

STATEMENT OF MANAGEMENT
OBJECTIVES, OPTIONS
AND PROCEDURES
(SMOOP)

March 3, 1999: MOF approved version

District of Mission
Mission TFL 26,
Management Plan #8



Kim G. Allan, R.P.F.
Director of Forest Management

Introduction

Tree Farm Licence Number 26 (TFL 26) has been continuously held by the District of Mission (Mission) since 1958. The entire TFL is located within municipal boundaries and is generally located in the northern half of the municipal district.

By having direct control of the forests in the "backyard" of Mission, the municipality can ensure that the forests are managed for integrated use, following environmental principles and legislative requirements. The District's general goal is to optimize sustainable economic and social benefits with particular emphasis on providing capital funding for various municipal projects, local employment, recreational opportunities and forest education.

1. COMMITMENTS

1.1 Outstanding Commitments

The District of Mission has no specific, outstanding commitments which are still in effect in relation to the following:

- ◆ in the application for TFL 26;
- ◆ in accepting a replacement offer for TFL 26; and
- ◆ as a result of the Minister's consent to a transfer of the TFL.

2. MANAGEMENT OBJECTIVES

2.1 Overall Objectives:

- 2.1.1 To maintain and enhance the productivity of the forest land base by using appropriate management strategies that will result in an improved long term timber supply;
- 2.1.2 To manage the forest land base for the efficient production of timber;
- 2.1.3 To provide sustained revenue to Mission to cover forest management capital and operational costs and to contribute surplus funds for local recreational, educational, social, artistic and safety facilities and programs;
- 2.1.4 To integrate the responsible use of non-timber forest values in all phases of forestry operations while considering economic sustainability;
- 2.1.5 To provide a source of employment for local residents;
- 2.1.6 To continue recent achievements in incremental silviculture by taking advantage of forestry funding and employment programs;

- 2.1.7 To conduct operations in an environmentally sound manner in accordance with Federal and Provincial Statutes and municipal bylaws;
- 2.1.8 To seek the addition to the TFL of parcels of vacant crown land within and adjacent to the TFL's boundaries thereby ensuring that a more logical and undivided unit is under TFL management; and
- 2.1.9 To continue pro-active and direct communication between Forestry Department staff and the local community.

2.2 Management and Utilization of the Timber Resource:

- 2.2.1 Management Plan 7 was approved for an annual allowable cut of 45,000 cubic metres including 42,000 m³ conventional conifer harvesting and 3,000 m³ deciduous harvesting. A Small Business Forest Enterprise Annual Allowable Cut not available to Mission of 1,602 m³ is included thereby leaving 40,398 m³ of conventional conifer cut for Mission.

This level will be re-evaluated in a new timber supply analysis that will reflect more current management practices and inventories.

- 2.2.2 Harvesting methods and systems will be utilized that will minimize loss of productive forest land, while taking into consideration social and economic issues. Felling, bucking and utilization specifications will be based on the BC coast close utilization standards.

2.3 Protection and conservation of non-timber values and resources.

- 2.3.1 Visual Quality: A new Visual Landscape Inventory (VLI) is being completed for early 1999 with FRBC funding to current MOF standards for TFL 26. This VLI will be used to manage the visual quality objectives in all relevant forest management activities and as part of the timber supply analysis. Landscape design techniques and visual simulation models, to a lesser extent, will be utilized to ensure visual objectives are being met while maximizing the harvest potential.
- 2.3.2 Biological Diversity: Mission has been actively managing for biodiversity primarily on the stand level in the absence of an approved landscape level plan. The timber supply analysis and Twenty Year Plan will focus on managing for both stand and landscape level biodiversity by taking into consideration biodiversity characteristics such as riparian management, landscape connectivity, wildlife tree retention, coarse woody debris and species variability.
- 2.3.3 Soils: Terrain Stability Mapping for all of TFL 26, funded by FRBC, is currently underway and is planned to be completed in early 1999. The TSM is mainly being done to a Terrain Survey Intensity Level of 'C' with 'B' in Community Watershed areas. The results of the TSM will be used when planning forest management activities and in the timber supply analysis.

As detailed in the Forest Practices Code, steep slopes will be inspected by a qualified professional prior to proposing any development activities.

