

APPENDIX 1: Statement of Management Objectives, Options and Procedures (SMOOP)



File: 19710-30/TFL33

March 1, 1999

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BVB		Forestry	
AW		JL	✓
Loggins		PBM	
DJC		GH	
NM		KW	
TM		DM	
BM		AT	
MEJ		PHJ	
DW		AM	
GH		LS	
RM			
VAULT			

Dear Jeff Lipsett:

**Re: Statement of Management Objectives, Options and Procedures (SMOOP)
for Management Plan #8 Tree Farm Licence (TFL) 33**



Thank you for the revised two pages submitted under your letter of February 12, 1999, for insertion into your December 15, 1998, SMOOP, for TFL 33.

In recent discussions with ministry staff, Section 3.11 Biological Diversity requires clarification to amend the second sentence as follows: "...45/45/10 (low/medium/high) modelling procedure and the low emphasis areas drawn down to one third and...".

Subject to the above and in accordance with paragraph 2.11 of the TFL document, I hereby accept your final SMOOP.

We look forward to receiving your information package very shortly.

Yours truly,

Fred A. Baxter
Regional Manager
Kamloops Forest Region

**STATEMENT OF MANAGEMENT
OBJECTIVES OPTIONS AND PROCEDURES
(SMOOP)**

AND

**STATEMENT OF OBJECTIVES FOR
EMPLOYMENT AND ECONOMIC
OPPORTUNITY (EEO)**

FOR MP #8,

TFL # 33

Submitted by:

Federated Co-operatives Limited

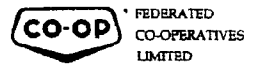
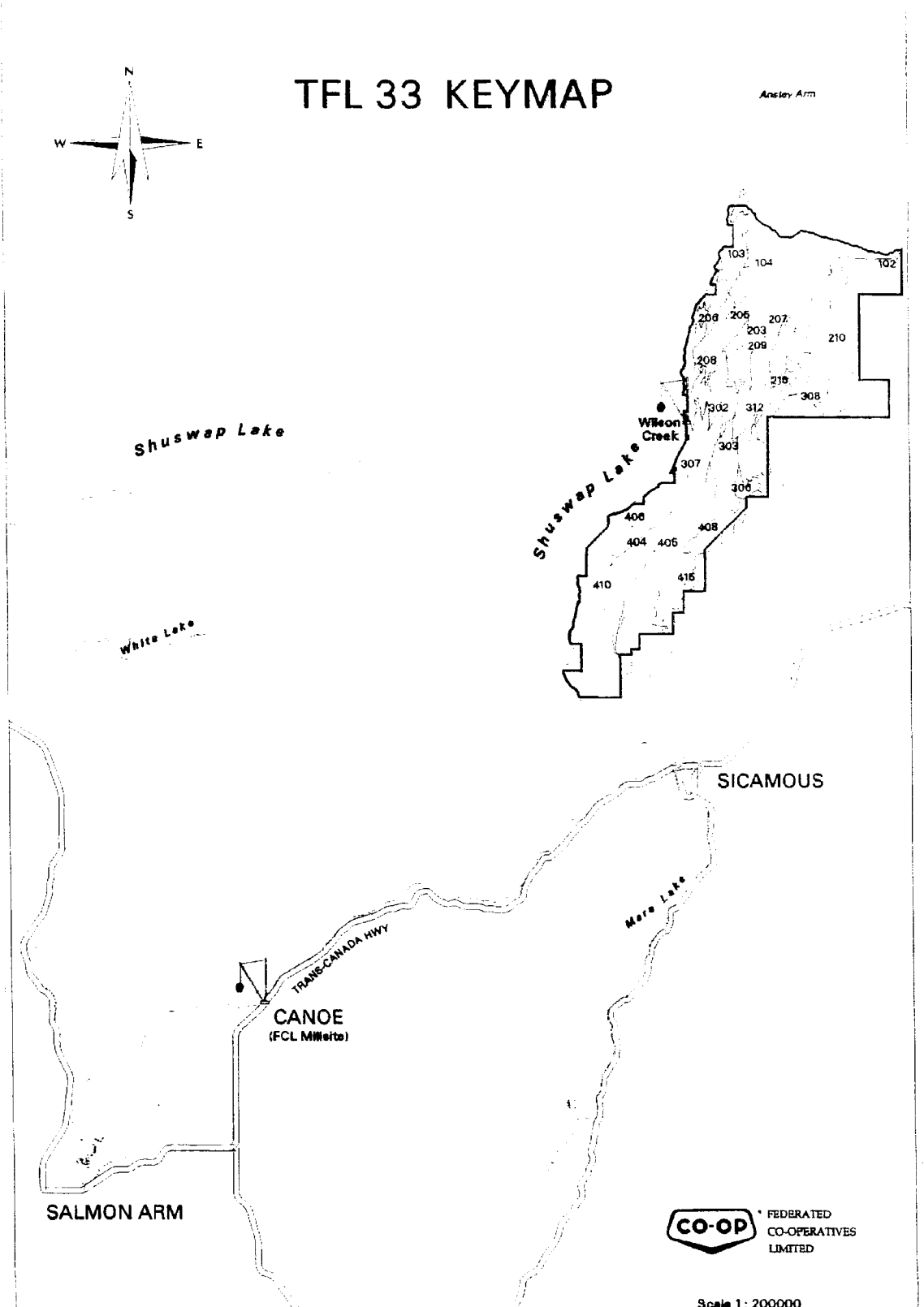
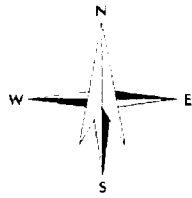
Box 70, Canoe B.C., V0E 1K0

