

APPENDIX IX

Review of the Draft Management Plan

- Summary of the Public Review of the Draft Management Plan
- Review by the Vancouver Forest Region: Comments and Responses

March 2001

Summary of the Public Review of the Draft Management Plan

The following is a summary of the public review process and results. A full report, including the specific comments received at the open houses and the written responses and replies, was submitted to the Regional Manager. This report is available on request.

1.0 PROCESS

Prominent advertisements were placed in regional and local newspapers in order to advise the general public:

- that the draft MP #8 was available for review;
- of locations where a copy of the Draft MP #8 could be obtained;
- of the schedule and locations of open houses for review and discussion of MP #8;

The advertisements were placed in the following papers in late October and early November as shown.

BC Gazette	October 27, November 3
Bella Coola Coast Mountain News [published every second Thursday]	November 9
Campbell River - Courier Islander	October 31, November 7
Campbell River Mirror	November 1, 8
Powell River Peak	November 1, 8
Prince Rupert Daily News	October 31, November 7
Queen Charlotte Islands Observer	November 2, 9
Williams Lake Tribune	October 31, November 7

Open houses, one-day events from 3:00 pm to 9:00 pm, were held at the following locations:

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| • Skidegate, Community Hall | November 14 |
| • Port Clements, Community Hall | November 15 |
| • Masset, Health Centre | November 16 |
| • Sandspit, Community Hall | November 17 |
| • Port McNeill, Lions Hall | November 20 |
| • Bella Bella, Alexa's Place Restaurant | November 20 |
| • Bella Coola, Valley Inn | November 21 |
| • Sayward, Kelsey Recreation Centre | November 21 |
| • Campbell River, St. Patrick's Parish Hall | November 22 |
| • Powell River, Coast Town Centre Hotel | November 23 |

The open houses included posters and copies of the draft MP #8, both text and maps. Weyerhaeuser staff involved in local operations and in writing the draft MP were available for questions and discussion.

Copies of the draft Management Plan, a short newsletter and a survey form were made available to the general public between November 14, 2000 and January 31, 2001. Copies were available during normal working hours at the following locations:

- Weyerhaeuser offices:
 - Queen Charlotte Timberlands
 - Port McNeill Timberlands
 - North Island Timberlands
 - Stillwater Timberlands
 - Nanaimo Woodlands.

- Ministry of Forests offices at:
 - Queen Charlotte Islands Forest District
 - Port McNeill Forest District
 - Mid Coast Forest District
 - Campbell River Forest District
 - Sunshine Coast Forest District
 - Vancouver Region Office, Nanaimo
 - Resource Tenures and Engineering Branch, Victoria

Copies of the advertisements, newsletter, questionnaire and public input received to-date were also sent to those on the mailing list for TFL 39.

Special invitations were sent to First Nations groups to meet with them for discussion of issues of special concern.

2.0 RESULTS

In total, 93 people attended the 10 open houses. Public attendance at the individual open houses varied between zero and twenty-three. In addition, eighteen written responses were received. Details of the comments at the open houses and the written responses and replies are included in the full report on the public review process.

The concerns and issues raised at the open houses and in the written responses are varied. In summary they included:

- Requests for information (particularly at the open houses). These included questions on the available timber inventory, employment and forest health.

 - Timber resource issues covered a wide range of concerns. They included concerns about harvest levels and sustainability. We believe these are covered by the analysis (including sensitivity analyses and a new analysis every five years) that provides information for the AAC determination. Our response to concerns that second-growth will be harvested at young ages has been to point out that harvest ages will vary considerably from around
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40 years to beyond 120 years; that some stands will be harvested at the younger ages of 40 to 50 years but that, on average, harvest ages will be between 70 and 90 years.

Interest was also shown in forest health issues such as wind damage and disease, and in sustainability of specific tree species such as red cedar and yew.

- Resource protection concerns referred to protection of biodiversity, wildlife, fish habitat, cultural resources and areas of specific interest. The Forest Practices Code and Weyerhaeuser BC Coastal Group's Forest Project (stewardship zones and variable retention) provide a strong basis for meeting these needs.
- Employment and economic opportunities for local people was of particular interest to residents near the northern Block 6 (Queen Charlotte Islands) and Block 7 (Namu). The Weyerhaeuser BC Coastal Group has become more active in working with First Nations and other local groups. This is outlined in the strategies described in Section 4 of the MP.
- There is considerable interest in forest recreation opportunities, in particular in maintaining and improving access to such opportunities. The MP (Section 5.6) strategy includes working with the MoF and local residents to develop appropriate prescriptions for public access to specific areas.
- Land based issues included the Tlell Watershed (Block 6), the Haida interest areas (Block 6) and the Koeye Watershed (Block 7). The Koeye and Tlell Watersheds are currently included in local or regional planning initiatives – these are described in Section 7 of the Management Plan. The Company AAC proposal includes a partitioned AAC contribution for harvest in the Haida Declared Protected Areas (Section 6.1.1.3 of the MP).

As indicated in the above discussion, responses to most of the questions and issues raised occurred in one of three main ways:

- Information was provided as requested
- The concern was communicated to the appropriate operations for resolution and/or awareness at the local level.
- The concern or issue is addressed by regulations, the management plan process (e.g. the analysis) and/or strategies described in the Management Plan.

Hence specific changes to the Management Plan are few. They include:

- A commitment has been added to Section 7.10, "Stillwater Timberlands Pilot Project", to compare the Timber Harvesting Land Base resulting from current planning initiatives with that analyzed in MP #8. If the difference is more than 10%, then the implications for future timber supply will be
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discussed with the Chief Forester. Further analysis and re-examination of the AAC contribution of Block 1 will depend on the outcome of this discussion.

- The description of Section 3.1.3 on adaptive management and monitoring and Section 5.3 on biodiversity objectives and strategy have been changed to clarify discussion of the monitoring and adaptive management program. It is important that appropriate indicators of success are identified and measured and that management responds according to such measurements and observations.