- 2.3.4 Water: As mentioned above, Terrain Stability Mapping to a 'B' level will be completed in both of TFL 26's Community Watershed areas, Kenworthy Creek and Cannell Lake. The results of the TSM will be used when planning forest management activities in these watersheds.

A Coastal Watershed Assessment Procedure (CWAP) was completed for the Kenworthy watershed. A CWAP has not been required for the Cannell Lake watershed as no activity has occurred there for several decades. No activity is planned to take place in the portion of the watershed draining into Cannell Lake until a multi-agency group has discussed the merits or concerns associated with forest management activity there. Mission intends that this decision be made by December 31, 2001 although the availability of the outcome will be somewhat determined by the resources of the involved agencies.

- 2.3.5 Recreation Resources: A Recreation Inventory and a Recreation Analysis, completed in 1993 and approved as part of MP 7, will provide a framework for the management of the recreation resource. Mission plans to provide a minor update to the Recreation Inventory by including the location of new trails in TFL 26.

Mission has aggressively expanded the TFL trail system over the past decade including both multi-use and hiking-only trails. Other primary uses of the TFL for recreation include mountain biking, horse riding, hunting, scenery and wildlife viewing as well as boating in adjacent lakes. Some fishing and snowmobiling are done although these are lesser activities.

One issue of concern is the MOF's and FRBC's imminent lack of funding for recreation trail maintenance on TFL's.

Forest management activities will consider recreational facilities and activities wherever possible. The Visual Landscape Inventory has considered the landscape from a series of viewpoints.

- 2.3.6 Cultural Heritage Resources: An Archaeological Overview Assessment (AOA) has been completed by the MOF to cover the Fraser TSA area. Mission uses the results from this assessment to indicate whether any areas on each year's Forest Development Plan require an Archaeological Impact Assessment (AIA) at a closer level using an Archaeologist to do an on-site inspection.

The Sto-Lo Nation is a regular part of the Forest Development Plan referral network. Mission has attended cultural learning sessions with the Sto-Lo and has employed some members of the Kwantlen Band to help conduct creek restoration, creek inventory and AIA's.

In the event that culturally significant sites are discovered during project planning, the appropriate parties will be identified and brought into the planning process.

- 2.3.7 Range Land: No range land exists in TFL 26 and there are no management objectives for this resource.

2.3.8 Wildlife and Fish Habitat: The TFL provides habitat for a range of wildlife. Deer, black bear and coyote are the most significant larger animals while many species of birds, amphibians, reptiles and insects also are found. No areas of the TFL have been identified by MELP as critical wildlife habitat for any species, including red and blue listed ones, although habitat protection is considered while planning forest management activities. The majority of wildlife issues can be adequately managed for through implementation of biodiversity objectives including wildlife tree patches, a connectivity corridor and coarse woody debris for small mammal habitat.

In addition, where raptor species such as eagles and hawks are found in the TFL, their habitat will be considered in forest management plans.

The lakes and some of the streams in the TFL contain populations of trout species. Salmon species are limited to Whonnock Creek in the south-west corner of the TFL. Many of the significant streams in the TFL were tested for the presence of fish by a fisheries consultant.

An FRBC funded project provided habitat restoration in the TFL portions of Whonnock Creek. Mission intends to work cooperatively with MELP in establishing objectives for the management of wildlife and fisheries in the TFL and will consult with DFO where salmon species will be impacted

2.3.9 Botanical Forest Products

Mission occasionally has requests for the removal of botanical forest products. These products may include items such as moss, salal, mushrooms, indigenous plant material or Christmas trees. Where feasible, Mission issues permits for the removal of these products. Mission's position is that the removal must be done in an environmentally acceptable, sustainable way.

2.4 **Integration of harvesting activities with uses of the TFL other than timber production including use of the TFL area by:**

2.4.1 Trappers: No known trappers are active in the TFL.

2.4.2 Guide Outfitters: No known guide outfitters are active in the TFL.

2.4.3 Range Tenure Holders: No known range tenure holders are active in the TFL.

2.4.4 Other Licensed Resource Users: There are some existing mineral claims and gravel leases within TFL 26. The mineral claims have for many years been at the exploratory stage. There is no known action planned by any of the claim holders except for further exploration.

