

Weyerhaeuser Company Limited

BC Interior Forestlands Kamloops BC

Proposed

Tree Farm Licence 35 – Jamieson Creek

Management Plan #9

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Submitted By:
Kurt Freudenberger RPF
Planning Forester



Bob Helfrich RPF
Manager Forest Administration and Planning



Prepared By:
Don Brimacombe RPF
Forestry Supervisor



Executive Summary

The TFL Holder is required to prepare and submit to the Chief Forester a Management Plan (MP) every five years. Management Plan #9 will outline Weyerhaeuser's management objectives and strategies, including a proposed harvest level, for the management of timber and non-timber resources within TFL 35.

MP #9 has been prepared consistent with Weyerhaeuser's Environmental Core Policy, Forest Stewardship Principles, recently completed Sustainable Forest Management Plan, Kamloops Land and Resource Management Plan and Forest Practices Code of BC Act and Regulations.

Weyerhaeuser will continue to follow the Enhanced Forest Management (EFM) philosophy established under Management and Working Plan #7. Under EFM, Weyerhaeuser will strive to ensure all productive forestland of TFL 35 is growing at or near its biological potential while considering other resource values.

Weyerhaeuser's objective for biological diversity is to conserve the diversity and abundance of native species and their habitats throughout TFL 35. Management of biological diversity will be achieved consistent with direction from the Kamloops LRMP and the Forest Practices Code Biodiversity Guidebook while limiting the impact of biodiversity to no more than 4% of the level of timber harvesting over the short and long term.

Drawing upon direction from the Kamloops LRMP and the District Manager - Kamloops Forest District, Weyerhaeuser has completed a biodiversity impact analysis on TFL 35 to further our understanding of the impacts of biodiversity on harvest flow. The biodiversity analysis showed an impact on harvest flow of 11.3 % with full biodiversity implementation based on a potential harvest flow of 142,141 m³ (full FPC of BC Act without Biodiversity Guidebook objectives). Weyerhaeuser has proposed a harvest level of 136,000m³ under MP 9. This harvest level is based on limiting the impacts of landscape biodiversity to no more than 4% of harvest flow.

The proposed harvest level will continue to provide a steady source of economic benefit to the province and local communities and long term stability to local forest industry contractors and consultants.

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Added at the end:

• THE INFORMATION
PACKAGE

• THE TIMBER SUPPLY
ANALYSIS

“This plan is the start of a never ending fact-finding job which, as time progresses, will gradually bring details into sharper focus for more efficient selection of logging areas, for revision of inventory estimates, for intensification of planning and for a stronger basis of predicting growth and yield. From this may evolve revisions of the sustained yield estimated, refinements in procedure, modifications of cutting methods, etc., for incorporation in future working plans”

Initial Management Working Plan for the BC Interior
Sawmills Limited Management License Reserve Area
(TFL 35), December 1955

1.0 Introduction

In accordance with The Forest Act and the Tree Farm License (TFL) 35 License Document, the TFL Holder is required to prepare and submit to the Chief Forester a Management Plan (MP) every five years. Management Plan #9 will outline Weyerhaeuser’s management objectives and strategies, including a proposed harvest level, for the management of timber and non-timber resources within TFL 35.

MP #9 has been prepared consistent with Weyerhaeuser’s Environmental Core Policy, Forest Stewardship Principles, recently completed Sustainable Forest Management Plan, Kamloops Land and Resource Management Plan and Forest Practices Code of BC Act and Regulations. Weyerhaeuser’s Environmental Core Policy is included in Appendix 1.

Weyerhaeuser will continue to follow the direction established under MP #7 of an Enhanced Forest Management (EFM) program for TFL 35. Under EFM, Weyerhaeuser will strive to manage the timber harvesting landbase at or near its biological potential.

