



**Statement of Management Objectives,  
Options, and Procedures**

Goldstream Tree Farm Licence #56  
Management Plan #3  
October 14, 1999

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## Statement of Management Objectives, Options, and Procedures

Goldstream Tree Farm Licence #56

Management Plan #3

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### **1.0 Introduction**

Revelstoke Community Forest Corporation (RCFC) is the holder of Tree Farm Licence 56 (TFL 56). As the holder of a TFL, RCFC is required -- at five year intervals -- to submit a new management plan to the Chief Forester. This particular document, *the Statement of Management Objectives, Options, and Procedures*, or for lack of a better acronym, SMOOP, is one of several steps in the management plan process. The end result, Management Plan #3 is due to take effect May 1, 2001.

The key map illustrates the location and boundaries of TFL 56. The TFL encompasses a total of 119,500 hectares of which approximately 25,000 hectares is forested land available for harvest. The TFL is set in the interior wet belt north of Revelstoke, a region of high precipitation and mountainous terrain. The current annual harvest level is 100,000m<sup>3</sup> of which 11,480m<sup>3</sup> is allocated to the Small Business Forest Enterprise Program.

The purpose of this document is to identify the objectives and activities that need to be done in order to complete Management Plan #3. This SMOOP document has been made available to government agencies and the public for comment.





## 1.1 Commitments

Revelstoke Community Forest Corporation (RCFC) has received a new tree farm licence replacement offer dated April 22, 1999. This new TFL replacement document contains standard provisions with no commitments that were not present in our existing licence document.

RCFC has also been through a pre-SMOOP assessment procedure. The results of the Pre-SMOOP process are outlined in the Pre-SMOOP assessment letter of May 20, 1999 (Appendix 1). These results are better described as *management concerns* rather than RCFC commitments – these concerns are addressed later in this document.

The Management Plan #2 approval letter and Management Plan #2 itself list a number of commitments for RCFC. Many of the Management Plan #2 commitments are simply reiterations of commitments required by regulation or legislation. Listed below are those commitments over and above those required by law.

RCFC has been working on these commitments since Management Plan #2 was approved in 1996. Commitments and progress are noted below.

**Table 1 -- Commitments**

<b>Commitment</b>	<b>Source</b>	<b>Actions</b>
Maintain an updated current inventory database.	MP #2	A full update with orthophoto verification is current to July 24 1998. Annual updates are completed with GPS verification. This is discussed in Section 1.3.
Complete <i>total resource plans</i> and <i>total chance plans</i> .	MP #2	<i>Total chance plans</i> were completed for the entire TFL in 1998. There has been no requirement to date for <i>total resource plans</i> .
Cooperate with MoF and MoELP to define Forest Ecosystem Networks.	MP #2	This commitment has been superseded by Kootenay Boundary Land Use Plan work and the subsequent Minister's Advisory Committee work.
Address refinement of site index and site productivity	MP #2	RCFC now collects site index data during free growing surveys. MoF continues to refine data.
Consult with MoF, MoELP and DFO in preparing stream classification	MP #2	Stream and wetland classification was completed in 1998. Refinements to Goldstream Valley data are ongoing during 1999.
Test Interior Fisheries, Forestry and Wildlife Guidelines in cooperation with MoF and MoELP	MP #2	These commitments were superseded by implementation of the Forest Practices Code and new guidelines.
Reach consensus with MoF on SBFEP operating areas.	MP #2	MoF have been allocated two untouched valleys in TFL 56 (compartments 330 & 340).



