

**MID COAST FOREST DISTRICT
RATIONALE FOR RECOMMENDED DRAFT
LANDSCAPE UNITS AND INTERIM
BIODIVERSITY EMPHASIS OPTIONS**

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Mid Coast Forest District Rationale for Draft Landscape Units

1.0 Introduction

In accordance with Section 4 of the *Forest Practices Code of British Columbia Act* (FPC) and Section 4 of the *Strategic Planning Regulation*, an area of land within the forest district may be established by the district manager as a landscape unit to ensure that Crown land in a provincial forest and private land in a tree farm licence (TFL) or woodlot licence are managed and used in accordance with Section 2 of the FPC and regulations.

Landscape units are defined as planning areas whose boundaries are based on topographic or other landscape geographic features. As a general guideline, they range in size from 5 000 to 100 000 ha and encompass all, or a portion of, a watershed or a series of small entire watersheds. They are strategic planning areas used to co-ordinate and integrate resource development and conservation activities.

Landscape units are ecological units. Just as forest sites are useful for describing stand level ecological processes and for planning forest stand management, landscape units are important for describing landscape level ecological processes and planning landscape management. Landscape processes include disturbance patterns, the abundance and spatial arrangement of different kinds of wildlife habitat, hydrologic processes, animal movements, seed dispersal, and air and water movement.

Landscape units are essential for implementing a number of provincial and regional initiatives, such as biodiversity. Guidelines for determining landscape unit boundaries and setting landscape unit objectives are contained in the Higher Level Plans: Policy and Procedures Guidebook with additional guidance found in the Biodiversity Guidebook and the interpretations provided by the regional biodiversity committee.

Planning areas larger than landscape units (Timber Supply Areas, Resource Management Zones) are too large to be sensitive to the unique attributes of specific landscapes, or for ensuring that a minimum level of biodiversity is maintained across the district. Although these larger planning areas are essential for setting broad objectives, landscape units are required to effectively integrate conservation activities with resource development activities in a manner most appropriate to specific areas. Landscape units also allow effective integration of visual landscape values, tourism values, recreation values, aesthetic and other values with those of biodiversity conservation and resource development.

Landscape unit boundaries are determined prior to, and independently of, setting landscape unit objectives. Boundaries should provide the basis for examining ecological characteristics and resource development values within the bounds of a relatively stable,

value-neutral management planning area. Landscape units should not be based on resource development or conservation values, past or present human use patterns, or administrative boundaries.

All landscape unit boundaries in a forest district should be delineated simultaneously to avoid gaps or overlaps among adjacent units. This process should take into consideration landscape units already established in adjacent forest districts and the boundaries of existing Local Resource Use Plans and Total Resource Plans.

In some districts there may be landscape units with areas that are outside of the provincial forests or are not private land in a TFL or woodlot license. Landscape unit boundaries may encompass these areas, however these areas should be clearly identified and are not covered by landscape unit objectives. These types of units help to place private land and resource conservation and community conservation concerns (e.g. water quality; runoff peak flows; fish and wildlife habitat protection measures; green space zoning; visual and recreation management) within a broader ecological context.

Landscape units, as defined above, may prove to be a unit of relevance for analysis and management by regional districts and other government departments to address much more than just biodiversity objectives, as defined by the FPC.

1.1 Procedure

Landscape units in the Mid Coast Forest District were derived using three main criteria: size, topography, and ecology. The application of these criteria resulted in 56 draft landscape units within the District.

1.1.i Topographic features should be boundaries of landscape units

Landscape unit boundaries are drawn primarily using heights of land to define watersheds. Wherever possible, landscape units consist of one discrete watershed. However in some cases it was necessary to aggregate smaller watersheds or separate larger ones based on hydrologically consistent subunits.

1.1.ii Size of Landscape Units should be between 5 000 and 100 000 ha

The size range described by the Regional Biodiversity Committee's *Landscape Unit Delineation* papers is selected to correspond to the scale of predominant natural disturbances and to the scale at which the different types of habitat present in an area, are adequately represented.

As a general guideline, landscape units should be smaller in areas of complex terrain and larger in areas of relatively uniform terrain. This guideline is based on the relative size and frequency of natural disturbance regimes in the province. The Natural Disturbance Types predominant in the Mid Coast Forest District are characterized by small disturbances and long periods between stand destroying events.