1.1. Vision for TFL 35

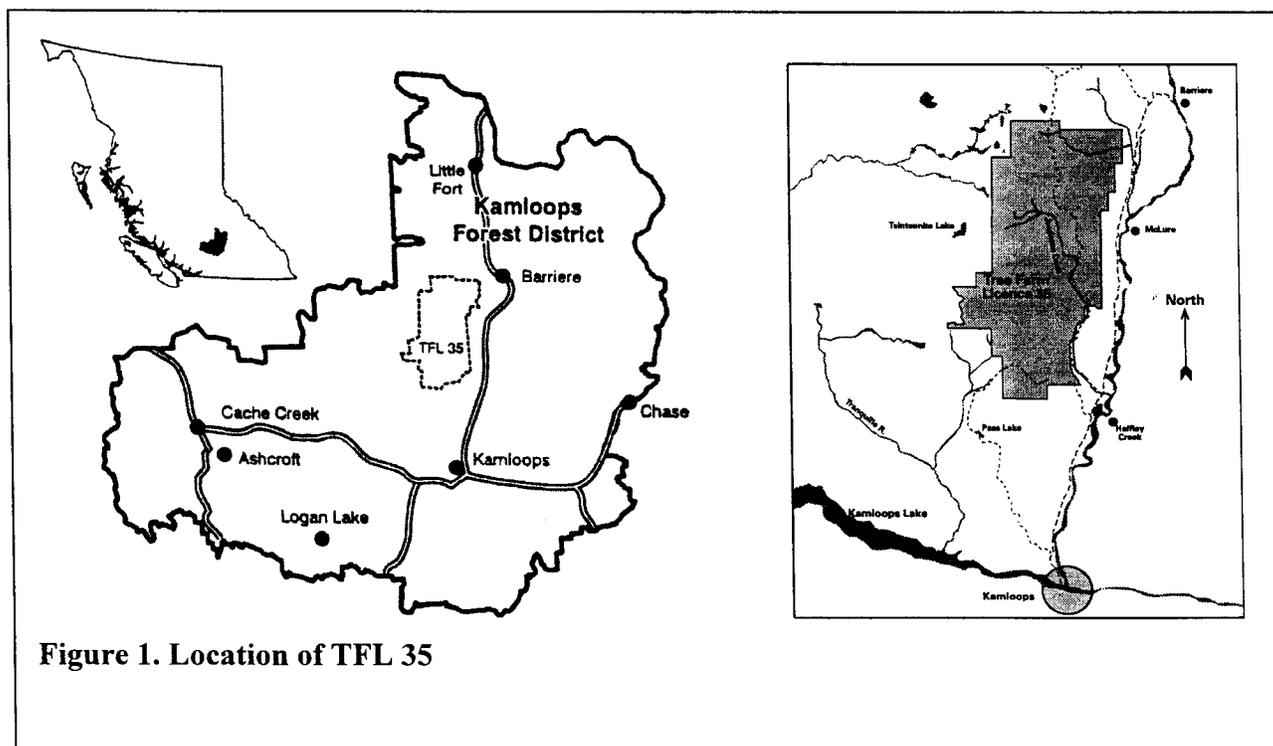
Weyerhaeuser's vision for TFL 35 is

“Leadership in Forest Estate Management”.

To achieve this vision Weyerhaeuser is committed to managing the forest lands of TFL 35 for the sustainable production of raw materials while protecting water quality, fish and wildlife habitat, soil productivity, and cultural, historical, recreational and aesthetic values

1.2. Description of the TFL

TFL 35 - Jamieson Creek is located approximately 28 kilometers north of the City of Kamloops. It is located within the Skull Landscape Unit within the Kamloops Land and Resource Management Plan and bordered by the Bonaparte and Porcupine Meadows Provincial Parks. The total area of TFL 35 is 36,563.6 ha of which 31,171.9 ha contribute to the long-term timber harvesting land base. Refer to Figure 1 for a map showing the location of TFL 35 in relation to Kamloops and surrounding area.



TFL 35 is located west of the North Thompson River, including the Jamieson, Wentworth, Whitewood and Skull Creek Watersheds. A small portion of the Tranquille Community Watershed touches the southwestern corner of the TFL.

The topography is typical of the Interior Plateau, ranging from gently rolling, low relief terrain in the western part of the TFL and creek headwaters to deeply incised, steep-sided canyons along the middle to lower reaches of the major creeks. Elevations range from 360 meters at the confluence of Lanes Creek and the North Thompson River to about 1860 meters near Wentworth Lake at the headwaters of Wentworth Creek giving a range of relief of 1500 meters.

TFL 35 is represented by four Biogeoclimatic Zones with six subzones. The Montane Spruce and the Engleman Spruce Sub Alpine Fir zones dominate the land base with smaller amounts of Interior Cedar-Hemlock and Interior Douglas Fir. The principal tree species on TFL 35 are Lodgepole Pine, Engelmann Spruce, Sub-Alpine Fir and Douglas Fir.

1.3. History

TFL 35 was originally granted to B.C interior Sawmills Ltd. in 1959. The license covered 41,708 ha at the time and was assigned an AAC of 33, 131 cubic meters under Management and Working Plan #1. A slight reduction in land base occurred prior to 1965 with an increase in the AAC to 50,970 cubic meters. In March of 1965 the AAC was re-determined at 82,119 cubic meters and again increased in 1969 to 99,109 cubic meters.

In 1970, Kamloops Pulp and Paper, a partner of Weyerhaeuser Company of Tacoma, Washington, purchased BC Interior Sawmills Ltd. TFL 35 was assigned to Weyerhaeuser Canada Ltd. in 1971.

The AAC fluctuated between 99,109 and 83,600 cubic meters until 1992, when it was raised to 125,600 cubic meters in recognition of Weyerhaeuser's enhanced forest management program on TFL 35. The current AAC for TFL 35 remains at 125,600 cubic meters.

In 1993, Weyerhaeuser elected not to accommodate harvesting under the Small Business Forest Enterprise Program, accordingly, 2,653 hectares was removed from the land base.

In 1999, Weyerhaeuser Canada Ltd. was renamed Weyerhaeuser Company Ltd.

1.4. License Holder and Administration

Weyerhaeuser is an integrated forest products company with an Administration Office in Kamloops. The Forestlands operations are located in six centers (Princeton, Merritt, Okanagan Falls, Kamloops, Lumby and Vavenby) and they supply logs and chips for four dimension sawmills and one pulp mill. Sawmills are located in Princeton, Okanagan Falls and Vavenby, while Kamloops has both a sawmill and pulpmill. The Kamloops Forestlands operation manages TFL 35.

Appendix 20 contains a copy of the Statement of Management Objectives, Options and Procedures (SMOOP) and Objectives and Strategies for Employment and Economic Opportunities (EEO) for TFL 35.

1.5. Forest Certification

Operations on TFL 35 will be conducted in accordance with Weyerhaeuser's Environmental Management System and Sustainable Forest Management Plan.