Prepared By:

Jeff Lipsett, R.P.F.

December 15, 1998

TFL 33 KEYMAP



Scale 1: 200000

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1. INTRODUCTION

1.1. Federated Co-operatives Limited (FCL)

Federated Co-operatives Limited (FCL) began operation in the Shuswap area 53 years ago. Tree Farm Licence Number 33 (TFL 33) was awarded to Shuswap Timbers in 1959 with the initial Cutting Permit issued on March 1, 1960. FCL acquired TFL 33 with the purchase of Shuswap Timbers in 1965. TFL 33, although small in comparison to other TFL's in the province, has played an important role in the past 33 years in providing raw material as part of the licensed quota attributable to FCL.

FCL provides central wholesaling, merchandising and manufacturing services on behalf of its member-owners to more than 300 retail co-operatives in Western Canada and North Western Ontario. Together, FCL and its member retails are known as the Co-operative Retailing System in Western Canada, providing goods and services to an estimated 750,000 individual Co-op members.

1.2. Location of TFL 33

TFL 33 is situated within the Columbia wet-belt on the Western slopes of the Shuswap Mountain Range. It lies immediately to the North of Sicamous (see Key Map) adjacent to Shuswap Lake and comprises a total land base of 8,365 hectares. Elevation of the license area is from approximately 347 meters at Lake Level to approximately 1700m on Queest Mountain.

1.3. Purpose of SMOOP

The purpose of the Statement of Management Objectives Options and Procedures (SMOOP) is to provide an outline of FCL's objectives for the management, utilization, conservation and protection of the forest resources within the TFL 33. It also ensures that the FCL addresses issues specific to TFL 33 and identifies ways in which the issues will be handled.

2. COMMITMENTS

The following commitments were contingent to the approval of Management Plan # 7 and are currently in effect;

1. Continued use of alternate harvest systems such as Cable and alternate silviculture systems such as Patch Cut and Group Selection.
2. To include an inventory of licensed and unlicensed water users in the vicinity of the TFL.
3. To complete operability mapping including an indication of harvest method.
4. To update stream inventories for the TFL.

3. MANAGEMENT OBJECTIVES

3.1. General Objectives

The general objective of FCL is to recognize and improve the current social, environmental and economic benefits attributable to the practice of forestry on the licence area. Specifically, FCL will maintain a long term, economically viable forest products division, while practicing sound integrated forest management. FCL has been operating for 53 years in the Shuswap area, attesting to the long-term commitment to the local communities.

FCL will comply with the Forest Practice Code of British Columbia Act (FPC) as well as the results of the Okanagan-Shuswap Land and Resource Management Plan (LRMP). The LRMP is still under discussion and not yet finalized. Analysis work will incorporate the finalized, cabinet approved, LRMP if completed prior to the submission of the analysis.