For the Vancouver Forest Region, four administrative planning areas (Queen Charlotte Islands, Mid Coast, Sunshine Coast-Squamish-Chilliwack, and Vancouver Island) were proposed to expedite planning efficiency with regard to the establishment of draft landscape unit boundaries. The Mid Coast Forest District was further broken into two groups, complex mountains and island groups with the recommended landscape unit sizes as follows:

Complex Mountains	30 000-80 000 ha range	50-60 000 ha average size
Island Groups	20 000-60 000 ha range	30-40 000 ha average size

1.1.iii Ecological attributes should be the basis for significant deviations from target sizes

Where landscape units could not be drawn simply using watersheds, other ecological criteria such as changes in biogeoclimatic units were used to define boundaries.

1.1.iv Hydrologic features may sometimes be used as landscape unit boundaries

Large rivers, lakes, and coastal inlets may be used as landscape unit boundaries when they constitute significant ecological barriers. Inlets or lakes that are larger than 5 000 ha and comprise a complete boundary between adjacent units are not considered as contributing area to either unit. Where the watershed is larger than the suggested maximum size, or where a number of watersheds drain into a large lake or an inlet, the water body can be used as a landscape unit boundary.

1.1.v Administrative boundaries may be used to refine landscape unit boundaries where watershed boundaries are indistinct

Human-caused features and administrative boundaries should not be used as the primary basis for landscape unit boundaries. However, where topographic features are indistinct, man-made or administrative boundaries may be used to specifically locate the boundary. The well defined islands and pronounced watershed characteristics of the mainland central coast made application of this criteria unnecessary.

1.2 Anomalies

Anomalies are deviations from the common procedure. Landscape unit number 4 is an anomaly. This landscape unit is within the Bella Coola LRUP area. Landscape unit number 4 covers all of the area in which there is human settlement or potential for future human settlement. It does not have boundaries which meet the previous outlined criteria. The boundaries of this unit were maintained due to its importance in the LRUP process.

1.3 Results

In total, 56 landscape units were drawn for the Mid Coast Forest District. Of these 56 landscape units, 47 are within complex mountains and nine are within island groups. The average size of landscape units across the region is very near target levels: 53 543 ha for mountainous units and 35 839 ha for island units. Five of the 56 landscape units are wholly within parks.

Landscape units in the Mid Coast Forest District are described in Appendix I and shown in Appendix II. The entire area within the landscape unit, including area in parks and private land, is based on size and ecological criteria and will result in some units having a mix of park, crown, and private land. In many units, more than one natural disturbance type occurs since natural disturbance type boundaries and watershed boundaries rarely match. The boundary criteria recognize natural features over administrative boundaries hence landscape units cross forest districts. Where landscape units crossed forest district boundaries the unit was assigned to the district containing the greatest portion of the landscape unit area.

1.4 Conclusion

The Mid Coast Forest District Biodiversity Committee has delineated 56 draft landscape units within the target size ranges for complex mountains and island groups. Size, topography and ecology were used for defining boundaries.

Mid Coast Forest District Rationale for Draft Biodiversity Emphasis Options

2.0 Introduction

In accordance with Section 4 of the *Forest Practices Code of British Columbia Act* (FPC) and Section 4 of the *Strategic Planning Regulation*, once landscape units have been established, objectives for these landscape units must be established by the district manager. As a result of a Cabinet level direction, to balance risks for managing for biodiversity against social and economic impacts on a provincial basis, a defined biodiversity level or biodiversity emphasis option must be established at the landscape unit level prior to establishing other landscape unit objectives.

Biological diversity (or biodiversity) is defined as the diversity of plants, animals, and other living organisms in all of their form and level of organization, and includes the diversity of genes, species, and ecosystems, as well as, the evolutionary and functional processes that link them. Applying biodiversity emphasis options to landscape units across a subregional planning area is a key part of a biodiversity management strategy. The underlying assumption of a biodiversity management approach is that all native species and ecological processes are more likely to be maintained if managed forests are made to resemble those forests created by the activities of natural disturbance agents such as fire, wind, insects, and disease.

The objective, of such an approach, is to maintain representative habitats across large areas and over long periods of time. To maintain such habitats, special management practices will be necessary. Both natural (e.g. wildfire, insect attack, etc.) and managed disturbances (timber harvesting, mining activities, etc.) return forested ecosystems to an early stage of succession, from which new forests develop. Standard forest management practices represent a disturbance regime that differs from natural disturbances with respect to the intensity, frequency, and size of the disturbance, as well as, the residual habitat structures that remain after the disturbance. Hence, where standard management practices are applied, certain habitat features and patterns will likely diminish over time (e.g. old-growth forests with habitat structures such as large dead and dying trees; high levels of down wood and abundant lichens; or large, unroaded patches of mature forest with forest interior conditions).