The gravel leases, granted by the Ministry of Environment, Lands and Parks, have active sand and gravel removal being done by private companies. Mission's Forestry Department honours the terms of the present arrangements but believes any further gravel leases or extensions should be evaluated carefully prior to being issued as this land use ends up with significantly degraded sites even after rehabilitation.

2.4.5 Activities of Aboriginal People: As explained in section 2.3 f), aboriginal people are consulted regularly regarding the Forest Development Plan. Any stated First Nation's interests will be considered prior to planned harvest activities.

2.4.6 Others: No other significant non-timber users of the TFL are known that have not already been mentioned in this section or section 2.3.

2.5 Forest Fire Prevention and Suppression, Prescribed Fire, and Fuel Management.

2.5.1 A Fire Preparedness Plan for TFL 26 is submitted annually to the Ministry of Forests. This plan is issued to staff, contractors, 9-1-1 and the Mission Fire Department. On an operational level, forest fire prevention will be addressed by following the Fire Prevention Regulation.

The majority of logging in TFL 26 is carried out in second-growth timber resulting in little slash accumulation and prescribed broadcast burning. However, landing and significant roadside debris piles are abated as required. This results in a good combination of fire prevention combined with leaving enough coarse woody debris for biodiversity purposes. By not broadcast burning, smoke management concerns are minimal. Harvest block design will be done in a way that considers fire prevention.

2.6 Forest Health, Including Disease and Pest Management.

2.6.1 Monitoring pest and disease incidence is done as Mission staff regularly walk through the forest doing operational reconnaissance, layout, surveys and supervision. Where special problems such as root rot management are identified, specialized consultants are brought in.

The Forest Insect and Disease survey intensity done by Forestry Canada has unfortunately been scaled back in recent years due to budget cuts. Ministry of Forests District and Regional staff have been consulted at certain times. Occasionally, the federal or provincial government staff place pheromone traps in the TFL to monitor various pests. Mission has forwarded samples of forest disease or insects to the Forestry Canada laboratory in Victoria for identification.

Some of the TFL's older second-growth stands with significant amounts of hemlock have mistletoe concerns. The presence of mistletoe occasionally warrants consideration for earlier harvesting, particularly where the infection is heavy or significant stand stagnation has occurred. Mistletoe is not usually a significant problem in thrifty, non-overstocked plantations. Where identified and where incremental silviculture funds are available, stands with potential for significant future mistletoe infestation will be spaced favouring removal of significantly infected trees. Commercial thinning activities, when undertaken, will consider mistletoe concerns and will be done favouring removal of significantly infected trees and non-thrifty, understory hemlock in general.

Balsam Woolly Aphid is a concern in areas with significant amounts of *Amabilis balsam* (*Abies amabilis*). However, the overall impact is not large as balsam leading areas cover less than 3% of the TFL. Mission will consider the impact of this insect concern in reforestation and forest management programs.

- 2.6.2 Mission employs the use of multi-specie plantations to reduce the risk and limit the damage from future insect or disease attacks. Most recent plantations have been spaced encouraging vigorous growth which generally discourages the development of insect or disease incidence.

Blowdown occasionally occurs in the TFL and is often associated with past development. As these areas are near roads, the blowdown is often salvaged prior to rot or insect attack. The small amount that is not salvaged will be considered in the timber supply analysis as non-recoverable losses.

2.7 Silviculture

2.7.1 Basic Silviculture:

- a) Regenerate all harvested forest lands promptly to maximize the productive growing capacity as well as minimizing any green up or adjacency concerns;
- b) To maintain a "no backlog NSR" status in the TFL;
- c) To favour multi-specie plantations for reasons such as biodiversity, product diversity and risk reduction;
- d) To use genetically improved planting stock where possible for the purpose of increasing future volumes, density or pest resistance. In the timber supply analysis, Mission intends to show the current use of genetically improved stock to consider increasing the AAC; and
- e) To employ planting and brushing techniques such that plantations reach the prescribed regeneration and free growing periods on time.

2.7.2 Intensive Silviculture:

- a) Pursue Forest Renewal BC or other external funding to conduct juvenile spacing, pruning or fertilizing in plantations that will show sufficient economic, social, strategic or employment benefits from these activities;
- b) Target pruning of crop trees that will generally be left for final rotation; and
- c) Provide for commercial thinning opportunities during juvenile spacing by considering appropriate stand density, species composition and wind firmness. Stand density and commercial thinning timing will depend on site specific prescriptions.