**Table 1 (continued) -- Commitments**

<b>Commitment</b>	<b>Source</b>	<b>Actions</b>
Harvest 110,000 m <sup>3</sup> annually.	MP #2	The approval letter of MP #2 lowered the annual cut to 100,000 m <sup>3</sup> annually. Our cut control requirements have been complied with.
Construct or reconstruct 121.1 km of road.	MP #2	All road necessary for a well rounded harvesting program has or will be constructed.
Construct 4 new bridges.	MP #2	Upper Downie, Upper Pass Creek, Lower Pass Creek, Pelkey Creek, and Hemlock Road Bridges have been constructed up to June 1999. In addition, Brewster Creek and Mid-Downie bridges will be built later in 1999. Two more bridges will be constructed in 2000. All bridges needed for a well rounded harvesting program have or will be constructed.
Investigate feasibility of alternate harvesting systems and harvesting outside the operable cut line with a target of 25% of a select component of the inoperable area.	MP #2	From 1996 to 1998, RCFC has harvested 240.5 ha above the operable cut line (OCL) or 34.3% of the area harvested during that period. This exceeds the Chief Forester's directive of 10%. A significant component of this volume has been harvested using skyline (CP 103-1) or helicopter harvest techniques (CP172-4,5; 141-4, 150-2,3,4) with the remainder being harvested with typical cable or ground-skid methods. RCFC has also met or exceeded its target of "25% of a select component of the inoperable area".
Reforest all 519 ha of backlog NSR by 1999.	MP #2	The backlog NSR on TFL 56 was reduced to zero as of the 1998 planting season. Post-planting treatments and surveys are ongoing.
Increase seed inventories to 10 year supply for all species.	MP #2	As of Jan. 1, 1999, RCFC had sufficient seed on hand to produce 10.4 million trees, or nearly 30 years supply. Some balancing of specific species and elevation requirements will be ongoing as well as normal replacement of old seed.
Cooperate with the MoF in the early detection and suppression of forest fires.	MP #2	An annual <i>Fire Preparedness Plan</i> is prepared for the approval of the MoF. RCFC continues to cooperate with the MoF on suppression and detection activities.
Coordinate harvest planning with commercial helicopter skiing operations and other commercial recreation opportunities.	MP #2	Heli-ski operators routinely review and comment on our operational plans. RCFC will take into account all comments to improve, or avoid damaging ski opportunities.



**Table 1 (continued) -- Commitments**

<b>Commitment</b>	<b>Source</b>	<b>Actions</b>
Upgrade the landscape inventory	MP #2	This requirement has been superseded by Minister's Advisory Committee guidelines which are in development.
Maintain both commercial and non-commercial recreation opportunities.	MP #2	RCFC has continued to help maintain opportunities for dispersed outdoor recreation and continues to provide opportunities for review of plans with licenced commercial operators.
Provide opportunities for public consultation in all levels of planning.	MP #2	In addition to the required opportunities for public consultation, RCFC carries out annual public meetings, annual report mail-outs to all Revelstoke households, and is governed by a board of directors from a variety of backgrounds.
Comprehensive forest inventory to be prepared for use in MP # 3 preparation.	MP #2 approval letter	A comprehensive update using digital orthophotos has taken place. Additionally, an F.S. audit of the TFL 56 inventory was completed and found the inventory satisfactory.
An assessment of the Environmentally Sensitive Areas (ESA's), particularly in regards to unstable terrain and riparian areas, is to be carried out and used in preparation of MP #3	MP #2 approval letter	Terrain Stability Mapping (TSIL D) was completed for the entire TFL. Stream and Wetland Classification has been completed. These will be used in MP#3 preparation.
62 hectares per year must be harvested from problem forest types and reported annually.	MP #2 approval letter	Problem Forest Type harvesting has been reported annually. RCFC has exceeded 62 ha per year. Our average is 96.1ha./year.
Operability is to be re-assessed in a manner decided by the District Manager.	MP #2 approval letter	This process has been commenced in early 1999 with completion planned for August 1999.
Caribou strategies in government approved plans are to be adhered to.	MP #2 approval letter	There are no government approved plans yet, but RCFC has been adhering to all interim measures described in documents such as the Forest Development Plan direction documents. Additionally, RCFC has been active in developing caribou-friendly silviculture prescriptions.
A review of non-recoverable losses must be completed for inclusion in MP #3.	MP #2 approval letter	A review of non-recoverable losses is in progress and will be included in MP #3.
A landscape inventory must be completed for inclusion in MP #3	MP #2 approval letter	This commitment has been superseded by the Minister's Advisory Committee. There is no requirement for a Landscape Inventory in the TFL 56 portion of the Forest District.
Biodiversity guidelines in government-approved plans such as guidebooks and Kootenay Boundary Land Use Plan must be followed.	MP #2 approval letter	RCFC has been following all requirements for biodiversity emphasis areas as outlined by such documents as the <i>Memorandum of Understanding between MoF and MoELP Regarding Instruction for the Preparation of the 1998 Forest Development Plans</i>
Ten per cent of RCFC's Allowable Annual Cut must come from above the operable cut line.	MP #2 approval letter	See comments on Page 4.



