures listed in Table 1 are from the Landscape Unit Planning Guide (LUPG), Appendices 2 and 3.

**Note:** Objectives apply only to Provincial forest lands. Park and Crown forest lands outside of Provincial forest contribute old seral representation but the LU Objectives do not apply to these areas.

**TABLE 1:** Required Levels for Old Seral Representation and Wildlife Tree Patches.

BEC Unit and NDT	LUPG Old Seral Representation Target <sup>2</sup>		OGMA Objective Provincial Forest <sup>3</sup>		Protected Area or Non-Provincial Forest Contribution <sup>4</sup>		<u>Total Old Seral Representation</u>		WTP Objective <sup>5</sup> (% of cutblock area)
	%	ha	%	Ha	%	Ha	%	Ha	Table A3.1
CWHds1 (NDT 2)	13	2081.5	12.8	2043.0	0.2	38.4	13	2081.4	9
CWHms1 (NDT 2)	13	1654.0	13	1661.8	0	0	13	1661.8	5
MHmm2 (NDT 1)*	28	1513.8	28	1506.2	0	0	28	1506.2	4

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

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

3 % of total productive forest area within BEC unit, as per LUPG, minus contributions from old seral representation within protected areas and Crown forest outside of Provincial forest.

4 Old growth stands within the Homathko Estuary Protected Area contribute to old seral representation but are not designated as OGMA.

5 WTP Objectives as per the LUPG, Appendix 3. Table A3.1 applies upon the designation of the Landscape Unit and its objectives.

**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, moist maritime subzone, leeward variant.

\* **Note:** As old growth representation is to be captured at the variant level, the MHmm2e phase have been included in the overall OGMA target for the MHmm2 variant. OGMA have been delineated in the spatially limited MHmm2e phase (Scar Creek).

OGMA Objectives listed in Table 1 have been met through the delineation of OGMA throughout the Homathko LU. Refer to OGMA map for their location, to Appendix VI for OGMA statistics and attributes, and to Table 3, below, for a breakdown of OGMA non-contributing (NC), constrained Timber Harvesting Landbase (THLB) and unconstrained THLB components.

**TABLE 2: Wildlife Tree Retention (WTR) by Biogeoclimatic Ecosystem Classification Subzone**

<b>BEC Subzone</b>	<b>Total Crown Productive Forest Area (ha)</b>	<b>Total WTR (%)</b>
CWHds1	16011.5	9
CWHms1	12722.9	5
MHmm	54064.4	4
<b>Totals</b>	<b>82798.8</b>	

Note: As per the Biodiversity Guidebook, 75% of WTR requirements are assumed to be met through otherwise constrained areas such as riparian reserves.

**TABLE 3: Non - Contributing, Constrained THLB and Unconstrained THLB Components of Homathko LU OGMA:**

<b>BEC Unit</b>	<b>Total Old Seral Representation<sup>1</sup></b>	<b>Non – Contributing<sup>2</sup> Area in OGMA</b>		<b>Constrained THLB<sup>3</sup> in OGMA</b>		<b>Unconstrained THLB in OGMA</b>	
	<b>ha</b>	<b>ha</b>	<b>%</b>	<b>ha</b>	<b>%</b>	<b>ha</b>	<b>%</b>
<b>CWHds1</b>	<b>2081.4</b>	1543.8	74.2	436.6	20.9	101.0	4.9
<b>CWHms1</b>	<b>1661.8</b>	1500.6	90.2	87.8	5.3	73.5	4.5
<b>MHmm2</b>	<b>1506.2</b>	1479.0	98.2	22.4	1.5	4.8	0.3
<b>TOTALS</b>	<b>5249.4</b>	<b>4523.4</b>	<b>86.2</b>	<b>546.8</b>	<b>10.4</b>	<b>179.3</b>	<b>3.4</b>

1 **Total Old Seral Representation** from Table 1, above.

2 **Non - Contributing Area in OGMA** = forest land that does not contribute to the AAC.

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 (i.e. an area netted out at 90% is considered 90% constrained, and 10% THLB). Based on netdown factors used in TSR 2.

The establishment of an OGMA will not have an impact on the status of existing mineral and gas permits or tenures. Exploration and development activities are permitted in OGMA. 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.

## **3.0 Biodiversity Management Goals and Strategies**

### **3.1 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 OGMAs, some of the ecological features that OGMAs are to include, and some of the compromises made to balance the management of all values present in the LU. While Objectives are legally binding, management goals and strategies are not. Goals and strategies must remain flexible to incorporate future direction and new methods to continue to meet LU Objectives.

The biodiversity ranking process identified many significant biodiversity values within the Homathko LU that must be managed for. The delineation of OGMAs cannot be undertaken without recognition of these significant values because OGMA delineation is the most effective provision of the Forest Practices Code (FPC) LU planning initiative for managing biodiversity. Refer to Appendix IV for detailed description of Homathko LU values considered in the LU planning process.

