December 8, 1997

South Island Forest District Policy (DSI-01)
Wildlife Tree Patch Guidelines dated December 8, 1997

This policy entitled Wildlife Tree Patch Guidelines is provided to communicate my expectations for operational plan requirements to achieve stand level biodiversity requirements through the designation of Wildlife Tree Patches. This policy is intended to guide operational plans in order to adequately manage and conserve the forest resources.

Forest Development Plans (FDP)

Operational Planning Regulations (OPR) Section 15(7)(b) requires that a FDP describe the objectives with respect to wildlife tree patches (WTP) and coarse woody debris (CWD) for the area under the plan. OPR Section 15(2) states that an FDP must contain a reasonable assessment of non-timber resource values know to be on or adjacent to the plan area, and must describe how to accommodate those values.

Guideline
The FDP must specify the objectives for WTP's including the percent retention as outlined in the Biodiversity Guidebook Table 20(a) or(b) for each landscape unit within the operational plan area. The FDP should track WTPs by marking them on all maps with the letters WTP. If the license holder has Geographic Information System (GIS) capabilities, it is to their benefit to track WTPs at this level. At the very least, WTPs must be tracked on a spreadsheet or database. The tracking system should indicate: block number; the total area under prescription (TAUP) minus any reserves or uncut areas (hectares); WTP retention target percent for the landscape unit and biogeoclimatic subzone; total area of WTP (hectares and percent of TAUP minus any reserves or uncut areas); portion of the WTP in constrained/non-contributing area (hectares); and type of constraint/non-contribution (riparian reserve zones, wildlife habitat areas, environmentally sensitive areas, forest ecosystem networks etc).
Provincial tracking methodology for WTPs is being developed. Once completed, it will likely be adopted and utilized. Tracking at this time remains very important to monitor timber supply impacts and to achieve the intent of the Forest Practices Code of British Columbia Act (FPC Act).
Silviculture Prescriptions (SP)

*OPR* Section 39(2)(h) states that the SP must contain a description of the silviculture system including the characteristics, species and function of any trees left standing. *OPR* Section 32(2)(v) states that the SP must describe any actions that will be taken to accommodate the forest resources identified in a higher level plan or FDP that applies to the area under prescription. *OPR* Section 39(2)(w) states that there must be a reasonable assessment of non-timber resource values known to be on or adjacent to the plan area, and a description of how to accommodate those values. *OPR* Section 39(3)(d) states that for the area under and adjacent to the area under an SP, the SP must identify and describe any proposed group reserves. Section 12(b) of the FPC states that the SP must be consistent with the FDP.

**Guideline**

WTP's should be chosen early on in the planning process to avoid unnecessary changes to the cutblock once it has been fully engineered. It is the responsibility of the signing/sealing Forester to ensure that WTP objectives will be achieved for a particular cutblock. The SP must indicate compliance with the WTP objectives stated in the approved FDP and should contain a description of the WTP. The description may contain information that indicates how each WTP attributed to the cutblock should maintain or restore structural attributes that provide critical wildlife habitat at the stand level including denning, shelter, roosting, nesting, and foraging habitat.

WTPs should represent the forest structure, density, and species composition of the cutblock being harvested while capturing the most significant habitat components. In general, the most valuable wildlife trees are generally old, large diameter live trees and snags. However, WTPs should try to capture a variety of tree species, including deciduous trees and rare species, trees within the upper 10% of the diameter distribution of the stand and trees showing evidence of wildlife use or heart rot. Wildlife trees retained in patches provide better habitat than scattered individuals. The *Biodiversity Guidebook* (1995) and the *Stand Level Biodiversity for Forest Managers Course Workbook* (October 1995) provide some additional direction for choosing a WTP.

The WTP must be clearly identified on the SP map (delineated and marked with the letters WTP). Each WTP is attributable to a single cutblock and each cutblock must have a designated WTP. A large WTP can contribute enough area to meet retention target percentages in more than one cutblock. However, the SP will only map and account for that portion of the WTP area attributable to the cutblock in the prescription. The maximum WTP retention percentage that may be attributed for any one cutblock will be the target percentage.
Logging Plans (LP)

OPR Section 33(2)(b) states that the LP must show the approximate location of group reserves, including wildlife trees, as identified in the SP applied to that area.

Guideline
LPs should show the approximate location of WTPs on the LP map. WTPs that are surrounded by proposed harvest will be traversed as part of the delineation of the falling boundary.