## **1.2 Management Objectives**

Revelstoke Community Forest Corporation will continue to manage TFL 56 guided by the objectives outlined in Management Plan #2 (modified somewhat as a result of Forest Practices Code changes and Minister's Advisory Committee (MAC) draft recommendations). These draft management objectives for MP #3 are outlined below. RCFC expects to receive comment and suggestion related to these and may modify them accordingly.

### **Land Use**

- To manage the licence area according to environmentally sound integrated resource use principles and land-use plans within the context of government regulations and guidelines.
- To use forest management and harvest planning strategies that will sustain the long term productivity of the working forest while minimizing impact on non-timber resources including fish, wildlife, recreation, biological diversity, wilderness and water.

### **Timber**

- To manage the forest in a manner that will produce a continuous flow of logs of suitable quality and quantity while maintaining other resource management goals.
- To recommend an annual allowable cut (AAC) which reflects the timber producing capacity of the landbase, the needs of non-timber resource users, and the social and economic values related to TFL 56.
- To harvest the various forest types in proportion to their relative abundance within the operable land base. This is sometimes referred to as "harvesting the profile".
- To cooperate with the District Manager in the sale of Small Business Forest Enterprise Program (SBFEP) timber licences within the TFL.

### **Engineering**

- To design and construct and maintain roads in accordance with all applicable Ministry of Forests requirements.
- To plan, design, and build roads and bridges sufficiently in advance of their needs.
- To respond promptly to road-induced erosion hazards in order to minimize environmental damage.

### **Reforestation**

- To maintain a basic silviculture program that complies with the Forest Practices Code of B.C. Act and ensures prompt and appropriate restocking of productive forest land.
- To undertake selected treatments on free to grow stands that result in increased forest growth, reduced losses to pests and diseases and improved timber quality in the future.



### **Fish and Wildlife**

- To provide a diversity of habitat capable of supporting viable populations of native fish and wildlife species.

### **Forest Inventory**

- To provide the Ministry of Forests with an annual submission of updated forest inventory digital files.

### **Recreation**

- To continue to provide opportunities for public recreational use at the current level and to explore opportunities for increase and enhancement in the future.
- To continue to use visual landscape planning principles and design in harvest planning and to coordinate visual landscape planning with other non-timber resource users.

### **Water Quality**

- To minimize the effect of forestry activities on water quality, quantity and flow timing.

### **Public Involvement**

- To provide open and accessible information to the public concerning the management of TFL 56 and to hold meetings for the interested public.

### **Forest Protection and Health**

- Maintain a forest health program that will promote healthy conditions within the forest.
- Minimize losses caused by forest fires, insects, diseases and other damaging agents.

### **Other Licenced Users**

- To consider the needs of other licenced users during planning and operations within TFL 56. At present these users include guide outfitters, helicopter ski and hiking operators, miners and water users.

### **Cultural Heritage Resources**

- To protect cultural heritage resources.

### **Relations with First Nations**

- To foster a cooperative relationship with first nations groups having an interest in the TFL area.



### **1.3 Resource Inventories**

This section describes the present status of resource inventories and related information for the TFL 56 area.

#### **Aerial Photography**

- Completion date: July 1998
- 1:50,000 aerial photography was completed on TFL 56. This photography was digitally ortho-rectified to create 1:20,000 mapsheets. Essentially these are maps that look like photos and are invaluable planning and inventory tools. They exist digitally as a “layer” in RCFC’s digital base map and physically as mapsheets in our map cabinet.