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 AAC contributions, as this approach could result in the inclusion of stands of marginal biodiversity value and significant timber supply impact within OGMAs. Individual forested polygons were assessed according to their specific attributes during the OGMA delineation process.

In the Homathko LU, maintenance of high value grizzly bear habitats is a key management goal; the Homathko LU supports a Regionally significant grizzly bear population. Efforts were made to include forested stands adjacent to high value feeding sites within OGMAs wherever possible to maximize overlap between old growth representation and specific wildlife habitat requirements. Areas previously identified as Environmentally Sensitive Areas for wildlife were included in OGMAs where they provided mature or old forest representation or included under-represented ecosystem types such as Sitka spruce leading stands. As a result, some age class 8 stands have been included in OGMAs to reflect operational constraints related to wildlife management.

The maintenance of marbled murrelet habitat within the Homathko LU is also of concern. As per the guidance of the LUPG, OGMAs were established first in areas considered as “non-contributing” forest in the current Timber Supply Review. Limited amounts of suitable MAMU nesting habitat were captured in OGMAs in the Homathko LU due to the lack of large tracts of non-contributing old growth available. Of 14 areas identified as having high MAMU nesting habitat suitability by MELP, only 3 have been partially or completely included in OGMA due to policy constraints requiring OGMA delineation to occur within the non-contributing land base. During OGMA delineation, efforts were made to include as much of the candidate MAMU habitat in OGMA as possible. Further research will be required to determine if MAMU habitat requirements have been adequately addressed through the OGMA delineation process. Remnant stands in areas currently approved for timber harvesting were not included in OGMA, as the high fragmentation of these areas reduces the suitability for MAMU nesting habitat.

Ungulate Winter Range habitats occur throughout the Homathko LU. Mountain goats, black-tailed deer, mule deer and black-tailed/mule deer hybrids are expected to occur within the LU. Where suitable old growth stands exist within Ungulate Winter range habitats, these were included in OGMAs to maximize overlap between OGMA delineation and specific wildlife habitat requirements. Due to the fact that UWR habitats are typically rocky, southerly aspect sites, not all old growth stands within UWR areas have been included to ensure biodiversity representation was not concentrated in a particular stand type.

Given the large size of the Homathko LU, efforts had to be made to ensure OGMAs 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 addition, ensuring OGMA placement is distributed throughout the LU ensures that any operational impacts are shared by all licensees operating in the area.

In all cases, detailed air photo review was performed to confirm the forest cover attributes and suitability of a given stand for OGMA inclusion. Numerous stands were field checked to verify the presence of desirable old seral characteristics.

### **3.2.1 CWHds1 Biodiversity Management Goals**

1. Maintain old seral representation, to the CWHds1 objective of 12.8%, or 2043.0 ha within Provincial forest through delineation of old growth management areas (OGMAs) as per the attached maps. No harvesting activities, including salvage or single-tree harvesting, are to occur within OGMAs.
2. Maintain areas that are representative of natural CWHds1 ecosystem patterns and ecosystem mosaics.
3. Include rare or unique stands (such as Ss leading or pure Fd stands) within OGMAs wherever possible.
4. Place OGMAs where site location and topographic features provide the highest value wildlife habitat and biodiversity value such as the confluences of creek systems and adjacent to slide tracks, wetlands or other features where compatible with old growth representation issues.
5. Include mature ESAs for wildlife within OGMA where compatible with biodiversity objectives.

### **3.2.2 CWHds1 Biodiversity Management Strategies**

- A. Delineate OGMAs to include existing stands of old growth or particularly high biodiversity value mature stands that will provide old growth characteristics in as short a time frame as possible. (Goals 1, 2)
- B. Include unique and constrained areas within OGMA. (Goals 1, 2, 3)



- C. Retain veterans within harvesting areas (Fd as well as Cw, Hw) to levels typical of densities found following natural disturbances as a focus of stand level biodiversity management (Goal 2)

### **3.3.1 CWHms1 Biodiversity Management Goals**

1. Meet the objective of 13% or 1661.8 ha old growth retention in Provincial forest through delineation of OGMA's in existing old growth stands as shown on the attached maps. No harvesting, including salvage or single-tree harvesting, is to occur within OGMA's.
2. Maintain areas that are representative of natural CWHds1 ecosystem patterns and ecosystem mosaics
3. Aggregate OGMA's wherever possible and consistent with biodiversity management objectives to provide for forest interior conditions within OGMA's.
4. Include unique or spatially significant stands within OGMA's where possible.
5. Maximize overlap between OGMA placement and high value marbled murrelet nesting habitat where consistent with policy direction and biodiversity considerations.
6. Maintain a wide range of ecosystem types and species composition (habitat types) within the CWHms1.