Cutting Permits (CP)

The Exhibit “A” map attached to the cutting permit will show the area designated for harvest. Any reserves adjacent to the cutblock are not shown on the CP Exhibit “A” but are presumed to be within the Chart or License area. For reserves within the block there is a Schedule B: Reserved Timber Clause. This clause notes areas that have been rationalised as reserve through the approval of the SP.

Guideline
The CP Exhibit ”A” will show the falling boundary and any WTPs that are within the cutblock and surrounded by a traversed falling boundary. CPs that have a WTP completely surrounded by harvest area will also contain a Reserved Timber clause (Schedule “B” - Coast: Felling, Bucking and Utilisation Specifications) linking the WTP to the approved SP.

WTP Retention Target Percentage

The Biodiversity Guidebook Tables 20(a) and (b) show the WTP retention target percentages within landscape units (approved or interim) or a contiguous geographic unit (FDP or portion on FDP). The percent retained increases as opportunity for WTP location decreases due to past development. In areas where landscape level biodiversity objectives have been established the percent retention is lowered by 3%. Detailed interpretation of these tables based on licensee and Ministry of Forests data, the Biodiversity Guidebook and the Forest Practices Code Timber Supply Analysis (February 1996) are attached to this policy for ease of use by licensees. The WTP retention target percentages are specified by landscape unit and biogeoclimatic subzone.

Guideline
The WTP retention target percentages are a one-time calculation for each biogeoclimatic subzone within the landscape unit. However, they will be reviewed and possibly modified as more precise data sets are analysed or as part of the process to set landscape level objectives for biodiversity. In addition, WTP retention target percentages will be reviewed during the annual allowable cut (AAC) determination for the licensee or supply block, to ascertain if there have been any significant changes to operability.

All FDPs will indicate the WTP retention target percentages for each landscape unit and biogeoclimatic subzone in the plan. If a draft FEN, jointly endorsed by Ministry of Forests and Ministry of Environment, is in place, WTP retention target percentages from Table 20(a) may be used. Otherwise Table 20(b) will be used to calculate WTP retention target percentages. WTP retention target hectares will be calculated based on the total area under prescription (TAUP) minus any reserved or uncut areas.
Field Layout

WTPs can be most easily established while engineering the cutblock. They do not have to be traversed, painted, and blazed unless they are surrounded by the area to be harvested (where WTP boundary constitutes the falling boundary). Special ribbon to denote WTPs would be useful for field identification. As per the Biodiversity Guidebook, WTPs should be located within or adjacent to the cutblock. The distance between WTPs or other suitable leave areas outside the block should not exceed 500 meters. The percentage WTP required for each cutblock is identified in the approved FDP.

Guideline

WTPs do not have to be traversed unless they form part of the falling boundary. They should be located within or adjacent to the cutblock ensuring the distance between WTPs or other suitable leave areas does not exceed 500 meters. WTP selection should be based on characteristics/attributes outlined in the Biodiversity Guidebook and Stand Level Biodiversity for Forest Managers course workbook.

Windthrow

WTPs are a long-term reserve and should remain standing for a least one rotation. Some windthrow may be inevitable but the objectives of the WTP should not be compromised by minor windthrow. The onus is on the licensee to establish WTPs in lower windthrow hazard areas.

Guideline

The SP should contain an evaluation of windfirmness and detail any treatments to be used to decrease risk, indicating treatment intent and desired result. These treatments are limited to those that decrease risk, but do not compromise the integrity of the WTP and may include pruning, establishment of a buffer, and feathering of a buffer. Feathering of the WTP is not acceptable. Locating a WTP in a windfirm location should be favoured over locating it in a less desirable location and prescribing windthrow treatments.

In the event windthrow does occur within a WTP, each situation will be assessed on a site specific basis and a determination of the adequate follow-up treatments, in accordance with WCB regulations, will be described in the SP and the FDP. The following categories will help guide the determination of what this treatment should be; minor windthrow (<25% of the WTP area) may remain on site as CWD, moderate windthrow (25-50% of the WTP area) may be salvaged and major windthrow (>50% of the WTP area) may be harvested. The licensee will be required to establish another WTP for a cutblock with moderate and major windthrow prior to approval of the WTP for salvage or harvest. Any proposed salvage of a WTP must be referred to the Designated Environment Official for comment prior to submission to the District Manager for approval.