Invitations were sent to First Nations Groups to meet and discuss issues of special concern and the Management Plan process. A meeting that included a presentation on the Management Plan was held with members of the Heiltsuk Tribal Council in Bella Coola on November 20, 2000.

Review by the Vancouver Forest Region: Comments and Responses

Regional Manager Review Comments on Draft Management Plan 8 for TFL 39 - February 2001

General

It is recommended that the twenty-year feasibility study be re-titled the twenty-year plan in order to clearly identify what legislative requirements it is designed to meet.

All review comments are made in the context of provincial forestry legislation and the TFL 39 licence requirements. These review comments in no way support or condone any practices not mandated by provincial forestry legislation or the TFL 39 licence document or supported by the discretion of statutory decision makers under the same documents. Full consideration of the proposed Forest Stewardship Zones will occur during the AAC determination process and upon submission of the proposed management plan.

Table of Contents

Where the table of contents describe what is on the enclosed CDs, it is recommended that a directory tree be included, identifying the location of all files by title.

Page 12, Section 4.3, First Nations Consultation

Specify measures to be taken by Weyerhaeuser to consult with aboriginal people claiming an aboriginal interest within or to TFL 39 area. Identify which First Nations groups such measures include, and also detail how Weyerhaeuser "...encourages review of operational plans."

Section 3.21 of the SMOOP states that one issue for the Haida is "the sustainable supply of red cedar". Readers are assured that "The supply of old growth cedar in Block 6 (Q.C.I.) will be examined as part of the analysis for MP#8." Section 4.3 of the MP merely notes that the QCI division helped the CHN with an inventory of "ceremonial cedar" and that the MoF is currently supervising a more systematic survey". The results of that survey on TFL 39 will be available this fiscal year. It is important to address the results of this survey to the greatest extent possible in the proposed MP.

Page 10, Section 4.1, Social and Economic Interests

The reference to a "substantial portion" of the logs from TFL 39 being processed in Vancouver Island and lower mainland facilities is vague. It is recommended that an approximate percentage be cited.

Page 13, Section 4.5, Other Forest Users

Where Weyerhaeuser is aware of other commercial resource users operating on the TFL, include such organizations on the mailing lists used for notification of opportunities to review FDPs and the MP. Provide a better explanation of the "as needed" basis on which Weyerhaeuser's strategy for interaction with other forest users is based. Is it Weyerhaeuser's experience that "as needed" interaction satisfies the other forest users?

Page 14, Section 5.1, Water Resources and Habitat Protection

Why are the ECA harvest constraints only applied for ten years, as detailed in section 8.3.5 of the Timber Supply Analysis Information Package (TSAIP)? Is this consistent with the recommendations of the completed watershed assessments?

Page 15, Section 5.2, Soil Conservation

Indicate if site rehabilitation will be required to meet the permanent occupancy netdowns in the TSAIP.

Page 17, Section 5.6, Recreation

Recommend adding 'and trails' after recreation sites in the third bullet.

After the last bullet, recommend adding the words 'and utilizing the existing MOF cave/karst management handbook for the Vancouver Forest Region as an interim measure until the new management guidelines have been finalized and approved for general use'.

Page 20, Table 6.1, Summary of Timber Supply Analysis Options

A sensitivity analysis on the impact of excluding deciduous from the AAC would assist the CF in assessing the utility of a deciduous partition.

A combined run of option 13a and 13b to test the impact of removing marginal economic areas, and the Koeye and Fougner Bay PAS areas would enable assessment of a highly probable scenario.

Page 23, Section 6.1.1.3

Given Northwest Hardwood's (Weyerhaeuser subsidiary) purchase of Coast Mountain Hardwoods and the increased emphasis on utilizing alder (as stated by Weyerhaeuser), a deciduous partition is more important than ever to ensure proper utilization of the deciduous timber. The Vancouver Forest Region is supportive of a deciduous partition on TFL 39.

Page 27, Section 6.1.2.4, Infrastructure and Access Development

Section 6.1.2.4. states that "new bridges and stream crossings will be reviewed with and approved by fisheries officials as required by the District Manager." The district manager does not routinely refer approval to fisheries officials. District manager approvals are given under the authority of the *Forest Act* and *Forest Practices Code of British Columbia Act*. District manager approvals do not exempt the proponent from any other statutory requirement such as the *Fisheries Act (Canada) R.S.C. 1985*.

Page 29, Second Growth Harvest Strategy

Address the issue of financial rotations likely leading to decreased stumpage revenue to the Crown due to smaller piece size, lower grades, and potentially decreased volume arising from shorter rotations.

Page 30, Section 6.2, Establishing and Managing the New Forest

Objectives for prescribed fire and fuel management are not proposed but are required as per section 2.25(f)(iv) of Schedule D of the TFL 39 licence.

Page 31, Section 6.2.1, Silvicultural Objectives

Expand on the stated objective of expanding hardwood management in response to market demand. How would such an expansion be effected?

Page 32, Section 6.2.2, Sub-Heading Wood Quality

Indicate on what basis it was determined that 'logging costs are not as dependent on piece size as previously thought, especially on machine accessible sites, so there is less advantage to larger logs'.

Page 32, Section 6.2.2, Sub-Heading Type 2 Analysis

Please expand on the comment that preliminary results of this analysis show other priority treatments to include utilization of deciduous sites.....

Page 33, Section 6.2.3, Sub-Heading Incremental Silviculture

Are there no incremental silviculture projects that Weyerhaeuser is considering funding?

Page 33, Section 6.2.4, Sub-Heading Species and Stock Selections

Add 'and an approved hardwood management proposal for the TFL', to the end of the sentence: 'Acceptable species may be coniferous and/or deciduous depending on the site and the company's market strategy requirements'.

Page 33, Section 6.2.4, Sub-Heading Species and Stock Selections

Ensure that the reliance on natural regeneration in the old growth and habitat zones and the associated absence of gains related to genetic superiority of nursery stock is reflected in the timber supply analysis. This management strategy may lead to longer delays in achieving regeneration and free growing status, thereby affecting the overall timber supply and will require review for the next timber supply analysis.