### **3.3.2 CWHms1 Biodiversity Management Strategies**

- A. Delineate OGMA's to include existing old growth stands (Goal 1)
- B. Delineate OGMA's to be as large and contiguous as possible and to contain as wide a range of sites as possible. (Goals 2, 3, 5)
- C. Retain veterans within harvesting areas (Fd as well as CW, Ss, Hw) to levels typical of densities found following natural disturbances as a focus of stand level biodiversity management. Retention of dominants as veteran recruits is recommended where veterans are not present in the stand. (Goals 2, 5)
- D. Include unique features and constrained areas within OGMA's where compatible with biodiversity management. (Goals 4, 6)

### **3.4.1 MHmm2 Biodiversity Management Goals:**

1. Achieve the target of 28% or 1506.2 ha old growth representation in Provincial forest through delineation of OGMA's as per the attached map. No harvesting, including salvage or single-tree harvesting, is to occur within OGMA's.
2. Attempt to make OGMA's as large and contiguous as possible to maximize their suitability for MAMU habitat nesting wherever possible and consistent with current policy to include non-contributing forest stands within OGMA.

3. Include rare or under-represented stand types within OGMA's where possible and compatible with biodiversity objectives.
4. Place OGMA's in areas with ecological or topographic features to capture the highest habitat complexity possible.

### **3.4.2 MHmm2 Biodiversity Management Strategies**

- A. Delineate OGMA's to include as much suitable MAMU habitat as possible. (Goals 1, 2,)
- B. Delineate OGMA's to be contiguous with adjacent OGMA's in the CWHms1. (Goals 2, 4)
- C. Include stands in OGMA's with least amount of operable timber and highest MAMU habitat suitability, where these values are compatible. (Goals 1, 2)

## **4.0 Mitigation of Timber Supply Impacts**

The Homathko LU plan has been developed to maximize the effectiveness of the Forest Practices Code's biodiversity management provisions while minimising impacts on the Sunshine Coast TSA and TFL timber supplies. Within the Homathko LU there are chart areas for numerous volume-based tenures, and it has not been possible to distribute LU planning impacts evenly among them all, nor is it the objective to do so. Instead, LU planning in the SCFD aims to minimise impacts to timber supply as a whole across the entire TSA and TFL areas. Chart area rationalisation may be required following the completion of the Sunshine Coast Forest District's LU planning, which may be a more effective means of distributing LU impacts.

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

Protected areas, ESAs, constrained areas ungulate winter range, lower productivity sites, areas of difficult access and marginal economics were included within OGMA's where possible and where compatible with biodiversity objectives.

Old and mature forested stands with very high grizzly bear habitat values likely to be constrained operationally were included in OGMA's where compatible with current policy and biodiversity management objectives. This reflects a general principle to maximize overlap between constraints when delineating OGMA's.

Areas to be included in OGMA's were assessed according to MAMU habitat suitability, 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's due to their lowered habitat suitability and ease of industrial access. Areas with high MAMU habitat suitability and a lower degree of habitat fragmentation are generally more difficult to access and have little existing industrial infrastructure. Inclusion of such areas in OGMA ensures protection of the most suitable MAMU nesting habitats, minimises impacts on timber supply through overlap of constraints and allows continued use of existing roads for future harvesting.

Suitable old growth stands within Ungulate Winter Range habitats were included in OGMA to reduce overall timber supply impacts and maximize overlap between constrained areas.

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 and OGMA boundaries were delineated to simplify adjacent management.

Approved year 2000 Forest Development Plans from all tenures within the Homathko LU were used 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.

Many areas within the non-contributing land base have been identified by forest licensees as having potential future harvesting opportunities. Where possible , OGMA placement avoided such areas. To maintain the representativeness and suitability of OGMA to function as “coarse filters” for biodiversity management (Biodiversity Guidebook, 1995), areas in the non-contributing landbase with timber otherwise suitable for harvesting for forest harvesting were included in OGMA.

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. Periodic assessment and revision of OGMA may be required.

## **Appendix I: Biodiversity Ranking Process: Ranking Criteria and Criteria Rationale**

### **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 Sunshine Coast Forest District are to be 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 affects 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. The Sunshine Coast Landscape Unit Planning Team has followed the first direction because the Sunshine Coast Forest District received somewhat less protected area forest ecosystem representation than some other Districts making ecosystem representation a higher priority, and the location of some of the protected areas do not 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 criteria 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 criteria 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 criteria, 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 criteria 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 are inherently 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 criteria 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 minimize 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 criteria compares the products of LU average site index multiplied by THLB area. This represents the potential of the LU to produce timber. This criteria is intended to minimize impacts on the long-term timber supply.

### **b) Timber Maturity**

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

### **c) Timber Value**

This criteria assigns scores based on the relative value of timber harvested from the various LUs. Information associated with timber value appraisal would be considered. This criteria 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 criteria 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 minimize any reductions to the TSA's AAC.