Biodiversity emphasis options are essential for implementing a number of provincial and regional strategies, especially the biodiversity strategy. The FPC; the Chief Forester's *Higher Level Plans: Policy and Procedures*; and the *Biodiversity Guidebook* all provide guidelines for setting landscape unit objectives, which will facilitate the management of all resources.

The *Biodiversity Guidebook* provides for the use of three different biodiversity emphasis options to give resource managers the flexibility to match landscape management prescriptions to differing resource management priorities. Each option is designed to provide a different level of natural biodiversity and a different risk of losing elements of natural biodiversity.

- The lower biodiversity emphasis option will provide habitat for a wide range of native species and communities, but is the most critical, as the pattern of the landscape and its constituent ecosystems will be significantly altered and the risk of losing some native species is higher.
- The intermediate biodiversity emphasis option represents a compromise between conservation and other social and economic considerations. An intermediate emphasis will provide more capability to conserve biodiversity with reduced risk of losing some native species.
- The higher biodiversity emphasis option assigns a higher priority to biodiversity conservation, and is recommended to those landscape units where a biodiversity conservation is a high management priority.

In accordance with the Chief Forester's Policy and the Biodiversity Guidebook, biodiversity emphasis is to be allocated based on the timber harvesting land base¹ within the planning area in the following proportions:

Lower Emphasis ²	45% (30-55%)
Intermediate Emphasis	45% (35-60%)
Higher Emphasis	10% (no range)

According to the Chief Forester's Policy, biodiversity emphasis option assignment involves six steps:

1. Apply ecological criteria to rank biodiversity values for each landscape unit.
2. Apply criteria to rank timber values for each landscape unit.
3. Apply criteria to rank or consider other resource values for each landscape unit.
4. Determine the total timber harvesting land base for the planning area and the target number of hectares allocated to each emphasis.
5. Review and compare higher level plans and biodiversity, timber and other resource values for each landscape unit, to recommend biodiversity emphasis assignments.
6. Present recommendations to land use planning tables or incorporate them into the regional landscape unit planning strategy.

¹ The timber harvesting land base is calculated by subtracting the area of parks, alpine parkland, non-productive forest types and inoperable area from the total crown forested area.

² The Biodiversity Guidebook recommends that the lower emphasis option should not be applied to more than approximately half of the areas of any biogeoclimatic subzone within each forest district.

2.1 Procedure for Biodiversity Value Assignments

The first step in allocating biodiversity emphasis is to rank the biodiversity values of landscape units, based on ecological values. The Chief Forester's policy outlines six ecological criteria, that may be used, for ranking biodiversity values for landscape units: 1) ecosystem representation, 2) ecosystem complexity, 3) identified wildlife, 4) area sensitivity to development, 5) connectivity, and 6) current condition. These six criteria were considered in assigning biodiversity values to 51 draft landscape units within the Mid Coast Forest District. The five landscape units that are wholly within parks do not have Biodiversity Emphasis Options set for them. The criteria are described below.

The Chief Forester's policy also outlines two methods as decision processes: decision tree or weighted factor scoring. Weighted factor scoring was the decision process chosen for use in the Mid Coast Forest District. This choice was based on the number of criteria which were to be considered. Due to the number of criteria the decision tree would have been very complicated and difficult to explain to public forums such as the Central Coast Land and Coastal Resource Management Plan Committee. A number of other processes (landscape unit planning for Vancouver Island CORE, Kamloops LRMP, Cariboo CORE) were reviewed and the majority of those processes used the weighted factor scoring. It was felt that the procedure for the Mid Coast would be similar to those other processes, and it was therefore appropriate to use them.

The six ecological criteria, listed by the Chief Forester, were categorized into four primary criteria and two secondary criteria. The primary criteria will be discussed first, and include: 1) ecosystem representation, 2) ecosystem complexity, 3) wildlife representation and 4) area's sensitivity to development. The secondary criteria include: 1) distribution of biodiversity emphasis options and 2) current condition, measured by seral stage analysis.

2.2 Primary Criteria

Three primary criteria, of equal weight, were used to derive an overall conservation ranking for each landscape unit.