ISO 14001

International Organization for Standardization is a worldwide federation of national standards bodies headquartered in Switzerland. ISO's mission is to promote the development of voluntary standards that will facilitate international trade. The ISO 14001 is a specific standard that permits the certification of an environmental management system (EMS).

In 1999, Weyerhaeuser's BC Interior Forestlands Operations received ISO 14001 certification for its environmental management systems.

CSA Z809

The Canadian Standards Association (CSA) is a national standards-writing organization, which develops national standards and certification programs in a range of technical fields. Through work with various Canadian Forest sectors, the CSA developed the CSA Sustainable Forest Management (SFM) Standards. The SFM standards are consistent with the management system approach used in ISO 14001.

During 2000, all licensees within the Kamloops Timber Supply Area developed a SFM Plan along with a public advisory group. The plan is consistent with the Kamloops LRMP and Government Legislation. Weyerhaeuser has incorporated the SFM Plan and management systems requirement for our defined forest area, which includes TFL 35 into our environmental management system. An

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independent audit of the system took place in January 2001 and Weyerhaeuser has received registration to CAN/CSA Z809.

2.0 Resource Inventories

Table 1: Forest Inventory status

Forest Resource Inventory	Standard Date Completed	Approval		Status/Comments	Appendix
Forest inventory	1978 timber cruise. Inventory is current to Dec 31 2000 for harvesting and silviculture activities.	Chief Forester, 1996 determination for 1978 inventory and 1992 update for harvest and silviculture activities		1995 audit by Inventory branch Data Package and TSA based on 1999 Inventory Update.	Forest Cover/Age Class Map – Appendix 7
Landscape VQO	February 1999	Kamloops Forest District			Appendix 11
Recreation	March 1997	Kamloops Forest District			Appendix 12
Range	Same as MP8	Kamloops Forest District		Each range unit has an AUM allocation - no change since MP 8	Appendix 13
Stream and wetlands	January 2000	BC Ministry of Environment is the holder of approved classification maps.		Maps are updated on an on-going basis as new information is made available through field verification or other inventories.	
TFL 35 Fish and Fish Habitat	Jamieson/Wentworth completed March 1999. Whitewood and Skull completed April 2000. Lanes Creek March 2001.	Completed under the FRBC Resource Inventory Program.		Inventories have been reviewed by BCE and incorporated into Stream Classification Maps	
TFL 35 Integrated Watershed Restoration Plan	Completed in March 1999. Included Jamieson, Wentworth, Whitewood, Skull and Poison Creeks	Completed under the FRBC Watershed Restoration Program		Reconnaissance level Channel Assessment was completed on Jamieson Creek.	
Lakes	1991 Kamloops Lakes LRUP	Kamloops Forest District		2000 document revisions in progress	Appendix 12 contains a summary of TFL Lakes
Terrain stability mapping	Level "C" April 1999. TSM Upgrade completed September 2000	FRBC quality assurance certificate Approved by Kamloops Forest Region.		Complete	
Terrestrial ecosystem mapping	December 1999	Partial approval received. The revised TEM is expected in April 2001.		Updated TEM Received and supplied to KFR for review against existing TEM	Appendix 15
AOA	As per the Kamloops LRMP 1995			New AOA model being developed	Appendix 10
Kamloops LRMP Management Zones	General management, Moose and Deer Winter Range	Kamloops LRMP	Higher level plan order, January 23, 1996		Appendix 8
	Special Wildlife management	1991 Fish and Wildlife plan ¹	Used in MP7 and MP8	Mule Deer and Moose Capability Mapping	Appendix 8

¹ Operational harvesting and reforestation guidelines for the overall maintenance of Fish and Wildlife Habitat on TFL 35 and Adjacent Area.

3.0 Management Objectives

3.1. Management and Utilization of the Timber Resource

The following sections describe the objectives and strategies for the management and utilization of the timber resource under TFL 35. These activities will be governed by the Forest Practices Code of BC Act, Regulations, and consistent with Weyerhaeuser's Environmental Management Systems and as specified in other approved plans.

3.2. Silviculture Cutting System

The type of silviculture system utilized will be dictated by the existing forest composition, site conditions, harvest method and regeneration regime (stand structure objectives), Integrated Resource Management and Landscape and Stand Level Biodiversity objectives.

The primary silviculture system utilized on TFL 35 is an even aged system (clearcut, clearcut with reserves and small patch cut) due to the following technical (Biological and Physical) reasons:

- even aged stands comprised of conifer species that do not require an overstory for satisfactory regeneration (most notably Lodgepole Pine);
- existing advanced regeneration is not suitable to become the next crop (species, stocking, vigor, notably Balsam);
- forest health and windthrow susceptibility;
- mature to overmature stand conditions leading to potential insect and disease outbreaks, and
- 90% of cutblocks are modified by leave trees, leave patches and buffer strips.

Where the selection silviculture cutting system is needed (often in dry belt Douglas fir), group selection will be the system of choice.

3.3. Harvesting Methods

Harvesting methods may include conventional (including roadside) ground based systems, cable systems on steep ground, cut-to-length forwarding system and helicopter logging.

The harvest system will be designed to meet the terrain, stand types and harvesting prescriptions.

3.4. Harvest Pattern

The harvest pattern and frequency will be based on site-specific forest development planning considerations and integrated resource management guidelines.

3.5. Seasonal Flexibility

The timing of harvesting operations will be dependent on suitable ground conditions, road accessibility, snow depth and integrated resource management concerns.