### **b) Recreation/Tourism Significance and Capability**

This criteria 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 minimize reductions to the TSA's AAC.

### **c) Mining, Hydro and Urbanization**

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

#### **d) Cultural Heritage Significance**

This criteria 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.

### **Appendix I: Criteria for Landscape Unit Biodiversity Emphasis** **Option Ranking and 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.

#### **1) Ecological Values Criteria**

(higher scores = higher BEO ranking)

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

Percentage of the LU's NDT 2 productive forest in old seral stage.  
(NDT1 to be considered if NDT2 <10% of THLB)

>13%	H	8 points
>9-13%	M/H	6 points
>3-9%	M	4 points
>1-3%	L/M	2 points
0-1%	L	0 points

##### **b) Recruitment Potential to Manage for Old Growth in NDT2**

Options to manage for old growth using age class 8 and 9 combined.

>13%	H	4 points
>9-13%	M/H	3 points
>3-9%	M	2 points
1-3%	L/M	1 point
0-1%	L	0 points

##### **c) Biogeoclimatic Complexity**

For the number of Biogeoclimatic subzone variants within the LU:

7-8	H	5 points
6	M/H	4 points
5	M	3 points
4	L/M	2 points
3	L	1 point
1-2	VL	0 points

##### **d) Specific Wildlife Habitat Requirements**

This criteria is based on the presence of species that have been recognized as requiring specific forest habitat, (including regionally significant species, threatened and endangered species (according to Provincial tracking lists).

H	8 points
M/H	6 points
M	4 points
L/M	2 points
L	0 points

**e) Sensitivity to Forestry Development**

Based on the % of the productive forest land in the Landscape Unit within Natural Disturbance Type 1 :

81 - 100	H	4 points
61 - 80	M/H	3 points
41 - 60	M	2 points
21 - 40	L/M	1 point
0 - 20	L	0 points

**f) Connectivity**

Based on the relative abundance of options that remain to manage for natural connectivity and to meet connectivity objectives considering the current state of the LU.

H	4 points
M/H	3 points
M	2 points
L/M	1 point
L	0 points

**g) Ecosystem Complexes**

Based on the presence of significant, large floodplains, wetlands, estuaries, and herbaceous slidetrack/forest complexes.

H	8 points
M/H	6 points
M	4 points
L/M	2 points
L	0 points

**h) Inoperable Land Habitat and Biodiversity Representation**

Based on the amount of old seral stage representation and forest habitat (that is suitable to the biodiversity and wildlife needs of the LU) that is present within the LU, but does not contribute to timber harvesting landbase. (PAS areas, inoperable terrain, riparian reserves and otherwise constrained areas) Representation within all or any of the BEC units to be considered as well as interior forest condition availability.

H	0 points
M/H	1 points
M	2 points
L/M	3 points
L	4 points

**2) Timber Values Criteria**

(higher values = lower BEO ranking)



**a) Potential Timber Productivity**

Relative productivity of LUs will be assessed in terms of the LU's average site index. (SI50) multiplied by the LU's THLB.

**b) Timber maturity and Mature Timber Availability**

Based on the percentage of the LU's operable land base stocked with mature timber, and the amount of it available for harvest considering constraints imposed by VQOs, ESAs and Community Watersheds. Mature is greater than 120 years.

Total all of the mature and 50% of the timber in age classes 40 - 120 years:

>50%	H	5 points
41 - 50%	M/H	4 points
31 - 40%	M	3 points
21 - 30%	L/M	2 points
11 - 20%	L	1 point
0 - 10%	VL	0 points

**c) Timber Value**

Based on the estimated appraisal value of the LU's average stand within the LU's operable landbase, relative to all other LUs in the District.

H	5 points
M/H	4 points
M	3 points
L/M	2 points
L	1 point
VL	0 points

**3) Other Resource Values (higher values = higher BEO ranking)**

**a) Visual Sensitivity**

based on the percentage of the operable forest landbase within the LU with a VQO of P, R, PR from the landscape inventories.

>51%	H	5 points
41 - 50%	M/H	4 points
31 - 40%	M	3 points
21 - 30%	L/M	2 points
11 - 20%	L	1 point
0 - 10%	VL	0 points

**b) Recreation/Tourism Significance and Capability**

Based on the LU's potential to provide for recreational use and potential of area to be of interest and attraction to tourists, now and in the future, relative to all other LUs in the District.

H	5 points
M/H	4 points
M	3 points
L/M	2 points
L	1 point
VL	0 points

**c) Mining, Hydro and Urbanization**

This criteria considers the potential for mining, hydroelectric projects, right of ways and urbanization, in its present and future states, to interfere with the ecological integrity or biodiversity values of the LU, relative to all other landscape units. "H" represents greatest effects on the LU's biodiversity.