2.2.i Ecosystem Representation in Protected Areas

Ecosystem representation was assessed based on how much of each type found in the Mid Coast Forest District is located in existing protected areas. Three different ecosections³ characterize the Mid Coast. Ecosystem representation was assessed against protected areas that occur anywhere in these ecosections. Because these ecosections

³ A description of the ecosections and percentages used can be found in the *Revised Study Areas for the Central Coast Land and Resource Management Plan Area*, page 27.

include areas outside the Mid Coast Forest District, protected areas outside the district influenced the assessment. Ecoregions were determined to be more appropriate units for assessing ecosystem representation than were administrative boundaries such as the forest district boundary.

Study areas under the Protected Area Strategy were not considered. This information is from the document *Revised Study Areas for the Central Coast LRMP Area, May 1997*. The results are summarized by ecoregion and by variant. The results were prorated to ensure that a variant with a small area in a landscape unit would not influence that landscape unit to the same degree as a variant with a large area in the landscape unit. A sample calculation showing the percent representation is included as Appendix III.

Ecosystems that are poorly represented in protected areas were rated as having higher value (or greater need) than those that are well protected. After the percent representation in protected areas was derived the following criteria was applied to establish the overall ranking: less than 5 percent protected received a ranking of 6, between 5 and 10 percent protected received a ranking of 4, and greater than 10 percent protected received a ranking of 2. Appendix IV summarizes these results by landscape unit. Appendix V is a map of these results.

2.2.ii Ecosystem Complexity

A total ecosystem complexity score, to a maximum of six, was assigned to each landscape unit from the value assigned for the ecological diversity (maximum 3 points) and the value assigned for habitat diversity (maximum 3 points).

Ecological diversity was assessed by determining the number of Biogeoclimatic Ecosystem Classification variants⁴ present within each landscape unit. The value for the number of Biogeoclimatic Ecosystem Variants was derived by first, using the number of variants and second, applying the following ranking: Where there was 2 or less variants the landscape unit received a score of 1. Where there were 3 to 5 variants the landscape unit received a score of 2. Where there were 6 or more variants the landscape unit received a score of 3. Appendix VI outlines the values for number of variants across landscape units.

The value for habitat diversity was assessed by determining the presence of the following key habitats: flood plains, estuaries, wetlands and avalanche tracks. Floodplains and estuaries each received a value of 1 if they were present in the landscape unit. Avalanche tracks and wetlands each received a value of 0.5 if they were present in the landscape unit. The total score for this criteria was 3 points. Appendix VII outlines the values for habitat diversity across landscape units.

⁴ For an explanation of the Biogeoclimatic Ecosystem Classification System refer to the *Field Guide for Site Identification and Interpretation for the Vancouver Forest Region, Land Management Handbook Number 28* or the *Ecosystems of British Columbia* Pamphlet, Ministry of Forests Publication.

Floodplains and estuaries received a higher ranking than avalanche tracks and wetlands because they highly productive and relatively scarce habitats. Appendix VIII is a map of the overall diversity ranking for landscape units.

2.2.iii Wildlife

The wildlife criterion was assessed by looking at two factors: species of management concern and special populations. Species of management concern are red, blue or yellow listed species that are forest dependent at the landscape level. Some species meeting this test could not be included because the information available did not allow any meaningful distinction between landscape units. Special populations are resident wildlife populations of special significance on the coast.

A complete list of wildlife species for the Mid Coast Forest District was used in this analysis. This included: *Wildlife Diversity in British Columbia Database* (Victoria Stevens et al 1995), the *Wildlife Information Database* (Candis Miller and Ken Dunsworth et al 1997) and regional Ministry of Environment, Lands and Parks wildlife inventory.

All red, blue and yellow listed species⁵ from the databases were then summarized into a list for the Mid Coast Forest District (Appendix IX).

The initial list was reduced down to 12 species. Each of the 12 species were evaluated to determine if they should remain on the list for developing a ranking for wildlife species. The following is the rationale for the decision to keep or eliminate each of the species:

- Grizzly Bear: Also represents significant salmon ecosystems, it is forest dependant, blue listed and of provincial significance (included in final list).
- Mountain Goat: Localized populations that require low elevation forested habitat in winter (included in final list).
- Marbled Murrelet: Blue listed and of provincial significance, and is highly dependant on old growth forest for nesting (included in final list).
- Elk: Found only in the Bella Coola watershed, unknown how they got there, very small population, which is unstable and it is unknown if they are Roosevelt Elk (not included in final list).
- Northern Goshawk: Not enough known at this time to determine presence or absence in specific Landscape Units (not included in final list).
- Fisher, Western Screech Owl and Lewis' Woodpecker: Not enough known at this time to determine presence or absence in specific Landscape Units (not included in final list).