Page 36, Section 6.2.5, Sub-Heading Spacing

MOF disagrees with the statement that 'conventional spacing strategies reduce merchantable stand volumes without improvements in stand value' given the ability of spacing to improve stand value by favouring certain species such as Cw, Fdc or Yc, removing poor crop trees, or reducing windthrow.

Page 37, Section 6.2.5 Sub-Heading Hardwood Management Strategy

As discussed in a meeting last year with the licensee, red alder management on the TFL is contingent upon a hardwood management proposal being submitted to, and approved by the regional manager. A statement covering this should be included in this section. Remove or modify the first sentence in the last paragraph (i.e. 'in addition, in some areas, alder will be left and encouraged to regenerate in disturbed areas such as adjacent roads and landing'), since utilization opportunities and possible adverse effects on conifer plantation productivity need to be reviewed before consideration is given to implementing this strategy.

In the development of such a hardwood management proposal, consider that the Weyerhaeuser proposal of "... regenerating a harvested area to alder, ... or a mixture of alder and conifer" would seem to have obvious operational difficulties due to the different rotation ages of most conifers and that of alder. Perhaps a mixed species approach could work in a patch-type configuration. In this way, the licensee could have substantial stems of both species, which are being managed on their own, and not compromising the other.

Page 38, Section 7.2, Higher Level Plans

Update this section to reflect the coming into effect of the Vancouver Island Land Use Plan (VILUP) Higher Level Plan (HLP), which can be viewed at the internet address <http://www.for.gov.bc.ca/pab/news/vilup/final.pdf>

Page 42, Section 7.0, Planning

The management plan does not discuss in any detail the links that could be made between the Forest Project Stewardship Zones (OG Zone, Habitat Zone, etc.) and the provincial landscape unit planning approach. There is a minor reference to some discussions between Weyerhaeuser and agency staff in one of the appendices. It would be helpful to compare the draft landscape units and biodiversity emphasis options to the proposed stewardship zones. This would provide a clearer picture of how the stewardship zone approach fits with the provincial landscape unit planning guidelines and biodiversity initiatives.

Page 45, Section 7.6, Queen Charlotte Island Local Resource Management Plan

It would be more accurate to say that discussions continue between LUCO, MAA and CHN in context of treaty-related measures when summarizing the status of this planning process.

Page 45, Section 7.8, Tlell Local Resource Use Plan (LRUP)

More detail would be helpful i.e.:

- expected date of completion (March 31, 2001)
 - how long the LRUP has been going on
 - members of the LRUP working group
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- the expected products that will come out of the process
- how Weyerhaeuser will work with the LRUP

Page 46, Section 7.11, Landscape Unit Planning

It would be helpful to list here an accounting of old seral area remaining by block of the TFL and comparing this to the targets for the draft landscape unit boundaries and biodiversity emphasis options. Should the reader wish more information, direct them to the relevant appendices (ie timber supply analysis).

Page 51, Section 8.8, Riparian

The Forest Practices Code allows for strategic fish inventory methodology under a Local Area Agreement (LAA). Weyerhaeuser may want to consider future inventory work aimed at achieving cost and time benefits that a LAA may be able to offer.

Page 51, Section 8.10, Cultural Heritage Resources

Include a reference to the Central Coast Archaeological Overview Assessment in this section.

Page 57, Section 10.3, TFL Annual Report

Note that an annual report is no longer automatically required under the licence agreement, although the Vancouver Forest Region intends to maintain this reporting mechanism by requesting such on an annual basis.

Appendix II, Information Package

Table 8-5 Netdowns for Lakes and Wetlands Riparian Areas

For your information, guidance in the form of lake classification guidebooks for the Prince George, Nelson and Cariboo Forest Regions indicate the use of a lakeshore management area that is 50-250 metres wide. We expect development of the guidebook for the Vancouver Forest Region to contain similar recommendations. The licensee should consider this in subsequent analyses.

Appendix II, Information Package

Table 8-11 Visually Effective Greenup (VEG) Heights and Ages

Please include an explanation of why the average age to meet partial retention and retention VEG is in some cases less than that of modification, counter to what would be expected.

Appendix II, Information Package. Section 8.1.5 Cultural Heritage Resources:

MacMillan Bloedel certainly contributed significantly in manpower but it was the MoF which actually funded the revision (not conversion) of the AOA data.

Appendix III, Timber Supply Analysis, EWB Netdowns

Please clarify how the EWB1 and EWB2 netdowns were applied in block 7 as blocks in the spatial model appear to be located over areas identified as either 55% or 90% netdown.

Appendix III, Timber Supply Analysis, Section 5.6, Visual Landscape Constraints

Option 6 refers to percentage of alteration values that are meant to be used for clearcut silviculture systems. For partial cutting systems, there are two tables, derived from the Visual Impacts of Partial Cutting report (BC Ministry of Forests, 1997), that can be used to estimate the amount of wood that can be removed from a visual area and still achieve the recommended VQC (rVQC).

Table 1. Predicting VQCs using even distribution leave tree partial cut silvicultural systems.

% Volume Removed (m ³)	Tree Height (m)									
	5	10	15	20	25	30	35	40	45	50
10	R	R	R	R	R	R	R	R	PR	PR
20	R	R	R	R	R	R	PR	PR	PR	PR
30	R	R	R	R	PR	PR	PR	PR	PR	PR
40	R	R	PR	M						
50	PR	PR	PR	PR	PR	PR	PR	M	M	M
60	PR	PR	PR	PR	PR	M	M	M	M	M
70	PR	PR	PR	M	M	M	M	M	M	M
80	PR	PR	M	M	M	M	M	M	M	M
90	M	M	M	M	M	M	M	M	M	M

If using table 1, it is recommended that the mid point for each visual quality class be used as timber supply analyses require a single removal figure for partial cutting per visual area. Example: If you are trying to achieve a partial retention visual quality class in a 30m tree height, the appropriate volume removal to be modelled would be 40%.

Table 2. Most probable classes for partial cuts with % basal area removed per hectare.