H	0 points
M/H	1 point
M	2 points
L/M	3 points
L	4 points
VL	5 points

**d) Cultural Heritage Significance**

This criteria 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.

H	5 points
M/H	4 points
M	3 points
L/M	2 points
L	1 point

## Appendix II: Landscape Unit Ranking and BEO Assignment

### Sunshine Coast Forest District

Landscape Unit Ranking and Biodiversity Emphasis Option Assignment. 98/09/09

LU Name	LU Number	Biodiversity Score	Rank	THLB Area (ha)	BEO Assigned	Planning Priority
Toba	207	42	1	12813	H	13
Skwawka	213	37	2	3726	H	2
Homathko	201	36	3	8453	H	4
Southgate	203	35	4	3446	H	16
Deserted W/S*	219*	N/A	N/A	2462	H	5
				<b>30899</b>	<b>9.7%</b>	
Brem	206	35	5	4883	I	9
Jervis (including Deserted River)	219	33	6	17246	I	5
Bute West	202	32	7	4508	I	19
Bute East	205	32	8	6504	I	12
Powell Daniels	211	31	9	2903	I	17
Brittain	218	27	10	8785	I	8
Bishop	204	26	11	1488	I	24
Salmon	224	26	12	19869	I	15
Homfray	209	24	13	8642	I	20
Quatam	208	23	14	8752	I	7
Narrows	223	23	15	10979	I	14
Howe	226	21	16	10939	I	6
Cortes	214	18	17	21517	I	10
Bunster	215	18	18	23057	I	1
				<b>150072</b>	<b>47.2%</b>	
Lois	217	17	19	53544	L	22
Powell Lake	212	16	20	14229	L	21
Chapman	225	14	21	15917	L	3
Texada	219	13	22	13837	L	18
Sechelt	221	12	23	26082	L	11
Haslam	216	8	24	13597	L	23
				<b>137206</b>	<b>43.1%</b>	
			Total THLB	<b>318177</b>	<b>100%</b>	

\* Deserted River Watershed, part of the Jervis LU, assigned “Higher” to utilize more of the 10% allotment for the SCFD.

SCFD LU Planning Team: Brian R. Smart, Darryl M. Reynolds, Steve M. Gordon.

**Appendix III: Wildlife Tree Retention Report**  
**(VFR RLUPS Table 2.9)**

<b>Landscape Unit Total Area (ha)</b>	<b>BEC Subzone</b>	<b>Crown Forested Area (THLB + NC)</b>	<b>THLB (ha)</b>	<b>% of Subzone available for Harvest</b>	<b>% of THLB Harvested</b>	<b>% WTP Retention</b>
	CWHds1	16011.5	7642.5	47.7	76.5	9
	CWHms1	12722.9	3337.1	26.2	51.3	5
	MHmm2	5406.3	418.6	77.7	62.1	4
183466.0	<b>Totals:</b>		11398.2			

## Appendix IV: Significant Ecological Features in the Homathko LU

This Appendix includes specific information regarding the Homathko Landscape Unit's (LU) biodiversity values that were considered in the biodiversity ranking and BEO assignment processes, and during the evaluation of stands for inclusion as OGMA. Headings **a)** through **h)** correspond to the LU BEO ranking criteria. (Refer to "BEO Ranking Criteria Rationale 98/09/13", and "Criteria for Biodiversity Emphasis Option Assignment Process 98/09/09", Appendices I and II)

### a) LU NDT2 Old Seral Representation

#### BEC Units and Seral Stage Distribution

**Table 1.**

Table 1 lists the Homathko LU BEC units, corresponding natural disturbance types (NDT) and OG representation based on 1999 VFR inventory summary data. Areas harvested since the 1999 inventory and areas approved for development have not been removed from these figures.

BEC	NDT	TOTAL OG	
		%	ha
CWHds1	2	18.2	2921.4
CWHms1	2	39.2	4986.6
MHmm2	1	45.9	2485.8

**Table 2**

The Homathko LU BEC units, NDT, LUPG representation recommendations, LU OGMA representation objectives, and non-Provincial forest LU old seral representation. Based on 1999 VFR inventory summary data and detailed polygon analysis including reductions for recent and proposed harvesting, as per 1995 - 2000 TSA FDP submissions:

BEC Unit and NDT <sup>1</sup>	LUPG Old Seral Representation Target <sup>2</sup>		OGMA Objective Provincial Forest <sup>3</sup>		Protected Area or Non-Provincial Forest Contribution <sup>4</sup>		WTP Objective <sup>5</sup>
	%	Ha	%	ha	%	ha	% of cutblock area, ha
CWHds1, <b>2</b>	13	2081.5	12.8	2043.0	0.2	38.4	9
CWHms1, <b>2</b>	13	1654.0	13.1	1661.8	0	0	5
MHmm2, <b>1</b>	28	1513.8	27.9	1506.2	0	0	4

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

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

3) % of total productive forest area within BEC unit, as per LUPG, minus contributions from old seral representation within protected areas and Crown forest outside of Provincial forest.