3.6. Harvest Priority

The harvesting of merchantable stands within the TFL will be in accordance with the long-term species, terrain and timber type profiles and manufacturing facility requirements, with emphasis towards:

- infested, diseased or salvage stands;
- stands susceptible to infestation or loss; and
- overmature stands (stands exceeding rotation age by 40 years or greater).

Currently, there are 2,393.2 hectares (1999 Inventory) of forest types on TFL 35 that are considered less desirable than the average sawlog stands harvested on TFL 35. These marginally merchantable stands although not a priority (due to age) will be factored into forest development plans consistent with total chance planning principles. Performance within these stands will be reported within the Annual Report for TFL 35.

Appendix 17 provides a summary (based on the 1999 Forest Development Plan) of existing proposed development within these less desirable stands on TFL 35.

3.7. Minor Salvage

Minor salvage includes non-clearcut areas less than 500 m³ or clearcut areas that are both less than 500 m³ and 1.0 hectare in size. The planning and harvesting of minor salvage will be done in accordance with Section 30 (1) of the Forest Practices Code of BC Act, Regulations and Kamloops Forest District procedures. Salvage practices will be conducted in accordance with the "Term and Conditions for Minor Salvage in Sensitive Ecosystems in areas without a Silviculture Prescription" where applicable.

3.8. Deciduous Stands

Deciduous (hardwood) volume makes up a small percentage of the mature timber inventory of TFL 35. Weyerhaeuser will continue to review the markets and economies for the management and utilization of the hardwood volume although it is not currently being harvested nor is it part of the AAC calculation, it is removed from the timber harvesting landbase.

3.9. Steep Slopes

Steep slope areas do not make up a significant part of the TFL (approximately 1.5 % by area of TFL 35). These areas are primarily located within Terrain Class IV and V. Terrain Class IV is included within the timber harvesting land base and Terrain Class V is excluded from the timber harvesting land base

Weyerhaeuser will harvest within steep slope areas in proportion to their contribution to the harvest level during the term of MP No. 9. Harvesting on steep slopes will be subject to the development of an adequate volume of timber to make the project economically and operationally viable.

Harvesting on steep slopes will be subject to terrain assessments in accordance with the Operational Planning and Timber Harvesting Practices Regulations.

3.10. Cutting Permit Development

The company will manage its cutting permit development consistent with EMS targets. The current target is to have at least two years of roaded and developed timber available for harvesting.

All timber harvested under TFL 35 will be inspected, cruised and the volume reported in accordance with the Ministry of Forests established policies, standards and procedures.

3.11. Utilization specifications

Harvesting operations conducted under the authority of TFL 35 will be conducted in accordance with the Ministry of Forests (MOF) Interior - Utilization Standards.

Table 2: TFL 35 Utilization Standards

Species	Maximum Stump Height	Minimum Log or Slab Length	Minimum Diameter at Stump Height	Minimum Top Diameter	Minimum Slab Thickness
Lodgepole Pine	30.0 cm	3.0 m	15.0 cm	10.0 cm	15.0 cm
Cedar older than 141 Years	30.0 cm	3.0 m	20.0 cm	15.0 cm	15.0 cm
All other species and ages	30.0 cm	3.0 m	20.0 cm	10.0 cm	15.0 cm

3.12. Partition

The are no partitioned areas or harvests on TFL 35.

3.13. Proposed Harvest Level

Drawing upon direction from the Kamloops LRMP, Weyerhaeuser has completed a biodiversity impact analysis on TFL 35 to further our understanding of the impacts of biodiversity on timber flow.

The LRMP states: "Limit the impact of landscape unit biodiversity to no more than 4% of the level of timber harvesting in the LRMP over the short and long term."

The Kamloops District Manager also stated that "Three-thirds OGMA development be standard unless a timber supply impact is demonstrated".

To demonstrate the impact Weyerhaeuser analyzed three different scenarios:

1. The short and long term harvest level with all forest practices code requirements, known as "Option 2".
2. The short and long term harvest level with all forest practices code requirements less 4%, known as the "Recommended harvest level".

3. The short and long term harvest level with all the forest practices code requirements, full biodiversity emphasis option requirements for old growth and wildlife tree patches, known as the “Base Case”

Table 3: Biodiversity Impact Analysis

Scenario	Harvest level (m ³ /yr)	Difference in harvest level Option 2 (m ³ /yr)	Percent difference from Option 2
Option 2	142,141	na	na
Recommended harvest level	136,000	6,141	4.3
Base Case	125,200	16,941	11.9

Following from direction in the LRMP the accumulated impact of biodiversity will not exceed 6,141 m³/yr

Based on the timber supply analysis, the biodiversity impact analysis and the Kamloops LRMP, Weyerhaeuser is recommending a proposed AAC of 136,000 m³/yr.

3.14. Integration with SBFEP

In 1993, Weyerhaeuser elected not to accommodate harvesting under the Small Business Forest Enterprise Program, in which case 2,653 hectares was removed from TFL 35 and allocated to the SBFEP. There is no integration of the SBFEP within TFL 35.

4.0 Protection and Conservation on Non-timber Values

4.1. Visual Quality

Weyerhaeuser is committed to ensuring that the levels of visual quality expected by society are achieved on Crown Land in keeping with the concepts and principles of Integrated Resource Management.