Basal Area Removed (%)	Most Probable VQC/EVC	Probability of Achievement (%)
5	R	99.7
10	R	99.5
15	R	99.1
20	R	98.4
25	R	97.1
30	R	94.7
35	R	90.6
40	R	83.9
45	R	73.8
50	R	60.3
55	PR	52.0
60	PR	63.9
65	PR	71.3
70	PR	72.5
75	PR	67.3
80	PR	56.8
85	M	54.7
90	M	69.1
95	M	80.5

Where table 2 is used to model the impact of partial cutting on timber supply, the timber supply analyst will have to choose an appropriate basal area removal number according to visual quality class. To ensure the VQC is achieved, it is recommended that figures with a probability of less than 70% not be used.

Weyerhaeuser should use the above information to model the impact of partial cutting/retention systems on timber supply.

Appendix IV

As per section 2.25(iii)(B) of schedule D of the TFL 39 licence, the draft twenty-year plan (TYP) included in the draft management plan should have been prefaced with the fact that it had not yet been accepted under paragraph 2.21 of the same schedule.

Note that where the licensee has proposed a harvest rate that is higher than that modelled by the TYP (the base case), an additional TYP demonstrating the feasibility of the higher proposed harvest would be of benefit, but is entirely at the option of Weyerhaeuser to provide such. Additionally, the utility of the TYP in supporting the modelled harvest rate is limited where the TYP only spatially models 40ha clearcuts and not the variable retention systems being employed operationally.

District manager comments on the TYP have been sent directly to Weyerhaeuser from the districts.

Appendix V

Update table 4.1 to include the meeting Cyndy Grant had with Stan Price on April 19, 1999, to review the Recreation Features Inventory and Visual Landscape Inventory.

Appendix V, Current Resource Inventories, Recreation

Major updates were undertaken to the recreation inventories (RFI and ROS) for blocks 2-7 during Management Plan No. 7, the revisions were completed to a draft inventory standard (MOF version 2.0 1996) which has since been approved by the Resource Inventory Committee (MOF version 3.0 1998).

Block 1 is currently being re-inventoried to the latest approved standard.

The subsequent recreation analysis which was completed for Blocks 2-7 has been reviewed and accepted by MoF staff. However, the method used present recreation values and incorporated recreation resources into the Timber Supply Analysis is based on outdated 1991 recreation inventory standards and are no longer considered valid (e.g. Procedures for Factoring Recreation Resources into Timber Supply Analysis 1993).

In particular, the resulting folio of maps that accompanies the draft Management Plan No. 8 shows areas of high recreation value as ER1, moderate recreation value as ER2 with netdowns, moderate recreation value as MOD without netdowns and C1 as potential recreation value. This is incorrect and should be amended to reflect that

recreation resources and values are now based on a combination of recreation feature significance class and sensitivity to resource development.

The following table is an example of how potential recreation netdowns may be applied based on these two criteria:

Recreation Feature Significance Class	Resource Sensitivity Rating	Potential Netdown Factors
VERY HIGH (VH)	HIGH (H) MODERATE (M) LOW (L)	100 % 50 % 0 (unlikely combination)
HIGH (H)	HIGH (H) MODERATE (M) LOW (L)	100 % 25-50 % 0 (unlikely combination)
MODERATE (M)	HIGH (H) MODERATE (M) LOW (L)	25-50 % 10-25 % 0
LOW (L)	HIGH (H) MODERATE (M) LOW (L)	0 (unlikely combination) 0 (unlikely combination) 0

Using this table to identify ESAs for recreation, ER1 would equate to areas with recreation values of VHH and HH and netted out 100 % while ER2 would equate to areas with recreation values of VHM, HM, MH and MM with potential netdowns of 10-50% depending on the individual polygon value.

It is recognized that it is probably too late in the MP process to use the updated approach, however, please consult with Doug Herchmer of the Vancouver Forest Region on how to best summarize in the proposed MP what the consequences of using the old approach may be, in addition to ensuring that the issue is adequately managed in the next TFL 39 and 44 MP.

Appendix VII, Section 4.0, Guidelines for Abies Species

The regional forest entomologist has expressed the view that while he does not disagree with the 'Guideline for Abies Species', it may be too stringent. In monitoring plots and from observations from around the south coast it would appear that although some of the amabilis population will be adversely affected by the Balsam Woolly Adelgid, a significant portion will likely make it through to rotation without undue impact from the insect. There is also concern about the long-term impacts to biodiversity of not accepting a set minimum number of amabilis trees per hectare, as proposed in the circumstances listed under section 5.0.

Appendix VIII, Discussion on Forest Stewardship Zones

Clarify if the retention areas in the habitat and old-growth zones are retained in perpetuity or is harvesting planned for these areas. If harvesting is planned, through how many entries, timed at approximately what intervals will it occur?

Part IV, Folio Maps for Visual Landscape

The map legend states VQOs have been established within all blocks. VQOs for blocks within the Sunshine Coast Forest District have been established by the district manager. Clarify with the other forest districts whether the folio maps are referring to 'recommended visual quality' or if VQOs have also been established by the other district managers.

Ensure that the scenic areas have been 'made known' by the district managers if the TFL is using the information to portray current operations (note page 3 of Ministry of Forests' Procedures for factoring visual resources into timber supply analyses, March, 1998).

Symbology regarding viewpoints and screening should be included in the folio in addition to the polygons. This is important since it provides the user of the inventory with an accurate idea of what viewpoints were used to assess the visual sensitivity unit polygon. This information would be useful when the folio maps are used by operational staff in completing visual impact assessments.

Miscellaneous:

Ensure an authorized licensee representative signature block is signed in the proposed management plan.

Responses to the Regional Manager's Comments on Draft Management Plan #8 for Tree Farm Licence 39

The responses follow the order of the comments.

General

The twenty-year feasibility study has been retitled the twenty-year plan, as recommended. It is suggested, however, that Spatial Twenty-Year Feasibility Study is a more accurate description of the product. The Twenty-Year Plan is a test of spatial feasibility and is not an operational plan.