4) Protected areas contribute to old seral representation but are not designated as OGMA.

5) WTP Objectives as per the LUPG, Appendix III. Table A3.1 applies upon the designation of the Landscape Unit and its objectives.

**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, moist maritime subzone, leeward variant.

\* **Note:** As old growth representation is to be captured at the variant level, the MHmm2e phase have been included in the overall OGMA target for MHmm2 variant. OGMA have, however, been delineated in the spatially limited MHmm2e phase (Scar Creek drainage).

The current old seral (age class 9) representation level is above the target for the Higher BEO level in all BEC units (CWHds1, CWHms1 and MHmm2) in the Homathko LU.

Some old growth patches less than 2ha, that are remnants left after harvesting, are not considered to contribute to old growth representation at the landscape-level for the following reasons:

Areas  $\leq 2$  Ha from logging origin often have a high degree of fragmentation and edge effect, subsequently, most are no longer representative of original ecosystem. As a result many are no longer capable of being habitat to the full range of species that originally occupied the site. Although they do provide valuable contributions to biodiversity, it is at the stand level, not the landscape level. The intention of OGMA is to fulfil the landscape level habitat requirements for the LU's natural levels of biodiversity through the "coarse filter" approach; encompassing as many species' habitats as possible. Small remnant patches, of diminished habitat capability, cannot fill this role and their biodiversity contribution must be limited to that of stand-level.

Natural stands  $\leq 2$  Ha may be completely typical of natural stand structure, and may continue to function in its natural state. Natural edges are less intrusive than artificial edges (harvesting). Small natural patches may provide important habitat attributes at edges of natural openings such as swamps, rock outcrops, etc. Their OG contribution, however, could be diminished or eliminated in some cases if larger adjacent OG forest is removed. For example, a number of small patches of old timber within a slide track complex may provide temporary cover for a number of species that forage in the slide track but require larger adjacent areas of OG in close proximity for thermal and visual cover, escape and denning habitat and snow interception. They may no longer contribute as natural habitat for a specific species if they become significantly isolated from the other required habitat type.

It is difficult to map and track the contributions of patches smaller than 2ha. Some small patches may be reduced in size by windfall following harvesting and it is unlikely that this reduction could be accounted for.

Note: This approach is consistent with principles outlined in the Landscape Unit Planning Guide.

#### **b) Recruitment Potential to Manage for Old Growth.**

OGMA and old seral representation stands are predominantly age class 9, some age class 8 and other stands containing a significant veteran component. Some other younger stand have been selected as OGMA "recruitment area" for specific stand attributes or known high wildlife values. Together these stands will be managed to meet the old growth management targets for the LU.

#### **c) Ecosystem Complexity.**

The Homathko LU contains 3 BEC variants, indicating a moderate level of ecosystem complexity. This ecosystem complexity was accounted for through OGMA delineation at the level of Biogeoclimatic variant rather than by subzone.

#### **d) Specific Wildlife Habitat Requirements.**

The Homathko LU is habitat to the following species of wildlife that have been recognised as requiring specific forest habitat, (including regionally significant species, threatened and endangered species, according to Provincial tracking lists): Marbled Murrelet, Mountain Goat, Grizzly Bear and northern goshawk.

The Homathko LU hosts a significant population of mountain goats, which are distributed throughout most subdrainages. MOELP-identified mountain goat winter range locations were considered in OGMA selection, as these areas are constrained.

Grizzly bears are present in moderate to high numbers in the LU and the MOELP has designated the Homathko River drainage as a grizzly bear recovery area. Linkages at the head of the Homathko River through to the Chilcotin plateau possibly provide interchange between interior and coastal grizzly populations. The significant wetland/forest complexes in Homathko provide suitable grizzly bear habitat and the extensive riparian/backwater channel/wetland network supports significant salmon runs for feeding.

Much of the OG forest in the Homathko LU may be suitable for marbled murrelet (MAMU) nesting. MOELP-identified areas of Suitable MAMU nesting habitat were selected for OGMA's when possible.

#### **e) Sensitivity to Forest Development.**

16% of the Homathko LU is within Natural Disturbance Type 1 (Ecosystems with rare stand initiating events). The remainder of the LU is within the CWHds1 and CWHms1, which are in NDT2 (Ecosystems with infrequent stand initiating events), therefore, the LU is considered to have a moderate sensitivity to forest development overall.

This criterion was utilised in the assignment of BEOs but not in the delineation of OGMA's.