The management of landscape values will be done consistent with Appendix 8 - Visual Quality Guidelines of the Kamloops LRMP. Visual objectives will be achieved through landscape design (visual impact assessment) and the application of appropriate silviculture systems in consultation with Kamloops Forest District Landscape Technician.

The Landscape Inventory of the Kamloops District including TFL 35 was recently completed in 1999. The Landscape Inventory identifies the following Visual Quality Objectives (including Lakes VQOs):

Table 4: Visual Quality Objectives

Visual Quality Objective	
Modification	Where alterations may dominate the characteristic landscape but must borrow from natural line and form to such extent that they are comparable to natural occurrences.
Partial Retention	Where alterations remain visually subordinate to the characteristic landscape and form, colour, and texture are repeated to blend with dominant elements.
Retention	Where alterations are not visually apparent and line, form, colour and texture of the characteristic landscape repeated.
Preservation	Where alterations result in no visible change

Forest development planning outside visually sensitive areas within the Kamloops LRMP will be managed for landscape objectives as follows:

- Alterations may dominate the characteristic landscape but must borrow from natural line and form to such extent and on such a scale that they are comparable to natural occurrences.

Appendix 11 contains the Landscape Inventory for TFL 35 and the Kamloops LRMP Visual Quality Guidelines for Timber Harvesting.

4.2. Biodiversity

TFL 35 is located within the Skull Landscape Unit within the Kamloops LRMP Area. The Kamloops LRMP table assigned an interim biodiversity emphasis option to each landscape unit. A biodiversity emphasis option is a land use management tool for managing biodiversity on the forested landscape within the landscape unit. The Skull Landscape Unit was assigned a low biodiversity emphasis option.

Weyerhaeuser's objective for biological diversity is to conserve the diversity and abundance of native species and their habitats throughout TFL 35. Management of biological diversity will be achieved consistent with direction from the Kamloops LRMP and the Forest Practices Code Biodiversity Guidebook while

limiting the impact of biodiversity to no more than 4% of the level of timber harvesting over the short and long term.

Biodiversity Strategy

Forest ecosystems are complex dynamic patches of vegetation varying in size, composition, age-structure and distribution. A variety of natural and anthropogenic processes drive stand dynamics at a variety of scales. In order to maintain a diversity of well functioning ecosystems within TFL35 and to assist in meeting Landscape Unit biodiversity goals, Weyerhaeuser has developed a Biodiversity strategy. This strategy incorporates direction from:

- The Forest Practices Code
- The Biodiversity Guidebook
- the Kamloops LRMP
- Weyerhaeuser's Forest Stewardship Principles
- the Sustainable Forest Management Plan for the Kamloops TSA (April 15, 2001)

Tactics within Weyerhaeuser's biodiversity strategy include maintaining a variety of seral stages including old growth, utilizing a variety of cutblock sizes and shapes, maintaining additional old timber in Wildlife Special Management Areas, utilizing a variety of snag/green tree retention practices and ensuring coarse woody debris is maintained. A map (Appendix 14) shows the location of old seral stands the location of existing and potential wildlife tree patches, and land removed from the timber harvesting landbase. Implementing the combination of these tactics will provide a balanced approach to managing for biodiversity within TFL35. This approach ensures that varying degrees of landscape and stand level biodiversity will always be maintained within a landbase designated primarily for timber production.

Old Growth Areas

The composition of plant and animal communities change as the composition and structure of forest stands develop through time. While minimum age is currently used to define when a stand has entered the old seral stage, the Biodiversity Guidebook, suggests that structure can be used to define when a stand has expressed old structural characteristics. However, given the significant age and structural variation of old seral forests by forest type and biogeoclimatic zone, guidance for disturbance type and minimum age requirements were taken from the Biodiversity Guidebook.

To determine how much old seral to place on the landbase, the volume identified in Table 2 above was converted into hectares. The recommended harvest level of 136,000 (m³/yr) could be achieved while setting aside 354 hectares from the timber harvesting landbase for biodiversity, which is consistent with limiting the impact of biodiversity on timber harvest flow to 4%. The area was split into two components, 191.1 hectares for old growth and 162.9 hectares for wildlife tree patches. Old growth areas are identified on the Biodiversity Strategy Map in Appendix 14. Appendix 14 also contains an explanation of the process to determine the biodiversity strategy areas requirements.

Wildlife Tree Patches

Weyerhaeuser is committed to maintaining natural stand attributes within managed stands.

The intent in the BGB is to have Wildlife Tree Patches (WTPs) well distributed across the landscape. To accomplish this at a strategic level, a maximum distance of 500m between WTPs was assigned for analysis purposes. A GIS analysis indicated that an additional 543 wildlife patches would be required to provide uniform coverage across the TFL. The current average wildlife tree patch is 0.3 hectares, so an additional 162.9 hectares would be required on the TFL to provide full and uniform coverage. Potential WTP locations are shown on the Biodiversity Map in Appendix 14.

Operationally, WTPs will be delineated in areas that will provide the most benefit, such as, adjacent to riparian features, wet or dry site series, rock outcrops, mixed wood patches, and in areas containing a high snag component and/or old seral attributes. The WTP selection sequence is, first, to look outside of the operable landbase, then within riparian management zones and lakeshore management zones, and lastly on non-constrained areas.

Individual Wildlife Tree Retention/Snags

The selection of individual or groups of wildlife trees will be based on the following characteristics:

- Large size (diameter and height);
- Windfirmness;
- Tree condition (high taper, large branch diameter, decay status);
- Pathological indicators; and
- Evidence of wildlife use.