Table of Contents

A clearer description of the CD contents has been added. It is recommended that the user follow instructions included in the cover of the CD case and refer to the site map on CD #1.

Page 10, Section 4.1, Social and Economic Interests

Changes have been made, including adding the following paragraph to Section 4.1.

Approximately 50% of the logs from TFL 39 go to Company sawmills on Southern Vancouver Island and the Lower Mainland. A further 25% is directed to the Pacifica paper mill in Powell River. Much of the remaining log volume goes to sawmills on Vancouver Island (some as part of fibre supply agreements) or to sawmills and cedar shake mills in the Vancouver/Fraser Valley area. These external sales are offset to some extent by mill purchases as logs are traded to better suit mill requirements.

Page 12, Section 4.3, First Nations Consultation

As suggested, more detail has been added to this section. This includes a list of First Nation Groups that are contacted for review of FDPs.

The text on the supply of "monumental" red cedar in Block 6 (Queen Charlotte Islands) has been changed as follows:

A more systematic survey (supervised by the MoF) of lands both in TFL 39 and in the Queen Charlotte Islands Timber Supply Area is scheduled for completion later in 2001. It is expected that results of this survey will assist in directing further information gathering and planning efforts. Weyerhaeuser will continue to cooperate in this initiative.

Page 13, Section 4.5, Other Forest Users

A fuller description of how Weyerhaeuser interacts with other forest users has been included.

Page 14, Section 5.1, Water Resources and Habitat Protection

Applying a 10-year Equivalent Clearcut Area (ECA) constraint is consistent with the recommendations of the watershed assessments. In all cases, the ECA was assessed by the professionals to be a secondary or tertiary issue in the TFL 39 watersheds. The CWAPs are being re-evaluated on a 3-year cycle (following the Operational Planning Regulations) and the professionals conducting the CWAP revisions anticipate changes to the recommendations (in consultation with the MoF and MoELP) following the revisions.

Page 15, Section 5.2, Soil Conservation

The permanent occupancy net-downs used in the timber supply analysis will be reviewed during MP #8. The current estimate assumes that site rehabilitation will not be required to meet these net-downs

Page 17, Section 5.6, Recreation

The suggested change, adding “and trails” after recreation sites has been made to the third bullet.

The suggested addition to the last bullet has been made. The words “and utilizing the existing MoF cave/karst management handbook for the Vancouver Forest Region as an interim measure until the new management guidelines have been finalized and approved for general use”.

Page 20, Table 6.1, Summary of Timber Supply Analysis Options

An option that excludes deciduous areas from the Timber Harvesting Land-Base has not been done. The area involved is small and the organization of data for the analysis results in a substantial amount of work to run this option.

Deciduous areas are defined as those classified at the time of inventory to have a deciduous species (usually red alder) as the leading species. These stands often have a significant conifer component and in some areas the species composition has changed to primarily conifer stands. This species change was noticeable in a number of areas cruised in Block 1 during the mid-1990s.

The analysis included only half of the available deciduous areas. Approximate deciduous areas in the THLB are:

	Deciduous areas in the THLB	
	Approximate Area (ha)	% of THLB
Block 1	1075	1.5%
Block 2	675	0.6%
Blocks 3&4	125	0.3%
Block 5	10	0.1%
Block 6	725	0.6%
Block 7	<10	< 0.1%
TFL 39	2610	0.7%

Most of the deciduous areas are between 30 and 70 years of age. The contribution to harvest levels (in the analysis) is estimated at around 1% in the medium-term and less than 1% in the longer-term. Refer to the discussion on a separate deciduous partition under “Section 6.1.1.3” below.

An option 13d, that combines option 13a (removing the Koeys Watershed and Fougner bay PAS areas from the timber harvesting landbase) and option 13b (removing marginal economic areas from the timber harvesting landbase) has been completed. The results for several harvest flow rules are included in an addendum to the Timber Supply Analysis in Appendix III.

Page 23, Section 6.1.1.3

Our recommendation is that a separate deciduous partition is not needed in MP #8. We acknowledge that utilization of the deciduous type should continue to be monitored – hence we commit to reporting on the area of deciduous stands that are harvested annually.

The deciduous forest types are a small portion of the forest (refer to discussion under “Page 20, Table 6.1, Summary of Timber Supply Analysis Options” above). Harvest in deciduous stands has been monitored since 1996 and has increased to 45,000 m³ in 1999, the last year for which data is currently available.

With Northwest Hardwood’s purchase of Coast Mountain Hardwoods there is an increased emphasis on utilizing alder. Timberlands operations in TFL 39 have plans to supply the Northwest Hardwoods sawmill in Delta with approximately 40,000 m³ of alder during 2001. Much of this volume will be from stands classified as deciduous (primary species alder, often with significant volumes of conifer).

The increased emphasis on alder strongly supports the premise that the deciduous areas will be utilized (at least to the extent included in the analysis). Monitoring of areas of deciduous stands that are harvested will occur during MP #8. This commitment has been added to the text in Section 6.1.1.3.

Page 27, Section 6.1.2.4, Infrastructure and Access Development

The sentence “new bridges and major stream crossings will be reviewed with and approved by fisheries officials as required by the District Manager” has been removed.

Page 29, Second Growth Harvest Strategy

By definition, the forest owner is best off financially by moving to financial rotations. The financial rotations include recognition of the forest owner’s cost of capital and estimates of future costs and timber values (quantity and quality).

It is recognized that the crown has a number of forest objectives including financial returns, employment (harvest flows) and protection of the environment.

Recently imposed regulations for environmental protection, focus on developing a significantly different spatial pattern (geographic distribution of age classes) in the forest than what has occurred with historical harvest practices. Harvesting some areas at closer to financial rotation will assist in easing the transition to this different forest spatial target. It will assist in avoiding medium-term (next 40 years) timber supply holes, and hence during this period increase timber supply, employment and government revenue including stumpage.