#### **f) Connectivity.**

The Homathko LU has a large degree of harvesting disturbance history throughout the lower elevations, and significant areas of natural disturbance throughout. Second growth stands are the predominant forest cover in the valley bottom portions of the LU, with some stands of advanced, maturing second growth of fire and early harvesting origin. Higher elevation areas are largely old growth with some post-harvesting regeneration. Connectivity opportunities from lower to higher elevations exist only in a few areas due to the contiguous lower elevation harvesting history

Consistent with LU Planning Guide direction, connectivity is not a primary objective of the Homathko LU plan, however, the opportunity to maintain connectivity (i.e. degree of remaining management options) is an important criteria for BEO assignment as it is an indicator of the degree of harvesting and road density, and other disturbance in a given LU.

#### **g) Complex Ecosystems.**

The Ecosystem Complexes present in the Homathko LU are some of the most significant in a District-wide context. The Homathko LU has a high level of complex ecosystems including an extensive wetland complex (the Cumsack Slough), numerous avalanche tracks providing

herbaceous forage and natural meadows. The Homathko River is a 4th order river system with a very dynamic floodplain. Seasonal back-channels provide salmonid rearing habitat when inundated with water. River dynamics change seasonally and annually, and extensive erosion of riverside areas can occur subsequent to spring freshets. Flows are lowest during the winter months, as the Homathko River is a glacial fed river system.

Despite the harvesting history in the drainage, the river and adjoining aquatic ecosystems remain in good condition. The Homathko estuary is large and in generally good condition; the Homathko Estuary protected Area has been established over the majority of the estuarine ecosystem and deciduous/swamp habitat complex in the upland area adjacent to the estuary. This area supports significant wintering populations of waterfowl and raptors and also provides high value grizzly bear habitat for foraging in the spring and summer months.

OGMAs have been located near such features whenever possible because these ecosystem complexes are rich in biodiversity and adjacent old growth forest adds valuable wildlife habitat. Much of the ecosystem complexes are heavily constrained by high water tables, riparian management areas, sensitive slopes and access; their inclusion in OGMA minimises impact on timber supply by recognition of operational constraints in LU planning.

#### **h) Inoperable Land Habitat and Biodiversity Representation.**

Due to harvesting history the majority of CWHds1 representation is within areas that are not operable or have remained unharvested due to difficult access or other constraints. Most of the CWHms1 OGMA was delineated to be contiguous with OGMA in the adjacent CWHds1 variant.

Riparian areas provide a substantial contribution to the LU's OGMAs. Riparian OGMAs are located within stands that are not operable, already left as riparian reserves from past harvesting or in operable, or in stands previously identified as having high wildlife or biodiversity values and thereby constrained at the operational level.

PAS OGMA contributions within the Homathko LU are limited to several old growth stands within the Homathko Estuary Protected Area. A total of 28 hectares or 0.2% of old growth in OGMA is within the protected area.

The remaining Old Growth Management Areas within the Homathko LU consist of Provincial Forest Land. Constrained and other lands available for old seral representation include:

- ESAs

- Steep and unstable terrain, gullies

- Riparian reserve areas

- Forested land of low productivity (low  $SI_{50}$ )

- Portions of some NP polygons that contain some suitable forest cover.

All constraints have been incorporated into the calculation of non-contributing forest in the Homathko LU used in the current Timber Supply Review.



## Appendix V: Public Consultation Summary

The draft Homathko Landscape Unit plan was advertised for a 60-day public review period beginning June 9, 2001 and ending August 9, 2001. During the review period, comments were received from the forest licensees operating in the Landscape Unit and from the Homalco First Nation. The Homalco First Nation did not provide specific comments on OGMA's proposed in the Homathko LU plan, but expressed interest in proceeding with a similar process for the Southgate LU. No other public comments were received.

In addition to providing the maps and text of the draft Homathko LU plan for review, the Landscape Unit Planning Team (LUPT) held direct meetings with affected forest licensees both prior to and during the public review period. The following meetings occurred:

April 11, 2001: Scott Paper Ltd., Terminal Forest Products Ltd and LUPT members at the Powell River Ministry of Forests Office.

April 12, 2001: International Forest Products Ltd. and LUPT members at the Powell River Ministry of Forests Office.

June 15, 2001: International Forest Products Ltd., Terminal Forest Products Ltd, and Ministry of Forest Staff at the Powell River Ministry of Forests Office. (LUPT members unavailable).

July 19, 2001: International Forest Products Ltd. and LUPT members at the Sechelt Ministry office.

August 15, 2001: Terminal Forest Products. Ltd. and LUPT members at the Powell River Ministry of Forests office.

The majority of proposed OGMA changes focused on alleviating the loss of future harvesting opportunities, though many of these perceived opportunities are in areas currently classified as non-contributing (NC) to the Allowable Annual Cut (AAC) calculation. The NC landbase was also referenced in the Chief Forester's TSR 1 AAC determination as reducing the risk to biodiversity from harvesting of the contributing landbase.