3.2. Timber Resource

FCL plans to maintain the currently approved Annual Allowable Cut (AAC) of 22,050 m³. The AAC includes 1,450 m³ (7%) managed by the Small Business Forest Enterprise Program of the Ministry of Forests (SBFEP).

Silviculture systems will vary depending on site-specific requirements (slopes, safety, timber type, etc.) as well as landscape objectives and requirements. Patch cuts and clear cut with reserves are the most predominant system currently used, although group selection will be phased in with specific development areas. Small CB's will be utilized in order to meet the various management strategies (Deer Winter Range, VQO's, etc.). Current CB size as approved in the 1998-2003 FDP, is 6.9 ha's.

Harvest systems will depend on the silviculture system and site specific requirements (slopes, safety, timber type, etc.). The licensee currently employs a variety of systems within its operating area including conventional ground skidding, low ground pressure, cable and helicopter. Harvesting will comply with the FPC and will incorporate the applicable guidelines and guidebooks as a reference for planning operations. Currently approved in the 1998-2003 FDP is Cable, Cable/Conventional harvesting of 27%, Conventional ground skid 64%, Low Ground Pressure 6% and Helicopter 3%.

3.2.1. Utilization Standards

Utilization standards will be the same as per MP # 7:

Specification	Species
10 cm Top Diameter	All Species
15 cm Top Diameter	Cw 141+ YEARS
17.5 cm D.B.H.	All Species (Except PL)
12.5 cm D.B.H.	PL
30 cm Stump Height	All Species

3.3. Silviculture

3.3.1. Basic Silviculture

FCL will meet the basic silviculture requirements of the Forest Act and FPC Act of B.C.. The licensee's IO obligations are recognized and priority will be given to achieve free growing on applicable areas. The licensee currently has no backlog NSR areas on the TFL.

Regeneration delay of a minimum of two years will be attained or exceeded. In general, the licensee plants a minimum of 1-year-old stock within a year of harvesting. Generally this policy equates to a 1-year regeneration delay. Mixed planting of a variety of species will be encouraged throughout the license area. Genetically improved stock (Spruce) is currently being planted on the TFL. As other species become available, additional improved stock will be planted on the license area.

3.3.2. Incremental Silviculture

The licensee supports any incremental silviculture activity within its license area, and will pursue opportunities beyond its basic obligations, where a tangible long-term benefit, to the licensee, will be recognized. Due to the potential to lower downfalls in the AAC, all incremental opportunities will be examined. Work will progress as permitted by funding and consideration for forest health.

3.4. Forest Health

The licensee objective is to minimize fibre losses to insects, disease and other pests within the planning area and to continue to ensure the prompt recovery of volume that would otherwise be destroyed. Strategies for recovery of damaged timber will be discussed in detail in the Management Plan and annually in the Forest Development Plan (FDP). The annual planning as a Forest Health Plan separate to the other licenses FCL operates under, will be continued.

Where required, insects and disease surveys will be conducted in conjunction with the Ministry of Forests to measure the incidence of infestations identified in the FDP. Generally, the TFL is either accessible by roads or visible from the lake. Any forest health concerns will be apparent and identified during the regular course of work on the TFL. Additional monitoring through aerial reconnaissance will be carried out on the more isolated portions of the license. Specific areas of concern will be addressed on an individual area basis.

3.5. Fire Protection

The rapid detection and suppression of fires will minimize losses and damage.

3.6. Soils

FCL will provide for the protection and conservation of soils by minimizing the amount of landbase occupied by permanent structures required accessing and

removing timber. Levels of disturbance will be in compliance with the applicable regulations and guidelines.

3.7. Inventory

Current inventories will be used as part of the inventory package (see Section 4. Inventories). The inventory will include the stream classification if completed and available - the contract will be issued late summer 1998 under FCL's MYA with FRBC. A FHAP was carried out in 1997 and does classify the lower reaches of the major streams up to a gradient break over 20% or a blockage to fish passage. Additional operational sampling has also been carried out. If the stream inventory is not completed in time to be incorporated in the Information Package, agreement will be reached with MOELP as to stream classification to be used for analysis purposes.