Our silvicultural strategy is focused on establishing and managing well-stocked stands. This provides benefits both in volume production and in wood quality as the size of the juvenile wood core, growth rings and branch size are smaller than in more open grown stands. In addition, an emphasis on tree improvement, brush control and fertilization in some circumstances will increase growth and hence timber supply.

A major benefit of the management plan process is the review that occurs every five years – the opportunity to change or adjust strategies according to new knowledge and changes in public expectations and government regulations.

Page 30, Section 6.2, Establishing and Managing the New Forest

Objectives for prescribed fire and fuel management. The following text has been added to Section 6.3.1, Fire Prevention and Suppression:

Fuel management plans are developed according to conditions identified during stand assessments (particularly post harvest assessments). Resulting plans for prescribed burning are submitted to the Forest District for burning permit approval.

Page 31, Section 6.2.1, Silvicultural Objectives

The objective “Expand hardwood management in response to market demand” has been changed to “Develop and implement a management strategy for hardwoods”

The emphasis on utilization of red alder has increased with Northwest Hardwood’s (a Weyerhaeuser subsidiary) purchase of Coast Mountain Hardwoods. Section 6.2.5, Incremental Silviculture, Sub-Heading Hardwood Management Strategy includes a commitment to submit a hardwood management proposal to the regional manager.

Page 32, Section 6.2.2, Sub-Heading Wood Quality

The last sentence in the paragraph has been replaced by the following:

We expect the premium for piece size to decrease over time as technical developments continue to reduce the cost advantage of size. Mechanized systems for processing and harvesting (on flatter ground) are increasingly designed for the size and other characteristics of the available resource. In addition, product developments are trending more towards re-engineered

structural wood products and extending the use of quality features (e.g. application of thin veneers).

Page 32, Section 6.2.2, Sub-Heading Type 2 Analysis

Changes made to this section include the following:

Priority incremental silvicultural treatments (given the objectives described earlier in this section) include vegetation treatments to reduce both above ground and below ground competition, fertilization prescriptions and riparian wide spacing. Fertilization treatments include late rotation fertilization in Douglas-fir stands, treatment of Salal-Cedar-Hemlock sites(as identified by the Salal-Cedar-Hemlock Integrated Research Program (SCHIRP)) and fertilization at time of planting on selected sites (particularly where impacts of spatial constraints such as adjacency or visual landscapes may be realized). Riparian wide spacing is beneficial where treatments occur in reserved areas and assist in recruitment to meet old seral targets, thereby allowing release of alternative reserve areas for harvest. The analysis also supports the management emphasis on regeneration activities such as initial stocking, tree improvement and stand maintenance [e.g. weed control].

Page 33, 6.2.3, Sub-Heading Incremental Silviculture

Changes have been made to this section – pointing out that Weyerhaeuser is responsible for funding incremental silviculture on private land within the TFL

Page 33, section 6.2.4, Sub-heading Species and Stock Selections

The words “and an approved hardwood management proposal for the TFL” has been added to the end of the last sentence of the second paragraph.

Page 33, Section 6.2.4, Sub-Heading Species and stock Selections

Higher proportions of natural regeneration (and hence less gain on average from tree improvement) in the habitat and old-growth stewardship zones is recognized in the analysis. The proportions of the inventory assigned to planted / natural regeneration forest types and to stand density classes are based on the detailed allocations in Table 6.4 of the Information Package. These allocations show higher percentages of natural stands in the old-growth zones and in the shelterwood / group selection component of timber and habitat zones. Table 6.1 of the Information Package shows a higher percentage of the area in shelterwood / group selection for the habitat zone compared to the timber zone. As suggested, this approach and assumptions will be reviewed prior to the next timber supply analysis.

Page 36, Section 6.2.5, Sub-Heading Spacing.

The comment on how spacing may impact stand value in different ways is appreciated. Recognition of species selection, wind firmness and habitat objectives has been added.

Page 37, Section 6.2.5, Sub-Heading Hardwood Management Strategy

A statement; "contingent on approval of a hardwood management proposal by the regional manager", has been added. Also included is the statement, "In the interim, establishment of alder on suitable sites may occur on a small scale." Other changes have been made to this section to meet the concerns raised.

Page 42, Section 7.0, Planning

A discussion relating the Forest Project stewardship zones to the draft landscape unit biodiversity emphasis options has been added to Section 7.11, Landscape Unit Planning.

Page 43, Section 7.2, Higher Level Plans

This section has been updated for the Vancouver Island Land Use Plan - Higher Level Plan coming into effect on December 01, 2000.

Page 45, Section 7.6, Queen Charlotte Island Local Resource Management Plan

The suggested changes have been made.

Page 45, Section 7.8, Tlell Local Resource Use Plan (LRUP)

More detail has been added to this section as suggested. It is as follows.

Weyerhaeuser has been involved in the Tlell LRUP since its inception in 1996. The working group for this planning process has involved participants from many community, government and industry groups. These include the Ministry of Forests, the Department of Fisheries and Oceans, the Tlell Watershed Society, the Friends of Tlell, the Island Community Stability Initiative, the Graham Island Advisory Planning Commission, the Gowgala Institute, the IWA, local trappers, independents and Weyerhaeuser.

A final report is scheduled for completion by March 31, 2001. It is expected to include Higher Level Plan Objectives that relate to resource management zones within the Tlell. Weyerhaeuser remains committed to this planning process and will include the outcomes in operational and strategic planning.

Page 46, Section 7.11, Landscape Unit Planning

A table summarizing the estimated percentage of productive forest that is old seral, by landscape unit and variant, has been added to the end of Appendix II.

Page 51, Section 8.8, Riparian

Thank you for mentioning the opportunity for Local Area Agreements (LAAs) to assist with achieving fish inventories. A reference to this opportunity has been included in Section 8.8.

Page 51, Section 8.10, Cultural Heritage Resources

A reference to the Central Coast Archaeological Overview Assessment has been added to Section 7 of Appendix V – Current Resource Inventories. Section 8 of the Management Plan presents plans for improving inventories, while Appendix V describes the current inventories.