Where a licensee is applying for either harvesting or salvaging of a newly created windthrow opening which does not have a WTP, WTP requirements will be as follows: if the harvest/salvage proposal is considered a minor amendment to the FDP under Section 43 of the FPC Act, WTPs will not be required; and if the harvest/salvage proposal is considered a major amendment, requiring further review and comment, under either Section 41 or 42 of the FPC Act, WTPs are required.
Hazard Trees

The Biodiversity Guidebook and the Biodiversity Question and Answer Document from the Chief Forester and MoELP (February 15, 1996) states that harvesting is not permitted within WTPs with the exception of hazard trees which must be left on site as CWD. A wildlife tree that must be protected under legislation i.e. Eagle nest tree, must not be felled regardless of whether or not it is located in a WTP. Thoughtful location of the WTP is encouraged to help minimise the requirement for buffers/safe work zones which will further impact the timber harvesting land base.

Guideline

The conditions for hazard tree removal are outlined in the CP. Schedule “A”: Special Conditions and Requirements outlines the authority to fell hazard trees. Utilization standards are outlined in Schedule “B” - Coast: Felling, Bucking and Utilization Specification and state that the licensee cannot buck or utilize any timber if reserved under Part 6.00: Reserved Timber (see Cutting Permit Section above). The WTP must include attributes such as snags. If removal of hazard trees compromises the WTP such that it is no longer representative of a good WTP or the surrounding/adjacent cutblock (with respect to snags as well as other attributes), another WTP must be located for the cutblock, or a safe work zone may be required.

Use of Constrained/Non-Contributing Area

Where ever possible WTPs should be located in constrained (riparian management areas, parks, forest ecosystem networks, deer winter ranges, marbled murelet areas etc.) or non-contributing (wetlands) areas providing they meet patch and live tree retention characteristics as per the Biodiversity Guidebook. If the constrained/non-contributing area has WTP characteristics it will contribute to the WTP target percentage for the cutblock. Areas that are not normally harvested such as rock outcrops, swamps and brush patches are NOT considered WTPs unless they contain wildlife trees. A wildlife tree is any standing live or dead tree with special characteristics that provide valuable habitat for conservation and enhancement of wildlife. Where rock outcrops, swamps brush etc., do not contain wildlife trees, it is suggested that WTPs be located adjacent to them. Together, the wildlife tree patch and the constrained area offer more diverse habitat and are more practical from an operational perspective. Small non treed units of less than or equal to 0.25 hectares may be counted towards the WTP retention target percentages provided they are surrounded by or have adjacent forested areas which contain wildlife trees.

Guideline

WTPs should be located in constrained/non-contributing areas where ever possible based on WTP characteristics as per the Biodiversity Guidebook. Areas may only be included in the WTP target percentage if they have WTP characteristics as described in the SP. A small non treed unit of less than 0.25 ha may be counted towards the WTP retention target percentage provided it is surrounded by or has adjacent forested areas which contain wildlife trees. However, the inclusion of a non-treed unit as a component of the WTP retention target percentage should be rare.

Coarse Woody Debris

Objectives for CWD must be included in the FDP (OPR Section 15(7)(b), OPR Section 51(2)) and the SP (OPR Section 39(3)). Currently, the requirement to maintain CWD following harvest conflicts with existing utilisation standards. Until further direction is provided, the utilisation standards will supersede the requirements for CWD.
Guideline
Follow current utilisation standards with respect to CWD. It is encouraged to leave slash scattered over the cutblock to the degree possible to work towards achieving CWD objectives.

Alternative Silviculture Systems

WTP retention is required for all types of silviculture systems in British Columbia because over time, all trees not previously constrained, will be harvested regardless of silviculture system. Also, snags/danger trees are often removed from an entire cutblock to meet WCB requirements. WTPs are required to ensure long term reserves are maintained.

Guideline
WTPs are required for all types of silviculture systems. WTP retention target percentages are not lowered when a system other than clearcutting is utilised.

Phase-In Period

Guideline
Full implementation of these guidelines must occur no later than 4 months after December 8, 1997. After April 8, 1998, all FDPs must show Table 20(a) or (b) WTP retention target percentages. However, all cutblocks that have met landscape requirements and have been approved under an FDP for submission of an SP, will continue to be processed under the WTP retention target percentage objectives of that FDP. Approved SPs will not require amendment although the licensee may voluntarily amend the SP to reflect these guidelines.

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