3.8. Engineering

3.8.1. Road Construction

All planned roads that are approved in the FDP will be developed in accordance with the schedules in that plan. In access development, FCL will strive to develop roads two years in advance of logging. FCL plans will work towards avoiding the duplication of access as much as practical.

3.8.2. Road Maintenance

A road maintenance plan will be submitted annually in the FDP. Standards will be as per the guidelines and regulations in effect. FCL will commit to implement maintenance in accordance with the plan as approved by the District Manager.

3.8.3. Road Deactivation

Road Deactivation plans will be submitted annually in the FDP. Standards will be as per the guidelines and regulations in effect. FCL will commit to implement deactivation in accordance with the plan as approved by the District Manager. In addition, an Integrated Watershed Plan (IWP) is planned to be completed in 1998 that will include an Access Management Plan (AMP) for the deactivation of roads no longer required for access. Public referral as part of the AMP will address short and long-term access needs of the public. The carrying out of the IWP will be contingent on continued funding from FRBC.

3.9. Public Involvement

The licensee is committed to taking an active role in public education and providing opportunity for public input. Input is sought from other resource users through the referral and consultation of the FDP and MP through direct notification of licensed users - including water licensee's, guides and trappers -

government agencies and local Indian Bands. As well local advertising of the plans as required under the FPC Act of B.C. will continue.

In addition to the licensed users, unlicensed water users are invited to participate in the MP and FDP process through advertising, Open Houses, informal meetings and where applicable, direct referral.

FCL will establish liaison with a band or tribal council representative for consultation of Management and Forest Development Plans. A consultation process will be agreed to and a review of sustenance activities initiated. Records of all decisions and actions that are taken or not taken, will be kept. The results of the consultations will be addressed in the Forest Development Plans. FCL will work with the Salmon Arm Forest District and within the MOF's policy requirements, identify and resolve issues.

The licensee is committed to addressing the concerns of the local resource user groups, First Nations, licensed and unlicensed water users and to fostering the public involvement process as it relates to forest management activities. To achieve this, the licensee will continue to meet with concerned groups annually on an informal basis. Meetings have occurred with various private interests since the approval of MP #7. The latest meeting occurred in August 1998 to discuss proposed development South of Wilson Creek. Approximately 30 people along with FCL staff and District reps from MOF Salmon Arm attended. All owners, including licensed and unlicensed water users from Wilson Creek Dump up to and including Hasemann Creek were invited to attend.

3.10. Archeological and Heritage Sites

In areas where development may impact on potential or existing archeological sites, the licensee will assure that an archeological assessment is carried out so that measures can be taken to protect the site. The Ministry of Forests has conducted Archeological Overview Assessments (AOA's) for the Salmon Arm Forest District, including TFL 33. The AOA will form the basis for conducting specific assessments. If heritage sites are discovered during logging or site preparation, all operations will cease until a proper assessment of the area has been made.

3.11. Biological Diversity

Biodiversity will be incorporated as per the Okanagan-Shuswap LRMP slated to be completed in the near future. As an interim measure, the base case will be addressed based on a 45/45/10 modeling procedure and drawn down to one third and recruited over three rotations. Further sensitivity analysis may be required.

The TFL will be included as part of the Landscape Unit (LU) designated at the LRMP Table. The small size of the TFL does not warrant separation from a larger LU. Removal from the larger unit of the TFL area may not meet the objectives of Landscape Level Biodiversity and may result in fragmentation of the LU.

3.12. Protection of Water Quality and Quantity

There are numerous water licenses and users located throughout the area. FCL recognizes the protection of water quality and quantity and will address both in planning and implementing operations. Consultation through direct referrals and advertising of the Forest Development Plan will address concerns raised by licensed and non-licensed water users and will consider those concerns during road construction, harvesting, site preparation and reforestation plans.

3.13. Fisheries and Animal Habitat

FCL will ensure that fish habitat is recognized and appropriate protection consideration is given. A FHAP was completed in 1997. Further stream inventories will be conducted under FRBC funding starting in the fall of 1998 and will be included, if completed on time, in the inventory package.

FCL recognizes the importance of animal habitat within the planning area. Consideration for habitat protection will follow the LRMP, when completed, in designing and implementing operations. Current management follows the OKTSHG for Deer Winter range.