Page 57, Section 10.3, TFL Annual Report

The words “in compliance with the Licence Agreement” have been replaced by “as requested by the manager of the Vancouver Forest Region”

Appendix II, Information Package Section 8.1.5 Cultural Heritage Resources

The wording has been changed as follows:

A revised Archaeological Overview Assessment (AOA), **funded by the MoF**, has been completed in the Block 6 portion of the Queen Charlotte Islands.

Appendix II, Information Package Table 8-11 Visually Effective Greenup (VEG) Heights and Ages

The average ages to meet VEG were calculated by TFL Block for each Recommended Visual Quality Class (RVQC). Hence, if site indexes in Block 2 partial retention areas are higher on average than those in Block 2 modification areas, then the average age to meet VEG is lower in partial retention areas than in modification areas. Clarification on this point has been added to the text.

Appendix III, Timber Supply Analysis, EWB Net-downs

I apologize for the confusion on net-downs for grizzly bear habitat in Block 7. In the analysis (both the timber supply analysis and the twenty-year plan) of Block 7, net-downs of 55% and 25% were applied to EWB1 and EWB2 polygons, respectively. This is as described in Section 8.1.4 of the Information Package (Appendix II of the MP). Unfortunately an error was made in the spatial presentation (both paper and digital maps) of these areas. Inadvertently an earlier representation of EWB areas was combined with the correct coverage, resulting in incorrect labeling and some additional EWB areas. This correct version is included in digital- and paper maps dated March 20001 or later.

Appendix III, Timber Supply Analysis, Section 5.6, Visual Landscape Constraints

Thank you for drawing my attention to the report on “Visual Impacts of Partial Cutting”. It is my understanding that the tables apply to areas where the partial harvest is distributed evenly across the harvest area and not to the less regular distribution of group retention. It is further understood that the Ministry of Forests is sampling variable retention areas with the intention of developing guidelines on visual impacts of variable retention..

As pointed out, the MP #8 analysis includes option 6, a sensitivity analysis on percentage of alteration.

We will review procedures for modeling timber supply impacts of visual landscapes, including recognition of variable retention, prior to the analysis for MP #9.

Appendix IV

This appendix is now prefaced with a note on the status of the Twenty-Year Plans (TYPs). The status (as of March 26th, 2001) is as follows:

Forest District	TFL 39 Blocks	Status of Twenty-year Plan
Sunshine Coast	Block 1	Accepted (December 19, 2001)
Campbell River	Blocks 2 & 5	Accepted (February 07, 2001)
Port McNeill	Blocks 3 & 4	Accepted (February 22, 2001)
Queen Charlotte Islands	Block 6	Not yet accepted. Have responded to questions
Mid-Coast	Block 7	Initial TYP was not accepted. Have responded with another TYP and a just completed operational review

An addendum including approval letters and a description of additional reports provided has been added to Appendix IV.

The Twenty-Year Plan (TYP) harvest levels are all equal to or slightly greater than the proposed Block AAC contributions. Refer to Section 3.1 of Appendix IV. Note that the recommended AAC contribution for Block 7 is based on option 13C in the Timber Supply Analysis (TSA) and not the base option – option 13C harvest levels are modeled in the TYP. The only other differences are that the Block 3&4 TYP harvest levels are slightly higher than the recommended AAC and the TSA base option for the first two 5-year periods, and the Block 7 TYP is slightly higher than the TSA option 13C for the third five-year period.

Period	Analysis/ Proposal ⁽¹⁾	Harvest level (000 m ³ /year) by Block					
		Block 1	Block 2	Blocks 3&4	Block 5	Block 6	Block 7
Period 1 2001- 2005	Proposed AAC Contrib.	550	1335	400	95	1150	150
	TYP	550	1335	420	95	1150	150
Period 2 2006- 2010	TSA	575	1305	400	92	1120	125
	TYP	575	1305	410	92	1120	125
Period 3 2011- 2015	TSA	600	1275	400	89	1090	110
	TYP	600	1275	400	89	1090	115
Period 4 2016- 2020	TSA	625	1245	400	86	1060	105
	TYP	625	1245	400	86	1060	105

(1) TSA for Blocks 1 to 6 is the base option. For Block 7 it is option 13C.

The TYP effectively models much of the impacts of the Forest Project, including variable retention. The one aspect that is not modeled is multiple-entry harvests; this will tend to understate the spatial flexibility that may be available.

- The three stewardship zones (timber, habitat and old-growth) are included in the analysis. Additional net-downs for incremental retention because of variable retention have been applied as described in the Information Package.
- In the old-growth zone, 66% of the forest was reserved from harvesting in the TYP. In addition, only one-third of the remaining 33% was available over the 20 years.
- Harvest blocks were modeled by the TYP as single-entry events with block size ranging up to 40 ha. In the old-growth zone (where the intent is to manage according to uneven-aged silviculture systems), the significance for timber supply volumes is negligible as the rate of harvest is very low and choice of harvest area is considerable.
- Even-aged silviculture systems will be the norm in the timber zone and it is expected that it will also apply to approximately 75% of the habitat zone.
- In some operations, harvest block plans include two harvest entries to meet adjacency requirements. If anything, this strategy will provide more short-term harvest flexibility than the single-entry approach (with adjacency restrictions) modeled in the TYP.

Appendix V, table 4.1

Entries in Table 4.1 for Block 7 recreation features and visual landscape inventories have been updated as suggested.

Appendix V, Current Resource Inventories, Recreation

Minor changes corresponding to comments in this section have been made to Table 4.1 in Appendix V.

The updated approach for applying net-downs was discussed with Doug Herchmer of the Vancouver Forest Region. No changes have been made at this late time in the MP #8 process. We will ensure that appropriate changes are made in the analysis for MP #9 for TFL 39 and the upcoming MP #4 for TFL 44.

Appendix VII, Section 4.0, Guidelines for Abies Species

The comments by the regional forest entomologist are of interest. We will follow-up and review the "Guidelines for Abies Species" during MP #8. This commitment has been added to the text in Section 6.3.2.1.