#### **Large Scale Contour Mapping**

- Completion Date: 1997
- Mapping at a 1:5,000 scale and at a 5 metre contour interval has been completed for timbered portions of the TFL.

#### **Total Chance Inventory**

- Completion Date: November 1998
- Total chance harvest planning has been carried out in the entire TFL. This essentially provides an inventory of all timber that is deemed “practical” to harvest using all harvesting systems presently available. Economic criteria – which are more volatile than “practical” criteria – will determine when the identified areas will be harvested and in what proportions.

#### **Timber**

- Completion date: July 1999
- A major update using the above-mentioned orthophotos was completed. Spatial positions of all existing roads and cut blocks were checked and corrected if necessary using these orthophotos. A Ministry of Forests audit was completed and found the inventory data within acceptable tolerances. RCFC will use this updated inventory information – further updated with GPS data for harvesting completed since July 1998 – for the timber supply analysis.

#### **Terrain Stability**

- Completion date: April 1997
- Terrain stability (TSIL D) mapping was completed for the entire TFL. RCFC will investigate the use of TSIL D data instead of the “Es” classification for net-downs in the timber supply analysis.



### **Recreation**

- Completion date: December 1992
- RCFC presently uses recreation mapping completed by the previous tenure holder. This will be updated and digitized to ministry standards

### **Wildlife**

- Completion Date: February 1996
- Caribou Habitat Suitability mapping has been completed for key areas of the TFL

### **Stream and Wetlands**

- Completion Date: February 1998
- Stream and wetland classification has been done for the entire TFL. The information used is field-based for most streams in the Downie Valley and Front Face areas of the TFL. Limited field data was available for the Goldstream area. However field work is being completed in 1999 for the Goldstream watershed.

### **Avalanche Likelihood**

- Completion Date: September 1998
- Avalanches have become an issue as harvesting progresses on steeper slopes, higher elevations, and further back in narrow valleys. This mapping has been completed for the entire TFL and is used in a similar manner as the terrain stability mapping.

### **Cultural Heritage Resources**

- Completion Date: Ongoing
- Cultural heritage inventories will be completed on a site-specific basis when specific concerns are brought forward or if any signs of cultural heritage resources are noted during the other on-site assessments which take place. RCFC has to-date completed three archeological impact assessments where concerns were noted during the Forest Development Plan process. No archeological sites were discovered.



## **1.4 Management Issues**

- **Minister's Advisory Committee Issue 1**

Issue: The Minister's Advisory Committee (MAC) report will have a number of recommendations for forest management in the TFL 56 area. What will be the impact on timber supply?

Action: The timber supply analysis process will be used to analyze several scenarios, including the MAC recommendations.

- **Minister's Advisory Committee Issue 2**

Issue: The Minister's Advisory Committee (MAC) process is drawing to a close as our Management Plan #3 process continues. Will MAC's report be implemented soon enough to use fully in this planning process?

Action: RCFC will complete a sensitivity analysis with the most current MAC recommendations versus the base case.

- **Operability Mapping**

Issue: Mapping of operability lines needs to be redone prior to the timber supply analysis. The mapping will need to take into account past performance both above and below the current operability line and may influence the need for a "partition" in the AAC.

Action: RCFC is discussing operability line classification with the District Manager's staff. Once criteria are approved, the new operability lines will be established. Completion is anticipated by November 15, 1999

- **Harvesting the profile**

Issue: The Ministry of Forests is concerned that better sites and western red cedar leading stands may be over represented in the harvest. The actual harvest profile and its impact on AAC need to be investigated.

Action: RCFC data suggests that RCFC has definitely not been over-harvesting western red cedar stands since purchasing TFL 56 in 1993. However, to alleviate concerns, RCFC will recompile the harvest data and compare them with inventory data. This will be presented to the District Manager – if there is reason for concern, an action plan with proposed solutions will be devised. Possible solutions include revision of harvesting plans, revision of the operability mapping or revision of the timber supply analysis data package to reflect actual cutting practices.



- **Species Conversion**

Issue: The Ministry of Forests is concerned that reforestation efforts appear to be reducing the proportion of Western red cedar and increasing Englemann spruce and Douglas-fir.