2.8 Road construction, maintenance and deactivation.

2.8.1 Construction: Mission will follow Forest Practice Code standards for all road construction. The objectives of road construction are:

- a) To minimize the amount of road built to enable successful physical, economical and environmentally acceptable harvesting; and
- b) To identify terrain stability or soil concerns and use appropriate techniques to minimize these possible hazards during road construction.

2.8.2 Maintenance and Deactivation:

- a) A detailed road maintenance and deactivation plan is included in each year's Forest Development Plan. The Management Plan will address the objectives of a road maintenance and deactivation plan for planned and existing roads.

3. INVENTORIES

3.1 Forest cover

- 3.1.1 The last comprehensive forest cover inventory was completed in 1989. Several updates have been conducted since, with the last updating forest cover data to January, 1996. MP 7 did not obligate Mission to conduct a new comprehensive inventory. Mission will consider the need to do this during the term of MP 8.

3.2 Recreation

- 3.2.1 A Recreation Inventory and a Recreation Analysis were completed in 1993 and approved as part of MP 7. Mission has been verbally asked by the MOF Chilliwack District and plans to provide a minor update to the Recreation Inventory by including the location of new trails in TFL 26.

3.3 Fisheries

- 3.3.1 Mission hired a fisheries consultant during the past three years to survey various creeks in the TFL for fish presence and for stream classification. Mission intends to survey streams with a potential for fish presence as required. Mission will survey additional streams where development is proposed as required.

At this time, Mission sees two possible options for determining the appropriate net-down in the timber supply analysis for MP 8. One option is to use a coastal watershed average net-down (for example, the recent Fraser TSA analysis used 4.8% of the total landbase as a riparian net-down). This net-down would also assume that most of the Wildlife Tree Patch (WTP) requirements would be met by this same net-down (for example, the Fraser TSA analysis assumed that 75% of their WTP needs would be met by this same net-down).

The other option would involve using existing creek information obtained from the above surveys coupled with local experience in a specific GIS analysis. Mission will consider both methods and identify the most appropriate one for the information package.

3.4 Wildlife

- 3.4.1 No formal wildlife surveys have been completed in TFL 26. The presence of various wildlife species are often noted from evidence found during field reconnaissance.

3.5 Range

- 3.5.1 No range inventories have been conducted or are required in TFL 26.

3.6 Cultural Heritage Resources

- 3.6.1 An Archeological Overview Assessment was completed by the MOF for the Fraser TSA in 1997. Mission uses the results from this assessment to help determine whether any areas on each year's Forest Development Plan require an Archeological Impact Assessment (AIA) at a closer level using an Archeologist to do an on-site inspection.

3.7 Landscape (Visual Quality Objectives)

- 3.7.1 A new Visual Landscape Inventory is being undertaken to current MOF standards for TFL 26 and will be finished in early 1999.

3.8 Terrain Stability (Sensitive Soils)

- 3.8.1 Terrain Stability Mapping for all of TFL 26 is currently underway and is planned to be completed in early 1999. The TSM is mainly being done to a Terrain Survey Intensity Level of 'C' with 'B' in Community Watershed areas.

As this TSM project is not yet complete, Mission cannot assess its suitability for use in determining timber supply analysis net-downs for unstable terrain. However, Mission believes it is likely that the results from this TSM will be the most likely source of information for net-down purposes.

3.9 Type of Timber and Terrain (Operability)

- 3.9.1 Operability mapping was completed in 1993 as part of the preparation for MP 7. Mission will re-examine prior to completion of MP 8:
- the TFL operability boundaries,
 - the criteria for non-economic timber within the operability lines, and
 - the criteria used to determine when timber should be harvested.

The results of these evaluations will be used in the information package and timber supply analysis for MP 8.

3.10 Others

- 3.10.1 No other comprehensive inventories have been done for TFL 26.