Coarse Woody Debris

Weyerhaeuser is committed to managing for coarse woody debris consistent with the Biodiversity Guidebook and the “Kamloops TSA Coarse Woody Debris Ratings for Silviculture Prescriptions” and with reference to the document “A Short-term Strategy for Coarse Woody Debris Management in BC’s Forests March 2000”.

Weyerhaeuser’s general objectives are to retain coarse woody debris (CWD) on harvest sites to provide for biodiversity and specific habitats utilized by a variety of wildlife. CWD retention may also be prescribed to reduce potential sediment transport into streams. The amount retained will depend on attributes of the pre-harvest stand and on how this retention may conflict with site specific objectives for silviculture, forest health, fuel management, utilization, range use, operational practicalities and timber supply.

On the following sites, instituting specific management actions or commitments to meet CWD objectives is felt to be unnecessary or impractical. In the first four instances because harvesting and silviculture practices tend to result in an abundance of CWD on the cutblock and, in the last two, because opportunities to manage CWD accumulations on landings are limited by operational practicalities related to safety and engineering.

- ICH - all sites age class 7 or older.
- ESSF - all sites with > 40% spruce/balsam by volume.
- MS - all sites with > 50% spruce/balsam by volume.
- Cutblocks with > 25% basal area retention prescribed.
- All cable and helicopter harvest areas.

On all other sites, management activities will seek to maximize the amount of non-merchantable CWD left on site in approximately the same distribution across the block in which it is found pre-harvest. It must be recognized that some non-merchantable CWD will be removed from the site in association with merchantable logs. In the absence of compelling site specific objectives restricting its retention on the block, the amount of CWD accumulated in landing or roadside debris piles will be limited to 10 % of the total non-merchantable CWD on the cutblock excluding pieces that are:

- Less than 15.0 cm at the butt end for Lodgepole Pine
 - Less than 20.0 cm at the butt end for all other species
 - Less than 3 m in length
 - Prescribed in the SP for disposal because of forest health risks
-

Recruitment of CWD over time will come from trees retained on site including wildlife trees, wildlife tree patches, stubs and, eventually, from the regenerated stand.

4.3. Soils

Weyerhaeuser is committed to maintaining long-term soil stability and productivity.

Soil productivity losses will be minimized through:

- planning harvest activities to conserve soil by following Forest Practices Code of BC Act and Regulations and Regional soil disturbance guidelines;
- using appropriate forest practices and technology to maintain organic matter and nutrients;
- conducting harvesting, road building and reforestation operations to minimize impact to productive capacity of forest soils;
- actively pursuing opportunities to reclaim portions of forest land lost to past roads and landing construction;
- actively pursue and support soil productivity research opportunities in consultation with the Ministry of Forests
- utilizing equipment that is matched to the site, soil, topography, season and weather; and
- application of appropriate road construction techniques and maintenance procedures.

In 1999 Level C - Terrain Stability Mapping was completed covering TFL 35. In 2000, the mapping was updated to reflect localized conditions. Results of the mapping include a detailed Terrain Stability Map and Terrain Stability Interpretive Map. The mapping provides a detailed overview of sensitive terrain (Terrain Class IV and V) within TFL 35.

Terrain Stability Field Assessments will be completed on areas identified as terrain class IV, V or having slopes greater than 60%. Proposals with terrain exhibiting slope instability characteristics will be field checked by a qualified professional.

A hazard assessment for site sensitivity to soil degrading processes is completed for each cutblock at the silviculture prescription phase.

Within Community Watersheds an assessment of erosion hazards and risk of sediment delivery is completed when proposing bladed or excavated trails.

4.4. Water

The maintenance of water quality and quantity within TFL 35 watersheds is an important consideration of downstream domestic and agricultural users.

The primary watersheds within TFL 35 include Jamieson/Wentworth; Whitewood, Skull Creek and Poison Creek. Jamieson/Wentworth and Whitewood are direct tributaries of the North Thompson River. Skull and Poison Creeks are tributaries of Fishtrap Creek. A small portion (approximately 403.0 ha) of the Tranquille Community Watershed is located within the south west corner of TFL 35.

With the exception of Skull Creek, all watersheds within TFL 35 have registered water users. Appendix 4 contains the Stakeholder List for TFL 35 including a list of water licensees.

The objective of the company is to maintain water quality and quantity within TFL 35.

Strategies include the following:

- Complete appropriate level of Watershed Assessments as determined by District Manager and Designated Environment Official;
- Manage the Whitewood Creek watershed to a maximum hydrologic equivalent clearcut area (ECA) of 30% as modeled in the Timber Supply Analysis
- Conduct activities consistent with assessment recommendations;
- Update our Water Licensee list annually
- Ensure water licensees are notified and provided opportunity to review plans and comment on activities;
- Ensure road construction, harvesting and silviculture activities are conducted in accordance with the applicable environmental laws and regulations; and
- Ensure DEO and MOF representatives are notified of landslide events within TFL 35;
- Ensure management of riparian areas consistent with the RMA Guidebook; and
- Protection of existing water improvements

4.5. Recreation Resources

The objective for recreation is to maintain the recreational opportunities within TFL 35. The Ministry of Forests completed a recreation inventory for the Kamloops Forest District (including TFL 35) in 1997. Appendix 12 contains a copy of the TFL 35 Recreation Plan (1995 Update), MOF Recreation Inventory Map and a summary of lake classifications.