Action: A review of past and present reforestation results will be done. The review will be designed to answer these questions:

Have reforestation efforts in the past changed the proportion of species in the stands significantly?

If so, is it still continuing?

Is there an impact on AAC?

Are there other impacts?

If the answer to any of these questions is yes, then an action plan to address the situation will be devised.

- **Seral Stage Objectives**

Issue: Seral stage objectives are currently being managed for based on the Forest Development Plans. The impact of these objectives will need to be modeled in the Timber Supply Analysis.

Action: The Timber Supply Analysis will model, among other scenarios, the following:

*Base Case*

- Ungulate winter range as per the Minister's Advisory Committee (MAC)
- Caribou as per MAC
- Biodiversity Emphasis Options (BEO) of 10/45/45 (high/medium/low) as per the Chief Forester's direction
- Reduce initial old seral requirement to 1/3 in low BEO
- Use non-proportional rule for seral stages
- Model old forest (Chief Forester Rules)

*Sensitivity*

- Actual MAC strategy for BEOs.
- No 1/3 old forest in low BEO
- Use proportional rule for seral stages
- Model mature plus old forest together (MAC Rules)

- **Small Business Forest Enterprise Program (SBFEP)**

Issue: The SBFEP may need to secure more timber from within the TFL. It is important that the SBFEP program planners utilize the current TFL 56 SBFEP operating areas to the fullest degree just as RCFC must do on the remainder of the TFL. Failure to do so will result in over-harvesting of easily accessed timber and may cause timber supply problems in the future.

Action: RCFC will seek consensus with Forest Service district staff on SBFEP operating areas and planning and layout principles within these areas.



- **RCFC Viability and Wood Supply Variation – Issue 1**

Issue: Will RCFC's viability be effected by reductions in AAC?

Action: A review of the viability implications will be completed.

- **RCFC Viability and Wood Supply Variation – Issue 2**

Issue: If RCFC's viability is effected by reductions in AAC, what further effect will SBFEP's non-declining 11,580m<sup>3</sup> apportionment have on the viability?

Action: A review of the viability implications will be completed.

- **Harvesting Systems**

Issue: To date, RCFC has met or exceeded its commitment to use innovative harvesting systems such as helicopter and skyline. Will RCFC continue to use innovative harvesting systems?

Action: RCFC is committed to harvesting the full spectrum of productive forest sites on TFL 56 using all technology available. Log market prices will determine the actual proportions and timing of innovative systems' utilization.

- **Standing Timber Inventory (STI)**

Issue: What is RCFC's strategy with regard to STI, including not just available cutting permits but also roads and Silviculture Prescription approval. The target of 3 years STI in the current MP is not being met nor is it likely to be met.

Action: The strategy, in brief, is to have two years of SP approved harvesting areas and one year of approved cutting permits. RCFC will further clarify, in MP#3, its' strategy for achieving STI targets.

- **Problem Forest Types**

Issue: In TFL 56, there are vast areas of unmerchantable stands and problem forest types. The strategy for dealing with these areas needs to be reviewed.

Action: RCFC will review its strategy in dealing with these areas. The review will include a thorough look at RCFC's past harvesting achievement within problem stands. The outcomes of this review will be used in the timber supply analysis including setting of net-down factors.

- **Forest Protection**

Issue: Landscape level strategies to mitigate fire risks are needed.

Action: A landscape level strategy to mitigate long term fire risks will be devised for inclusion in the MP #3. This will include the effect of patch size and configuration, access and other controllable factors.



- **Forest Health**

Issue: Landscape level strategies to manage forest health problems are needed.

Action: Strategies covering major forest health agents such as Armillaria, hemlock looper and others will be devised for inclusion in the MP #3.

- **Recreation**

Issue: Forest recreation is an important and growing forest use in TFL 56. Forestry activities can impact recreational opportunities.

Action: Strategies for managing forest recreation will be devised for inclusion in the MP #3. These strategies will include consideration of recreational activities such as back country skiing, helicopter skiing, hunting, fishing, hiking, nature viewing and other activities.