4. MANAGEMENT ISSUES

4.1 Ministry of Forest Issues:

The following issues were identified in the Regional Manager's pre-SMOOP assessment letter dated November 10, 1998 (see Appendix 2). The MOF stated issues are followed by the District of Mission's plan of action:

4.1.1 Previously Identified Issues:

MOF Statement: *Below is a list of the outstanding commitments and issues that were contained in the implementation section of the AAC rationale, the approval letter and in the AAC rationale report for Management Plan 7.*

4.1.2 Deciduous Harvest

a) Deciduous Harvest Annual Reporting and Plans

MOF Issue: Chief Forester says "Please include in the annual report for TFL 26, the District of Mission's performance in harvesting the deciduous portion of the annual allowable cut (AAC), as specified in the partition summary". Regional Manager says "Information included in Mission's 1997 annual report:

No harvesting of the deciduous portion of the AAC has occurred to date on the TFL. Deciduous harvesting is expected by about the year 2000."

A commitment was made in MP7, based on the deciduous management trial that a more detailed plan and analysis would be calculated for MP8 regarding the deciduous harvest in TFL 26."

Action: Mission will continue to report this information in each TFL 26 annual report. See the "Deciduous/Mixed Wood and Partition" section below for more on this topic.

4.1.3 Unsalvaged Losses

a) Unsalvaged Losses:

MOF Issue: Chief Forester says "MP No. 7 includes an estimate of unsalvaged loss due to blowdown only. While unsalvaged losses may be low, I do not accept that they are zero for fire, insects and disease. Would you therefore please research and prepare an estimate of unsalvaged losses for TFL 26 for inclusion with the information package for draft MP No. 8." Regional Manager says "To date the Ministry of Forests has received no information on this issue."

Action: Mission intends to provide this information as requested in the MP 8 information package.

4.1.4 New Issues

4.1.5 Harvesting

a) Deciduous/Mixed wood and Partition

MOF Issue: In MP 7, the Chief Forester partitioned the AAC as follows:

- 3,000 cubic metres from deciduous stands, and
- 42,000 cubic metres from the remainder of the timber harvesting land base.

In MP 8 Mission must summarize their performance and future plans in meeting this partition, especially in regards to deciduous partition. Performance in meeting this partition will be reviewed in the development of MP8 to determine if these areas should continue to contribute to the timber harvesting land base.

Action: Mission intends to summarize in MP 8 our performance and future plans

in meeting this partition. Mission plans to analyze the deciduous partition in MP 8 and recommend whether these areas should continue to contribute to the timber harvesting land base. Mission has not harvested any deciduous stands since approval of MP 7. The initial plan was to gain approval to do so, then take a couple of years to plan and propose this work. Progress has been delayed by various factors including the economy and coping with the demands of the Forest Practices Code Act in other areas. In short, resources and funding have not allowed the project to proceed as earlier envisioned. However, a deciduous harvesting block is now part of our current approved Forest Development Plan.

Where deciduous harvesting has been done, the species subsequently planted will generally be a site specific, biological decision although coniferous species will be preferred where suitable. Mission recognizes that the assumption used in the timber supply analysis regarding the percentage of conifer versus deciduous restocking in deciduous logging areas will have an impact on the TFL's long run sustained yield.

4.1.6 Commercial Thinning

MOF Issue: *As specified in MP 7, Mission is considering commercial thinning as there are many regenerated stands on TFL 26 which are of a sufficient age and stand condition to be suitable. In MP 8 please provide details on Mission's progress in identifying suitable opportunities to initiate experimental commercial thinning activities.*

Action: As planned, Mission has carried out four commercial thinning projects and has gathered sufficient data to enable a more comprehensive analysis in MP 8 of the future opportunities for this activity in TFL 26.

4.1.7 Cut Control Performance

MOF Issue: *Mission has advised the Regional Manager that 1) the 50 percent cut control requirement for 1998 may not be met, and 2) the 90 percent periodic cut control requirement for the 1994 to 1998 period may not be met. Please address the implications of this potential shortfall in meeting your cut control requirements in MP 8.*

Action: Despite depressed markets, Mission has recently taken additional steps to achieve both the 50% and 90% cut control requirements by the end of 1998. Mission's historical cut control performance has been excellent and this short term severe market difficulty should not produce lasting cut control concerns.

4.1.8 Inventory (Forest, Operability, etc.)

a) Volume Estimates for Existing Stands

MOF Issue: *In AAC rationale for MP7, the CF stated that he expected that Mission would monitor harvested volumes closely on the land base, relative to inventory forecasts.*

Please report in MP 8 any work which has been undertaken regarding this issue. Any new information developed regarding volume estimates for existing stands will be considered in the upcoming AAC determination.