⁵ For an explanation of Red, Blue and Yellow Listed Species refer to the British Columbia Conservation Data Centre: Rare Vertebrate Animal Tracking List.

- Turkey Vulture: Habitat is confined to marine island shorelines, therefore species can be managed for using FPC (not included in final list).
- Wolverine: Not enough known at this time to determine presence or absence in specific Landscape Units (not included in final list).
- Keen's Long-Eared Myotis: Not enough known at this time to determine presence or absence in specific Landscape Units (not included in final list).
- Caribou: Unconfirmed data regarding use of Mid Coast areas (not included in final list).

Species of management concern were therefore reduced to three (Grizzly Bear, Mountain Goat and Marbled Murrelet) and one point was assigned for each of these species present in a landscape unit.

The following species were considered, as special populations, where populations were known to exist: resident moose, northern goshawk, bald eagle (well populated wintering sites), Kermode bear, caribou, and wolverine. There are populations of migratory water fowl which over-winter in several estuaries in the Mid Coast, however it was felt that these species will be taken care of through FPC, or Goal 2 protected areas under the Protected Areas Strategy.

One half point was given per species for a maximum of three points. Appendix X is a table indicating wildlife value for each landscape unit. Appendix XI is a map showing the relative ranking for wildlife by landscape unit.

2.2.iv Area Sensitive to Development

This criteria was not used for determining Biodiversity Emphasis Options. This criteria is based on natural disturbance types (NDT)⁶, for which there are only three in the Mid Coast Forest District: NDT 1, NDT 2 and NDT 5. NDT 5 is alpine which is not within the operable area, or area subject to development in the Mid Coast. The two NDTs, which are forested (subject to development) are very similar in sensitivity to development and most of the landscape units on the mainland coast have both these NDTs present.

2.3 Relative Conservation Priority

Application of the primary criteria (Sections 2.2.i to 2.2.iv) results in a relative ranking of all landscape units called relative conservation priority. This is the ranking to which the

⁶ For an explanation of Natural Disturbance Types see the Biodiversity Guidebook.

secondary criteria and other considerations are applied. Appendix XII is a table showing the relative conservation priority. This is also represented on a map as Appendix XIII.

2.4 Timber Harvesting Landbase

In order to assign the biodiversity emphasis options it is necessary to determine the timber harvesting landbase. This landbase is the area against which the 10:45:45 percentage allocation for higher, intermediate and lower biodiversity emphasis options applies. The timber harvesting landbase is the operable landbase with the district minus any netdowns to the operable landbase such as steep terrain. To calculate this landbase the same criteria used in the last Timber Supply Review were applied. Appendix XIV summarizes the timber harvesting landbase for each landscape unit.

2.5 Secondary Criteria

2.5.i Distribution of Biodiversity Emphasis Options

The map of relative conservation priority was assessed for distribution of biodiversity emphasis options across the district. The highest ranked Landscape Units were the Nekite and the Nootum/Koeye. The Nootum/Koeye represents over 10 percent of the timber harvesting landbase. If this landscape were ranked higher it would be the only landscape unit ranked higher in the district. It was considered important to distribute the higher biodiversity emphasis options around the district so the next three highest landscape units, which were very close in biodiversity values, were ranked as higher.

It is stated in the biodiversity guidebook that more than half a biogeoclimatic subzone should not be ranked as low in any forest district. In general the outer coast of the mid coast forest district, which falls mostly within the hypermaritime subzone, ranked lower than other areas of the district. To ensure that more than half a subzone was not ranked low the highest outer coast landscape unit, which was close to the landscape units with an intermediate ranking, was given an intermediate ranking. Some intermediate, inner coast landscape units were given rankings of low to ensure the 10:45:45 apportionment for higher, intermediate and lower emphasis options was still met.

Appendix XV is a map of biodiversity emphasis options with distribution considered.

2.5.ii Current Condition

Current condition was considered to determine whether the current physical state of the forest within each landscape unit permitted the seral targets to be met. To assess this, a seral stage analysis was done for each landscape unit. A seral stage analysis is a breakdown of the seral stages (age classes) within each variant within a landscape unit. The seral stages for the Mid Coast Forest District, based on Natural Disturbance Types

are: early seral stage: 0-40 years, mature seral stage: 80-250 years and old seral stage: greater than 250 years. The seral stage analysis for the Mid Coast Forest District is included as appendix XVI.