3.14. Range Management

No range use exists or has taken place on the license area. FCL will cooperate with the MOF if a demand for a program develops.

3.15. Recreation Management

Recreation use is important within and outside TFL 33. The present recreational opportunities that relate to hunting, snowmobiling and landscape values will be maintained. There is currently only limited recreational activity on the license area, and as a result, no information has been, or is planned, to be collected. The Ministry of Forests, Salmon Arm Forest District, has completed a recreation inventory of the licence area. The inventory and any updates will be incorporated into plans and operations.

3.16. Visual Quality Objectives

FCL recognizes landscape management concerns and operations will be carried out to meet the Visual Quality Objectives (VQO's) as established by the Ministry of Forests (1995), or when completed, the Okanagan-Shuswap LRMP. Data analysis undertaken by the District MOF from perspective measurements for the TFL will be incorporated into operational plans.

4. INVENTORIES

The following table outlines the inventories currently available as well as the status of those in progress:

Inventory	Status
Forest Cover	Forest Cover was updated for MP #7. Forest Activity history will be updated as part of the Information package. A review of the non-productive types as listed in the TFL 33 Inventory Audit 1997, will be carried out and the information incorporated into the Information package. Forest Cover history to be updated and submitted annually to District Manager.
Recreation	MOF inventories current to 1998 will be used.
Fisheries	Fish stream identification is currently being carried out under agreement with FRBC. The inventory will not be completed until after fish sampling has taken place in late summer 1999. The FHAP was completed in 1997. Agreement will be reached with the MOELP as to stream classification based on existing information (FHAP, TRIM mapping, and site specific sampling) in order to be included in the Information Package. Operational planning will be based on the approved Fish Inventory – to be completed 1999.
Wildlife	The OKTSHG inventory is presently available. A revised deer winter range map is currently being prepared by the FES of MOELP and may be available for the analysis. The final LRMP map may also be available, pending the completion of the planning process. Other inventories (Caribou, Grizzly) are also under discussion at the LRMP – no agreement has yet been reached as to boundaries or management strategies.
Range	There currently is no range, or plans for range use on the TFL.
Cultural Heritage Resources	The MOF, Salmon Arm Forest District has completed a district wide AOA (1997). The information is used in planning.
Landscape	MOF - 1995
ESA Soil Inventory	As per MP#7. Confirmation will be included as part of Information Package.
Operability	Submitted to District Manager for approval December 10, 1998.
Terrain Stability Mapping (Level D)	Completed spring 1998 by FCL. Not submitted for approval to MOF.

As part of the information requested for MP #7, a terrain analysis was submitted to the District Manager April 19, 1995 and approved in a letter April 26, 1995. The analysis mirrored the current Forest Development Plan for proposed harvest systems with the exception of a proposed FDP volume increase in the 31-50%

slope class of 10%. The operability mapping was submitted for approval to the District Manager on December 10, 1998.

5. MANAGEMENT ISSUES AND OPPORTUNITIES

The following issues and opportunities for possible inclusion in MP # 8 have been identified through correspondence, review or direction from the Ministry of Forests, management experience of FCL, and public and resource agency consultation:

1. **Issue:** Site Index Estimation - formal transition of site indices from old growth will soon be available. Site Index assessments in the TFL require further review. The opportunity to realize timber supply benefits exists.

Action: Utilize data, as it becomes available, on old growth site index in order to produce site index adjustments.

2. **Issue:** Minimum Harvest Ages - A minimum harvest age and volume of 160 m³/ha was used in the determination of the AAC for MP #7. Concern has been raised by the MOF about the figures used.

Action: Review current operations and performance in order to justify the figures used. To be addressed as part of the Information Package.

3. **Issue:** Non-Productive Forest Types - An inventory audit (April 1997) suggested that the some Non-productive Forest types contained productive forestland. Also, some productive forest may have been classed as alpine or non-productive forest.

Action: FCL has completed an enhanced inventory audit in order to confirm correct forest attributes and will submit as part of the Information Package. Update information will also be forwarded to the Salmon Arm Forest District.

4. **Issue:** Growth and Yield Information - growth and yield information have not been collected nor have permanent sample plots been established on the TFL. Many analysis functions require more specific local data, particularly the actual height to green-up.