- **Non Timber Use**

Issue: Notification of “non-timber users” (such as heli-skiing operations, commercial back country recreation operators, trappers, and others) about planned forest management activities has been identified as an issue.

Action: RCFC will devise a notification strategy for non-timber users. The existing strategy is to follow current code requirements for notification as well as maintain an open line of communication with other users. Significant change to this strategy is not expected.

- **Specific fish/wildlife issues:**

Issue: Forestry activities can effect populations of many animals. Current government guidelines address many wildlife issues, but because of the important habitat within TFL 56 for grizzly bears as well as caribou and other ungulates, these species will require specific planning.

Action: RCFC will describe the strategies for these animal populations including the role that biodiversity zones, ungulate winter range zones and caribou zones play in the strategy. These strategies will be largely based on the MAC recommendations. RCFC will describe its approach to modeling caribou habitat, grizzly bear habitat, ungulate winter range and biodiversity in the timber supply analysis data package. Consensus on the approach will be sought with the staff of MoF and MoELP

- **Management Strategies**

Issue: Extensive areas of TFL 56 have been identified in the draft MAC plan as being caribou habitat, ungulate winter range and biodiversity zones. Draft MAC guidelines have been devised for these areas. At issue are the methods that RCFC will employ to meet the guidelines while managing the forests in these areas.



Action: RCFC will describe its approach to modeling caribou habitat, ungulate winter range and biodiversity in the timber supply analysis data package. Consensus on the approach will be sought with the staff of MoF and MoELP.

- **Outside Communities**

Issue: Management Plan #3 may effect communities outside Revelstoke.

Action: The effects of management actions on outside communities will be discussed in the plan document. This will be tempered with the knowledge that there is a requirement in the TFL document to process 50% of the sawlogs locally and to sell the remainder competitively through a local log yard.

- **Backlog NSR**

Issue: Backlog NSR has been an issue in the past on the TFL 56 area. Backlog NSR has been reduced to zero as of 1998.

Action: Post planting treatments and surveys will continue on previous backlog areas until they are free growing. On backlog areas where reduced stocking was accepted, the future timber yields will be reduced in a manner acceptable to the MoF.

- **Inventory**

Issue: The suitability of the current inventory for this timber supply analysis was identified as an issue by the Chief Forester. A comprehensive forest inventory was to be prepared for this management plan process. Update of certain other inventories has also been an issue.

Actions:

**Timber.** Since this was identified as an issue, an inventory audit was completed by the Ministry of Forests. It found that the inventory was satisfactory. As well, RCFC has completed an intensive inventory update, completed ancillary inventories such as terrain stability, stream & wetland and others to augment the timber information. RCFC has formally requested to be released from this requirement based upon the audit results and completion of ancillary inventories. This will not keep RCFC from joining the Vegetation Resource Inventory initiative for the Columbia Forest District. RCFC will join this initiative when funding is available.

**Recreation.** Although RCFC finds the recreation inventory functional, it will be updated if so requested by the MoF.

**Archeology.** An overview archeological inventory has not been considered critical because no archeological sites have been unearthed within the TFL. Key areas of concern, as noted by first nations groups during the Forest Development Plan process, will continue to be spot-inventoried.



- **Landscape Management**

Issue: Landscape management, especially around backcountry lodges, is of concern.

Action: RCFC will follow MAC guidelines for visual landscape management. A discussion of this issue will be included in the Management Plan #3.

- **Low Sites**

Issue: Actual performance on harvesting low productivity sites needs to be documented and reviewed in the timber supply analysis

Action: The actual and expected performance on harvesting low sites will be reviewed and analyzed as part of the timber supply analysis.

- **Access**

Issue: Increased access as a result of forest road construction may impact wildlife.

Action: RCFC will review its forest road construction and deactivation strategies and their effect on wildlife management.

- **Strategic Silviculture Planning and Intensive Silviculture Strategy**

Issue: Although RCFC strives for excellence in the basic silviculture program, opportunities may exist for ameliorating future reductions or improving the future timber yields (or quality) through changes or expansion of the silviculture program.