As a result of the seral stage analysis the Talchako/Gyllenspetz, which ranked as a higher biodiversity emphasis option was assigned to intermediate because it did not meet the seral stage requirements for a higher biodiversity emphasis option. The Lower Kimsquit unit was very close in ecological value and met the targets for seral stage so it was upgraded from intermediate to higher biodiversity emphasis. Appendix XVII is a map of the biodiversity emphasis options with seral stage (current condition) considered.

2.6 Timber Ranking

Each landscape unit was assessed for timber values. This was done using a combination of timber harvesting landbase and site productivity information⁷. The timber harvesting landbase has already been discussed above. The site productivity was assessed using site index information from the forest cover inventory for the Mid Coast Forest District. This inventory is current to the end of 1996. Sites were broken into five site classes: poor (0-15 meters), low (15-20 meters), medium (20-25 meters), good (25-30 meters) and very good (>30 meters). Appendix XVIII is a summary of site productivity by landscape unit. Each Landscape unit was assigned a site productivity using the above classes and the relative amounts of each site class in each landscape unit.

Each landscape unit was assigned a ranking for timber based on the site productivity and timber harvesting landbase using the following system: If a landscape unit has a high timber harvesting landbase and a good or very good site productivity it was assigned a high for timber ranking. If a landscape unit has a moderate or low timber harvesting landbase and a good or very good site productivity, or a moderate timber harvesting landbase and a medium site productivity it was assigned a moderate for timber ranking. If a landscape unit has a low timber harvesting landbase and low or poor site productivity it was assigned a low timber ranking.

The ranking of landscape units for timber is summarized in tabular form in Appendix XIX. Appendix XX is the map of relative timber ranking by landscape unit.

The Chief Forester's Policy directs that where a landscape unit is ranked high for biodiversity and high for timber a landscape unit that is close to the same values for biodiversity but ranked lower for timber may be assigned a higher biodiversity emphasis option. Consequently, the landscape unit ranked high for both values may be reduced to intermediate. In the Mid Coast Forest District this was done for one landscape unit. The Sheemahant ranked higher for biodiversity and timber so it was adjusted to intermediate.

⁷ For an explanation of site productivity and site indices refer to the Ministry of Forests, Inventory Manual.

The Neechanz was adjusted to higher for biodiversity as it only ranked moderate for timber.

Appendix XXI is a map of biodiversity emphasis options with timber ranking considered.

2.7 Consideration of Other Resources

There are a number of other resources which have not been included or evaluated as part of this process. These other resources include, but are not limited to: mineral resources, archaeological resources, visual quality and recreation resources and botanical forest products. It was determined, for the Mid Coast Forest District, that the information for assessing each landscape unit was not complete. It was decided that a better mechanism for dealing with other resource incorporation into this strategy would be the Central Coast Land and Coastal Resource Management Plan Committee. Therefore, at this time the landscape unit ranking for biodiversity emphasis options do not consider other resources.

2.8 Recommended Biodiversity Emphasis Options

The recommended biodiversity emphasis options, taking into account the Chief Forester's Policy as outlined above, is depicted in Appendix XXII.

3.0 Conclusion

Using the criteria, as outlined in section 2, a ranking of biodiversity emphasis options was established. This ranking was done for the Regional Landscape Unit Planning Strategy and was submitted to the Regional Manager of the Vancouver Forest Region in October, 1997. The results are that 11 percent of the timber harvesting landbase is in higher biodiversity emphasis option, 45 percent is in intermediate biodiversity emphasis option and 44 percent is in lower biodiversity emphasis option.

Assigning biodiversity emphasis is a "coarse filter" strategy that will help in maintaining diverse habitats in representative ecosystems across the landscape. Across the 56 landscape units within the Mid Coast Forest District, the ecosystem types (i.e. Biogeoclimatic Ecosystem Classification [BEC] zones, subzones, and variants) and previous disturbance (both natural and managed) history are not uniformly distributed. As a result, some landscapes have greater need for special management, while others present fewer opportunities to manage for old growth attributes or for low levels of fragmentation. Planning within landscape units,

(e.g. the development of FENs, stand management practices, etc.) will proceed once a direction has been set for biodiversity emphasis and resource management zones are discussed in the Central Coast Land and Resource Management Planning (CCLRMP) process.