Action: Research the establishment of permanent growth plots on the TFL - particularly in the managed stands. Increased growth and yield information would aid in ameliorating any timber supply declines due to the FPC or the impending LRMP.

5. **Issue:** Fish Inventory Data - fish stream inventory data is lacking for the TFL. Although a FHAP has been carried out, not all streams were classified. The deductions for riparian reserves may have been overstated in the previous analysis.

Action: Initiate a Fish Stream Inventory under the FRBC MYA just signed by FCL. The information, when gathered, will become part of the data package for the analysis of AAC. If information is not available in time for the information package, agreement will be reached with MOELP on stream classification for use in the analysis.

6. **Issue:** Visual Management - the inventory for visual management has been completed by the MOF (April 1995). The use of the information will help to guide planning and block design within the landscape.
Action: The 1995 visual inventory will be used in the planning process for the TFL.
7. **Issue:** Vegetation Resource Inventory (VRI) - an update of the inventory using VRI standards would provide current inventory information. Due to the size of TFL 33 it may be more efficient to include the VRI inventory within a TSA inventory.
Action: Review the status of VRI for the TSA and examine the opportunity to include the TFL or carry out the inventory as a separate entity.

6. TIMBER SUPPLY ANALYSIS

A timber supply analysis is required to assess the current and future supply from a management unit. The last timber supply analysis was completed in 1996 and the AAC determined as part of the approval of MP #7.

6.1. Current Management Option

The base case will be representative of the current management practices and will include, or be based on:

- Operation activity since the approval of MP #7.
- Forest Practices Code Act of B.C.
- VDYP natural stand yields and TIPSY for managed stand yields.
- Current utilization standards.
- VQO's established 1995.
- Wildlife management as per the Okanagan Resource Timber Harvesting Guidelines.
- Two Year Regen Delay.
- Basic Silviculture.

Sensitivity analysis will be run by varying aspects such as green-up ages which are thought to be underestimated.

6.2. LRMP Option

In order to fully understand the implications of the forthcoming LRMP, an option or perhaps a sensitivity analysis will be to examine the proposed management under the LRMP. Although items may not be finalized in time, the option will be to review, based on assumptions, the following:

- Wildlife management beyond current management, including Deer, Caribou and Grizzly.
- Riparian management if requirements considered are beyond the current management practiced (i.e. – reserves on S6 streams).
- Visual Quality Objectives if beyond current management.
- Landscape Units (LU) (Biodiversity) – To determine the difference of TFL 33 analyzed as a separate LU and as incorporated into the adjacent LU (Anstey).
- Other items that may impact on the operation and timber supply.

6.3. Intensive Forest Management

FCL has been very active in managing stands on TFL # 33 through enhanced silviculture activities. The benefits of such activities will be examined.

**7. APPENDIX 1: OBJECTIVES AND STRATEGIES FOR
EMPLOYMENT AND ECONOMIC OPPORTUNITIES (EEO)**

Submitted Under Separate Cover

8. APPENDIX 2: CHANGES FROM DRAFT SUBMISSION

The following changes were made due to comments received during the review period.

- 3.2.1 – Utilization Standards added.
- 3.4 Forest Health – Section updated – wording similar to approved MP#7.
- 3.6 Soils - Section added.
- 3.7.3 – Clarification – Integrated Watershed Plan (IWP) is a summary plan that will contain work to be carried out (following public review) as per assessment results. The works are funded through FRBC. An IWAP is a separate assessment that will not be funded beyond 1998.
- 3.9 Public Involvement – Section expanded.
- 3.11 Biodiversity – Section expanded. Proposed LU's and corresponding statistics not available at time of submission of Draft SMOOP.
- Inventories Section updated to include Operability Mapping and Fish Stream Identification as well other corrections made.
- EEO – Expanded as per comments received;
 - Volume figures from all Crown tenures added.
 - Current job numbers added; also percentage community breakdown of company workforce.
 - Employment Equity, including native peoples added.
 - General strategies added.

The Public referral advertisements and referral letters brought no direct comments as to the SMOOP. No portions were changed in light of the comments.

**9. APPENDIX 3: ADVERTISEMENTS AND REFERRAL
CORRESPONDANCE**

Submitted Under Separate Cover