Written comments on the plan were received from Scott Paper Limited in a letter dated May 16, 2001 prior to the public review period. Suggested changes were assessed in the field June 7, 2001 and using air photos subsequent to field review. The suggested replacement of polygon 1136, mapsheet N006 with polygon 135 was found to be suitable and this change to OGMA configuration was made. Scott Paper Ltd. indicated inclusion of polygons 1046/1047 (mapsheet 92 N006) in OGMA would reduce the economic viability of the area. These polygons were netted out of the Timber Harvesting Landbase at a 90% factor in TFL 43 Management Plan Number 4 for economic, hydrological and wildlife reasons. In light of the high biodiversity and old growth values evident during a site inspection of this area carried out March 31, 1999, combined with the active nature of river channels in this area and their spatial location in the Homathko watershed, these polygons were retained as OGMA in an effort to overlap constraints, as per LUPG direction.

Several electronic (e mail) submissions were received from Terminal Forest Products Ltd., outlining areas of potential future harvest opportunity and alternate OGMA within the non-contributing or non-productive landbase. Many replacement areas suggested were outside the Homathko LU or within higher-elevation areas, and did not address the limited opportunities for achieving old growth representation in OGMA within the CWHds1 variant. During subsequent meetings, proposed replacement areas were assessed using air photos. Numerous changes were made where replacement areas provide equivalent biodiversity values to areas in draft OGMA. Polygon 168 (mapsheet 92 K097) was retained as OGMA in order to overlap constraints with a high value grizzly bear habitat and to maintain the suitability and spatial distribution of OGMA. Draft OGMA and proposed replacement areas were reviewed in the field by MSRM staff on June 7, 2001.

Maps with hand-written comments were received from International Forest Products Ltd (IFP), outlining areas of concern. A letter dated June 8, 2001 (received June 13, 2001, after advertising had occurred) requested delaying advertisement of the Homathko Plan. A subsequent letter dated July 25, 2001 requested deferral of establishment of OGMA. No written comments regarding the spatial location of OGMA were received from this licensee. Suggestions made by IFP during meetings were recorded and individual proposed OGMA changes assessed. Field review of suggested changes and draft OGMA was also performed June 7, 2001 by MSRM staff. Suggestions received electronically from IFP were incorporated into OGMA revisions where appropriate. Specific suggestions included:

- Incorporating more age class 8 stands within the Homathko Protected Area in OGMA. This was accomplished by establishment of an additional 10.4 ha OGMA in the Protected Area. These age class 8 stands were included in OGMA as they are rare, Sitka spruce leading stands.
- Inclusion of deciduous-leading stands in OGMA. This was not performed, as the primary objective of OGMA is to ensure old growth representation. Many OGMA include mixed species stands, thus a component of deciduous is represented in OGMA. In Natural Disturbance Type 2 (infrequent stand initiating events), a minimum 250 year stand age is considered as old growth as per the Biodiversity Guidebook (1995).
- Inclusion of younger age classes in OGMA. In keeping with direction in the Landscape Unit Planning Guide (LUPG), OGMA in Higher Biodiversity Emphasis Option LUs such as the Homathko are to be established in age class 9 (stands greater than 250 years old) where opportunities exist. Where targets cannot be achieved in age class 9, OGMA are to include the oldest stands possible to achieve old growth characteristics in the shortest possible time frame. In the Homathko LU, OGMA were selected to include age class 9 stands wherever possible. Age class 8 stands were included in the CWHds1 due to reduced options for OGMA placement in age class 9 stands resulting from ongoing development in this variant not yet reflected in the database. Younger age classes were not included in OGMA as the targets were met in age class 9 and through identification of OGMA in suitable age class 8 stands.

A subsequent letter was forwarded from International Forest Products Ltd. to the Ministry of Forests District Manager September 14, 2001 after the public consultation period, re-iterating the above comments. This letter also questioned modifying the WTP cap in the CWHds1 subzone. In

response to this concern, variances to the WTP cap were removed from both the legal objectives and from Table 2.

While all OGMA conflicts with approved forest development plan blocks have been resolved, several areas of conflict between proposed development in NC forest remain outstanding. These include stands of non-contributing forest adjacent to the Cumsack Slough wetland complex (mapsheet 92 K096, polygons 95, 114, 115, 224). The high wildlife values of this area, combined with limited alternative options to achieve old growth targets in the CWHds1 variant, make the OGMAs in this area non-replaceable in terms of biodiversity values. To maintain the suitability of OGMAs to achieve the “coarse filter” protection of biodiversity values outlined in the Biodiversity Guidebook (1995), these NC OGMAs were not relocated to less suitable areas.

A number of changes to the OGMAs were made based on the licensee input received and are best viewed by comparing the draft and final OGMA maps.