Weyerhaeuser will recognize and consider the specific point recreation features identified in the recreation inventory during forest development planning in consultation with the Kamloops Forest District Recreation Staff.

The Bonaparte and Porcupine Meadows Provincial Parks are located adjacent to TFL 35. Planned activities adjacent to these parks will be conducted with input from BC Environment, Lands and Parks, Bonaparte LRUP, Ministry of Forests and other stakeholders.

Public input will be requested during Forest Development Plan referral and public viewing. Recreational access will be considered during access management planning.

4.6. Lakes, Wetlands and Streams

All lakes and wetlands within TFL 35 have been classified and will be managed according to the Kamloops District Lakeshore Management Guidelines and the Riparian Management Area Guidebook.

Lakeshore and associated Landscape Management Strategies will be developed in consultation with MOF, BCE and BC Parks staff where required. Affected resort operators, cabin owners and/or other affected parties will be consulted where required.

TFL 35 streams are classified according to the Riparian Management Area Guidebook. During development planning stream classifications are confirmed and assessments completed where required. Stream assessments are submitted to BC Environment for acceptance. Confirmed stream classification is shown on Forest Development Plans.

4.7. Aboriginal Communities/Cultural Heritage Resources

Weyerhaeuser is committed to communicating and working with First Nations (FN) to ensure that forest management plans and activities consider, respect and accommodate the unique needs and values of Aboriginal Peoples. Communications with FN will be conducted consistent with the Ministry of Forests' Aboriginal Rights and Title Policy.

Weyerhaeuser has developed a policy which provides a framework for building mutually beneficial relationships with Aboriginal peoples whose communities are or may be affected by Weyerhaeuser's operations.

TFL 35 lies within the Shuswap (Secwepmec) Nation Traditional Territory. The Kamloops and North Thompson Indian Bands have traditional territories that include TFL 35. The Skeetchestn Indian Band occupies a shared territory with the Kamloops Indian Band. The Whispering Pines Indian Band (WPIB) is located adjacent to TFL 35 north of Black Pines. Although, the WPIB is located adjacent to TFL 35, their primary traditional territory is located in the vicinity of Clinton, BC.

The Archaeological Overview Assessment (AOA) map developed by the Archaeology Branch of the BC Ministry of Small Business, Tourism and Culture in 1994 for the Kamloops LRMP serves as a reference for development planning on TFL 35. It classifies the land base as having a high, medium or low probability of containing archaeological sites.

Recently, through coordinated efforts of the SNTC, MOF and Forest Licensees, considerable work has been undertaken to develop a new AOA model for the Kamloops TSA. Weyerhaeuser is actively involved in the development and testing of the New AOA Model. Pilot tests were completed on Forest License areas in association with the Kamloops Indian Band.

To ensure First Nation and Traditional Use values are addressed, communications with first nation communities concerning operational plans will generally follow the process as outlined below:

- Referral of FDP or FDP Amendment. (Licensees will contact individual FN in writing, asking them what kind of process they would like to enter for referral and review of the Licensees' proposed FDPs)
- Meet with the FN community to review plans and activities as early as possible.
- Review AOA maps, Archaeological Inventory Survey and Trail Inventory (AIS), and related traditional use inventories.

- Undertake archaeological assessments (detailed AOA, Preliminary field Reconnaissance (PFR) or Archaeological Impact Assessment (AIA)) in all High and Moderate Potential areas identified in the KLRMP AOA or as determined through review with FN community.
- Undertake selective impact assessments on low potential areas or as determined through review with FN community.
- Incorporate archaeological and traditional use information into operational plans and develop strategies to address identified FN/Cultural Heritage Values.

4.8. Range

Three range units with five range tenure holders overlay the entire TFL 35 land base. Weyerhaeuser's range objective is to maintain the current 2,475 Animal Unit Months of range capacity throughout the term of MP #9. Weyerhaeuser will work with the range tenure holders to minimize timber and range conflicts. This will be accomplished through a coordinated effort with tenure holders and the MOF to:

- Discuss, identify and protect range values during forest development planning;
- Conduct management activities in a manner conducive to limiting the spread of noxious weeds;
- Protect existing Range improvements;
- Grass seed appropriate disturbed areas with an appropriate seed mix to limit the spread of noxious weeds, minimize erosion and reduce wildlife/cattle/erosion conflicts; and
- Work with the range tenure holders and the MOF to identify suitable areas and timing for forage seeding of cutblocks.

Appendix 13 contains a list of the Range Tenure Holders, Range Resource Summary and Range Unit Overview Map.

4.9. Fish and Wildlife Habitat

Weyerhaeuser is committed to the maintenance and protection of wildlife habitat values within TFL 35 and to ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be given to red and blue listed species as defined by BC Environment and species designated as regionally significant (Mule Deer).

TFL Wildlife Capability Mapping and Fish and Wildlife Plan

In 1991, Weyerhaeuser completed Biophysical Habitat and Capability Mapping (Moose and Deer) and developed Operational Guidelines for Harvesting and Reforestation for the Overall Maintenance of Fish and Wildlife Habitat on TFL 35. With the onset of the Forest Practices Code of BC Act and the Kamloops LRMP, this document and related guidelines have become dated and Weyerhaeuser will not be updating this plan, however, the Wildlife Special Management Areas will continue to be recognized on TFL 35.