The guidelines are directed at ensuring a minimum stocking of species other than the genus *Abies* in the described circumstances. In most cases, considerable numbers of naturally regenerated amabilis remain and contribute towards species diversity.

Appendix VIII, Discussion on Forest Stewardship Zones

Long-term retention within harvest blocks will amount to at least 15% of the cutblock area in habitat zones and at least 20% in old-growth zones. This long-term retention will be at least until the end of the current rotation. At that time there may be some shifting of retention areas according to condition and habitat characteristics of retention areas compared to other parts of the harvest block. This clarification has been added to the discussion in Appendix VIII.

The question of how “long-term” retention would be was raised at the second year Scientific Panel Review (year 2000) of the Forest Project. The response, endorsed by most panel members, was that prudence would be in order, recognizing the learning that will ensue over the next 60 years. Our commitment is to linking the learning to future retention decisions through an effective adaptive management program.

In old-growth stewardship zones, approximately 66% of the gross productive forest will remain in landscape reserves. No harvesting will be planned for these reserve areas.

In addition, as is described in Appendix VIII, uneven-aged silvicultural systems (group selection, modified irregular shelterwood and multi-pass retention) will be the norm in old-growth zones and will apply to some areas in habitat zones where maintenance of late successional forest attributes are a conservation priority. Long-term retention will still apply to these areas.

Part IV, Folio Maps for Visual Landscape

Visual Quality Objectives (VQOs) have only been established in Block 1 of TFL 39 (by the Sunshine Coast Forest District). Elsewhere, the correct reference is Recommended Visual Quality Classes (RVQCs). This distinction is clarified in Appendix V, Section 4 on recreation and visual landscape inventories.

Known scenic areas have been identified throughout TFL 39.

- In Block 1 (Sunshine Coast Forest District), the known scenic areas have established visual quality objectives.
 - In Blocks 2 and 5 (Campbell River Forest District) and in Blocks 3 and 4 (Port McNeill Forest District) the known scenic areas correspond to the Visual Landscape Inventory (VLI) polygons. As noted in the correspondence in the addendum to Appendix IV, two additional small areas in Block 4 need to be recognized and added to the VLI.
 - In Block 6 (Queen Charlotte Islands Forest District) the known scenic areas were identified in June of 2000, after the timber supply analysis had
-

commenced. Some of the VLI polygons included in the analysis are not considered “known” and will not be managed. The implications of these changes for timber supply will be reviewed with Timber Supply Branch.

- In Block 7 (Mid Coast Forest District) the recommended visual quality classes modeled in the analysis, correspond closely to the known scenic areas.

The symbology regarding viewpoints and screening is part of the spatial data set available to operational staff for completing visual impact assessments.

Miscellaneous

An authorized licensee representative signature block has been added and signed in the proposed management plan.

Gross Area Discrepancies:

The gross area of TFL 39 for MP #8 (inventory date of 1995) is 801,337 ha. As pointed out, the reporting routine for the timber supply analysis (page 5 of Appendix III) resulted in a slightly higher gross area. Most of the difference is in Block 1, and all of it occurs in the non-forest or non-productive forest areas. Areas of productive forest are consistent across reports.

There are three main reasons for the differences in gross areas between MP #8 (1995 inventory) and MP #7 (1991 inventory):

- Protected areas (Blocks 2 and 4)
- Thirty-year reserve (Block 1)
- Shift from NAD 27 to NAD 83.

These differences also largely explain differences by Block and to some extent the differences for Schedule A and Schedule B.

The first table below summarizes gross area differences between MP #8 and MP #7 by Block and the Schedule A / Schedule B split. The second table provides the same summary after adjustments have been made for protected areas (Blocks 2 and 4) and reversion of the thirty-year reserve in Block 1.

The MP #8 gross areas exclude the protected areas that were proclaimed in the Goal 1 and Goal 2 processes in 1995 and 1996. Refer to Section 5.2 on page 8 of the Information Package (Appendix II). Although these protected areas were not formally removed from TFL 39 in 1995, they have been excluded in the area summaries (as noted in the text and at the foot of the tables in Appendix VI). The Information Package estimates of these protected areas (gross) are 1,720 ha of Schedule A and 2,172 ha of Schedule B in Block 2 and 32 ha of Schedule B in Block 4.

The MP #8 area summaries for Block 1 include reversion of expired timber sales from the thirty-year reserve. This includes approximately 3,000 ha that reverted prior to the end of 1995 (refer to section 5.2 of the Information Package) and

another 1,268 ha that reverted in 1996 (section 5.3.2 of the Information Package). The total of these two areas, 4,268 ha, was added to the Schedule B gross area for Block 1.

The shift from NAD 27 (map datum) to NAD 83 and changes in tenure boundaries (refer to Section 5.2 in the Information Package) have resulted in most of the remaining gross area differences between MP #8 and MP #7. It is expected that further changes in boundaries and total areas will occur when comparisons are made with Ministry of Forests' initiatives on spatially defining tenure boundaries.

Some of the differences between Schedule A and Schedule B (e.g. Blocks 2 and 3) are likely due to reversion of Timber Licences (Schedule A) to Crown (Schedule B). These expectations have not yet been confirmed.

	Differences between MP #8 and MP #7 – gross areas (ha)		
	Schedule A	Schedule B	Total
Block 1	92	4217	4309
Block 2	-3378	-1603	-4981
Block 3	-501	432	-69
Block 4	-1	-150	-151
Block 5	5	-165	-160
Block 6	-534	-739	-1273
Block 7	-78	12	-66
Total TFL 39	-4395	2004	-2391

	Differences between MP #8 and MP #7 – gross areas (ha) after recognizing changes due to protected areas and the 30-year reserve		
	Schedule A	Schedule B	Total
Block 1	92	-51	41
Block 2	-1658	569	-1089
Block 3	-501	432	-69
Block 4	-1	-118	-119
Block 5	5	-165	-160
Block 6	-534	-739	-1273
Block 7	-78	12	-66
Total TFL 39	-2675	-60	-2735