Action: Mission intends to continue gathering and report this information in MP 8.

4.1.9 Terrain Stability Mapping Soils Information

MOF Issue: *For the next timber supply analysis use the soils information available from terrain mapping projects.*

Action: TSM is expected to be completed in TFL 26 in early 1999 and the next timber supply analysis will utilize the soils information gathered.

4.1.10 Other Inventories (Recreation, etc.)

a) Recreation:

MOF Issue: *No written pre-SMOOP comments were received. However, a verbal update from the Chilliwack Forest District was to request that the results of the Recreation Inventory and Visual Landscape Inventory be incorporated in the timber supply analysis where possible. Another request was for Mission to include recent trails in the Recreation Inventory map.*

Action: Mission will include recent trails in recreation inventories in MP 8. Mission will consult with the Chilliwack Forest District regarding what percent alterations will be used to affect net-downs for each category in the new Visual Landscape Inventory.

b) Protection:

MOF Issue: *Further to "the issue raised in section 4.1.3.1", Mission will be required to evaluate the review procedures used to estimate non-recoverable losses and include strategies to deal with these losses. It is recommended that given the uncertainties associated with estimates of non-recoverable losses, in general, licensees should monitor and record salvage activities and timber losses from fire, blowdown and pests.*

Action: Mission intends to monitor and record salvage activities related to this issue as well as evaluate and determine a suitable estimate of non-recoverable losses and how to deal with them. Salvage records from recent years will be analyzed.

4.1.11 Engineering

MOF Issue: No comments given.

4.1.12 Silviculture

a) Incremental Silviculture Strategy

MOF Issue: *Planning and development of an incremental silviculture strategy for the TFL including clearly stated objectives regarding volume, value and employment.*

Action: Mission recently completed an Incremental Silviculture Strategic Plan for TFL 26. Relevant parts of this plan will be incorporated into the timber supply analysis. In addition, a computer run is planned to be done regarding various incremental silviculture strategies.

b) Alternate Silviculture Systems

MOF Issue: *Development of a strategy for alternate silviculture systems.*

Action: Mission has been planning and performing an increasing amount of alternate harvesting systems in recent years in variations of Clearcut with Reserves and Commercial Thinning. Other variations and different systems will be considered in future harvests.

• c) Maximum Density

MOF Issue: *The maximum density issue for the TFL i.e. new density management regimes for a licensee's specific areas. This policy is expected to be released soon.*

Action: Upon release of the policy, Mission will evaluate and consider this issue.

d) Regeneration Delay

MOF Issue: *The current management plan states a regeneration delay of 2 to 3 years. Please review this assumption for the next timber supply analysis as the Chilliwack district believes that actual performance has been approximately 1 year.*

Action: The regeneration delay has been analyzed based on historic levels and shows it is closer to one year. The correct figure will be included in MP 8.

4.1.13 Recreation

a) Public Access to TFL

MOF Issue: *Address public access to lands within the TFL. How does the licensee propose to manage roads and public access to recreational opportunities?*

Action: Mission continually monitors public access to the TFL and has provided a rapid expansion of recreation opportunities, particularly trails. Mission readily provides recreation access to any member of the public through a liberal key loan policy on any gated areas. This policy will be reviewed for MP 8.

4.1.14 Landscape Management (known scenic areas, approved VQO's, etc.)

a) Visual Landscape Inventories

MOF Issue: *Recently new visual landscape inventory standards and procedures were released in May 1997. What inventory coverage subscribes to these new standards? It is expected that all inventories will be updated to the new*

standards when time and resources permit. Of these inventoried areas, address the district guidelines with respect to known scenic areas (with or without established Visual Quality Objectives) and green up heights associated with block adjacency constraints with respect to visuals.

Recently, all TFLs were required to participate in producing a strategy to mitigate the visual impact on timber supply. The management plan would be a good opportunity to document the TFL's commitment to undertaking its strategy over the next 5 years e.g. if the strategy of reducing size of the known scenic areas is adopted will that have reduced the constraints on timber supply over the short term.