Action: RCFC will explore the effects of modifying or enhancing the silviculture program to improve quality and yields – in particular where there are “troughs” in the timber forecasts. RCFC will use a “type 1 silviculture analysis” or similar process.

- **Deciduous Management**

Issue: Some existing immature stands have a high component of deciduous species. As well, it may be desirable in some cases to promote a deciduous component within future conifer stands for forest health or biodiversity reasons.

Action: RCFC will devise a strategy for managing existing immature stands having a major deciduous component. It should be noted that “backlog” stands considered treatable have already been planted and tended to increase the conifer component. RCFC will also devise a strategy for the acceptability of minor components of deciduous species when deemed applicable for forest health or biodiversity reasons.



- **Partitioned Cut**

Issue: The need to partition harvest should be based upon performance relating to achievement of commitments made in Management Plan #2 as well as any operability mapping changes for this plan.

Action: RCFC has over-achieved on its commitments for harvesting above the operability line during the last plan period. RCFC has redrawn the operability lines based on the experience of the last several years and will propose to eliminate the partitioned cut in Management Plan #3 based upon past-performance and a uniform set of net-downs for the gross operable area.

- **Patch Size Distribution**

Issue: Different patch size distribution configurations may effect timber supply over time.

Action: Different patch size strategies will be investigated. Two metre green-up will be modeled as per District Manager direction.

- **Non-recoverable Losses**

Issue: Forest growth losses which are not recovered must be adequately estimated. Such losses include windthrown, burnt or otherwise killed timber which is not harvested.

Action: Non recoverable losses will be reviewed in order to determine an acceptable estimate of unharvested forest growth losses. An important part of this review will be the recent work done as part of the Columbia Forest District's TSA timber supply review.



## 1.5 Timber Supply Analysis

A forested area can produce a wide range of sustainable harvest levels – the variability comes from management assumptions such as the amount of net harvestable land base, rotation length and other factors. RCFC will prepare a timber supply analysis which will be used to determine harvest level options. This analysis will be done using a number of management assumptions. From this, a rationale will be prepared with a recommended harvest level.

RCFC will use a spatially explicit model (*FPS* – Forest Planning Studio; called *Atlas* in its previous editions) for the timber supply analysis. First, several management options will be modeled. These preliminary analysis runs will be used to develop a planned management strategy. Various sensitivity analysis will be run to further assess which factors affect the analysis results.

The analysis options will likely include the following:

1. Base Case:
  - Ungulate winter range as per the Minister's Advisory Committee (MAC)
  - Caribou as per MAC
  - Biodiversity Emphasis Options (BEO) of 10/45/45 (high/medium/low) as per the Chief Forester's direction
  - Reduce initial old seral requirement to 1/3 in low BEO
  - Use non-proportional rule for seral stages
  - Model old forest
2. Case 2
  - Actual MAC strategy for BEO's.
  - No 1/3 old forest in low BEO
  - Use proportional rule for seral stages
  - Model mature plus old forest together

Sensitivity analysis will be done around the issue of size of operable land base and net down criteria for harvesting systems and problem forest types. The specific procedures and assumptions will be outlined in RCFC's data package. This package is scheduled for submission to the Forest Service on January 12, 2000.



## 2.0 Comments From Referrals

The current Management Plan has been available for review as outlined in the *Review Strategy*. There have been no comments received.

This SMOOP document has been made available for review as per the Review Strategy. Few comments were received. Those received are listed below and a copy of the comments, with letters of reply, are contained in Appendix 3.

Source of Comment	Comment	Summary of modifications (if any) made as a result of the comment
SMOOP and EEO Open House	“Should add hardwoods as potential crop trees and for Armillaria control and site nutrient enrichment...”	Deciduous management added as a management issue
Letter received from Parks Canada as a result of our advertisement for comment	This letter contained comments about “forestry practices in the caribou zone”, “FEN’s”, “mature deciduous component”, “old growth fragmentation” and “access”	See attached letter of reply (Appendix 3). Access added as a management issue to the final SMOOP document