Action: Mission is currently undertaking a Visual Resource Inventory to current standards and expects completion by early 1999. The results will be incorporated into MP 8. Green up heights and adjacency will also be considered. The TFL's visual strategy will be included in MP 8.

4.1.15 Planning (landscape unit planning, LRUP'S, LRMP'S, CWAP'S)

a) Timber Harvesting Land Base

MOF Issue: In MP 8, please review the criteria for defining the timber harvesting land base. Currently, the objectives are: a minimum harvest age at culmination of mean annual increment and a minimum volume of 600 cubic meters per hectare.

Action: This criteria will be reviewed as stated.

4.1.16 Biodiversity, Fish and Wildlife

a) Netdown for Riparian Reserve Zones

MOF Issue: For the Fraser timber supply review a 4.8 percent netdown was used to account for riparian reserve zones. This was significantly higher than the 1 percent accounted for in the AAC rationale for MP 7. For MP 8, please review the riparian reserve and management zone netdowns for inclusion in the TSA.

Action: The last timber supply review for TFL 26 was done around the time of the introduction of the Forest Practices Code Act. Many consequences of the FPC were not known and could not be reflected accurately at that time. The netdowns for riparian reserves and management zones will be calculated directly and included in the Information Package.

4.1.17 Public Involvement

a) Public Review Strategy

MOF Issue: A public review strategy for MP 8 has been approved by the Regional Manager.

Action: Mission will follow the plan and ask for amendments in dates or submission times where necessary.

4.1.18 Range

- a) MOF Comment: *Not applicable.*

4.1.19 Guidelines in Effect

a) TFL Management Plan Guidelines

MOF Issue: *The Ministry of Forests document titled "Tree Farm Licence Management Plan Guidelines", August 1998, contains guidelines for the following:*

- ◆ *The submission of timber supply analysis information packages,*
- ◆ *The format yield tables submitted in TFL management plans,*
- ◆ *Methodology for incorporating biodiversity and landscape units into the timber supply review,*
- ◆ *The submission of the 20 year plan (Please ensure the Chilliwack Forest District is provided an opportunity to review the Terms of Reference for the 20 year plan), and*
- ◆ *The submission of the draft and proposed management plans*

Action: Mission will be guided by this document during the preparation of Management Plan 8 and will refer the Terms of Reference for the Twenty Year Plan to the Chilliwack Forest District.

4.2 **District of Mission Issues**

4.2.1 Public Stated Issues

There were no public issues provided during the earlier advertising for the review and performance by Mission in regard to TFL 26 and the current MP 7. Any public issues raised during the SMOOP advertising will be included in the final version of this SMOOP.

4.2.2 Site Index

Mission feels the site indices used in the current MP may be low. These site indices were generated from Timber Supply Area data and are not specific to TFL 26. Mission will consider looking into methods of improving the accuracy of site indices although no specific plans are in place to do so at this time.

4.2.3 Market Issues

Currently, Mission views high quality sawlogs as a primary market product to be produced from TFL 26. However, with the world wide evolution of wood products and markets, this strategy may not provide the most optimal market mix.

As such, Mission plans to monitor the evolution of timber products as it will affect the long term management philosophy of the TFL.

4.3 **Timber Supply Analysis**

The purpose of the timber supply analysis is to present information regarding the short, medium and long term timber supply forecasts for the TFL to be considered by the Chief

Forester in his AAC determination. The effects of various management options on the TFL landbase will be assessed through various management scenarios and sensitivity analyses to provide a rationale for the AAC determination.

An MOF bench marked forest estate computer model will be used for the timber supply analysis. This is capable of accessing techniques, such as simulation or optimization, with the appropriate technique being selected according to the analysis objective.

The currently approved inventory was completed and approved in 1989. This inventory, updated to December 1998, will be used in the yield analysis.

Analysis Scenarios

Several management scenarios are proposed for this yield analysis. The computer model being used will allow scenarios to be prepared that are both rule-based and target-based. Prior to carrying out the analysis, the scenarios and related parameters will be presented in the information package for review and approval by the MOF.

Seven management scenarios, with variations, are envisioned at this point in the management planning process. Scenarios 1, 2 and 3 will be run using a simulation model, while scenarios 4, 5, 6 and 7 will be run using a target-based optimization model. Further refinement or additions of scenarios, along with variations in optimization targets, will be addressed in the information package.

4.3.1 Gross Productive Land Base

The scenario will serve as a benchmark, showing the total potential timber producing capacity before net downs for non-timber resources.

4.3.2 AAC Rationale

This scenario will use the same management and harvesting assumptions used in the analysis for MP 7. The updated inventory will be applied to determine the change in timber supply due to new inventory information and new modelling techniques.

4.3.3 Current Management Practices (Base Case)

This scenario will include current management and harvesting options and requirements as per the Forest Practices Code. Current harvesting systems include clearcut, clearcut with reserves and patch clearcuts. Management practices include allowances for riparian management lake shore harvesting guidelines, visual quality objectives, recreation, wildlife habitat, protected areas and current practices for biodiversity including wildlife tree patches and connectivity.

4.3.4 Enhanced Silvicultural Practices

Recent silviculture practices have resulted in the potential for shorter crop rotations, a greater potential for future commercial thinning due to higher quality stands and the lowering of the operability guidelines for each stand. This scenario will analyze the effect these options will have on the AAC.

Modifications to this scenario will include:

- ◆ Conversion of Deciduous stands to coniferous
- ◆ Include Commercial Thinnings
- ◆ Alternate Harvesting Methods
- ◆ Genetic Gain allowances
- ◆ Environmentally Sensitive Areas

4.3.5 Landscape Level Biodiversity

This scenario will analyze the effects of landscape level biodiversity objectives on the land base including old growth management areas and large block management for reduction of fragmentation, ecosystem connectivity and seral stage distribution. The effects of this option will be compared to current management practices.

In the absence of an approved higher level or landscape unit plan, the guidebook targets of 10%/45%/45% (High/Medium/Low) biodiversity emphasis will be used. Mission intends to investigate variations in biodiversity targets in both seral stage and patch size objectives.

4.3.6 Integrated Resource Management

This scenario contains several variants that analyze the effects of managing non-timber resources and values will have on the AAC. In general, managing for these resources will require modifications in the size, timing and positioning of cutblocks, which will have effects on the AAC. These effects will be modelled.

- ◆ Sensitive soils
- ◆ Community watersheds
- ◆ Recreation resources
- ◆ Visual Quality Resources
- ◆ Fish and Wildlife Resources
- ◆ Connectivity corridors
- ◆ Riparian management zones

4.3.7 Recommended Scenario

As the various scenarios are analyzed, refinements will be made and documented in the yield analysis. Various aspects of the scenarios, that reflect the management strategy of Mission, will be integrated into one recommended scenario. This scenario will form the basis for the AAC rationale.

5. COMMENTS FROM THE REFERRAL OF THE SMOOP

- 5.1 The draft SMOOP and EEO were available for public review until February 15, 1999. A total of six people viewed the documents during the January 6, 1999 Open House and general viewing period at the District of Mission's office. No one

viewed the documents at any of the participating agency offices. Two written submissions were received by Mission and are discussed as follows:

- 5.1.1 Comments were received at two different times by Bill Archibald who said he was representing the interests of Trails BC. Another comment was received by Ronn Harris, an active minor salvage contractor in TFL 26.
- 5.1.2 The comments are attached to the report (3 pages total).
- 5.1.3 In his comments, Bill Archibald wants Mission to consider constructing an east-west section of a planned "North Fraser Trail" through TFL 26 and says that Trails BC would support this project. He would like this trail to likely link up with the BCIT Woodlot on the Maple Ridge side and near Cascade Falls on the east side of Mission.

Mission has not altered the wording of section 2.3.5 of the SMOOP as the current wording would allow for such an initiative. We believe this would be a longer term project which would require identification of adequate funding for construction and maintenance as well as proper route location. As such, we would be willing to be involved in future discussions with Trails BC regarding this concept.

Ronn Harris' comments are brief and relate to employment and commercial opportunities. As he is a current contractor in TFL 26, Mission intends to have further conversations with him related to these comments.

Appendix 1

The Objectives and Strategies for EEO are attached as Appendix 1. (Note: In the final version of this document in proposed MP 8, the Objectives and Strategies for EEO are not required and are not included).

Appendix 2

Three pages of public comments received during the public review period. The names of the six people that attended the public viewing will be on file at the District of Mission.