Direction for maintenance and protection of Fish and Wildlife habitat will come from the Forest Practices Code of BC Act, Regulations, Guidebooks and the KLRMP.

The Kamloops LRMP identifies critical moose and deer winter range. The Wildlife Capability Mapping for TFL 35 identifies high value moose and deer habitat including wildlife special management areas. This mapping will be considered during forest development planning. Planning will be completed in consultation with BC Environment Staff.

New wildlife habitat capability mapping is being prepared for Moose, Mule Deer, Goshawk and Martin based on Terrestrial Ecosystem Mapping. Upon completion of the habitat mapping, Weyerhaeuser will work with BC Environment Staff to review and refine habitat boundaries and management regimes consistent with the Kamloops LRMP and TFL 35 objectives.

Timber Supply Analysis

Key wildlife and related features including operational considerations modeled in the TFL 35 timber supply analysis include:

- Landscape and Stand Level Biodiversity (Old seral areas, WTPs, WTs and CWD)
- Riparian Management Area requirements
- Wildlife Special Management Areas
- Thermal Cover
- Critical Mule Deer Winter Range

High Value Fish Lakes

Numerous high value fish lakes are located in the northwest corner of the TFL. Weyerhaeuser will prepare development plans adjacent to fish lakes consistent with FPC of BC Act, Regulations, Kamloops LRMP and the Lakes LRUP.

Riparian protection will be prescribed consistent with the RMA Guidebook. Access Management will be directed through the Lakes LRUP and other Local Level Planning groups and consistent with the TFL 35 Access Management Plan.

Development Strategies to Consider in Mule Deer Winter Range

- Disperse timber harvest throughout the winter range and spread it out evenly over the rotation. Maintain at least 25% of forested area in thermal cover. Linkage of thermal cover units together with suitable travel corridors, especially mature Douglas Fir veteran trees on ridges.
- Practice uneven aged management wherever possible. Apply clearcuts smaller than 5 hectares where uneven aged management cannot be practiced.
- Mixed species management
- Access management strategies.
- Local level planning.

Development Strategies to Consider in Critical Moose Winter Range

- Maintain thermal and visual cover for moose and enhanced browse production.
- Ensure adequate forage is maintained during silviculture activities (Brushing & Weeding, Stand Tending). Provide visual screening of swamps and openings along main and secondary forestry roads. Pursue mixed forest management with similar species distribution to natural stands (including deciduous).
- Establish access management guidelines.

4.10. Identified Wildlife

No Wildlife Habitat Management Areas are located within TFL 35. No known Red or Blue listed species have been identified on TFL 35. The Skull Mountain Wildlife Management Area is located north east of TFL 35.

Within TFL 35, identified wildlife - “species at risk” include Bull Trout. Bull trout was identified in Jamieson Creek (up to approximately 5km on the Jamieson FSR) during the Fish and Fish Habitat Inventory completed by Arc Environmental in 1999. Activities planned within areas known to have species at risk will be managed in consultation with BC Environment Staff.

Appendix 9 contains a list of identified wildlife for the Kamloops Forest District.

5.0 Integration of harvesting activities with non-timber uses

5.1. Trappers

There are four registered trapping licenses within TFL 35. Trapping licensees are provided an opportunity to comment on plans and activities at time of FDP referral.

5.2. Resorts and Guide Outfitters

There are a number of Fish Camp Operations within the Bonaparte Provincial Park. These operators have staging areas within and clients passing through TFL 35. These operators are notified of activities and provided opportunity to comment on plans. Specific concerns relating to timing of operations and access management will be addressed as required.

There are no Guide Outfitters operating within TFL 35. However, two guide outfitters are included on our stakeholder list and provided opportunity to comment on plans and activities.

5.3. Range Tenure Holders

Range management planning is an integral component of the development process for TFL 35. Range and Plantation Protection plans are updated annually to provide the basis for integrating timber, silviculture and range interests. The plans address:

- Range improvement and maintenance
- Harvesting
- Road construction and deactivation
- Access management
- Forest regeneration
- Range availability and use
- Grass seeding
- Cattle rotation and management (salting)
- Forage requirements
- Interaction and potential issues from above activities

These plans are subject to continuous review and amendment between the Company and the Tenure holders as new cutting permits are developed. The ranchers are contacted early in the development process for their input as to how best to deal with the particular issues specific to the permit being developed.

The Range Resource Analysis (Appendix 13) and Stakeholder List (Appendix 4) provide a list of the range tenure holders on TFL 35.

5.4. Water Licensees

There are numerous active water licensees (domestic and irrigation) on TFL 35 Watersheds (Jamieson, Whitewood and Poison). The Stakeholder List in Appendix 4 contains a list of TFL 35 water licensees.

Water license holders will be provided an opportunity to comment on MP and FDP Plans during the referral process. Specific issues/concerns will be addressed through individual meetings and site visits. Water licensees are invited to participate and provide input during the completion of watershed assessments. The last watershed assessment completed on TFL 35 watersheds was in 1999.

5.5. Mining and Exploration

A small mine is located south of Bob Lake on TFL 35. The mine is currently inactive. Activities adjacent to the mine site will be referred to the mineral tenure holder.

6.0 Forest Fire

6.1. Prevention and Suppression

Weyerhaeuser is committed to working with the Ministry of Forests – Kamloops Region Fire Center to take rapid initial attack on all wildfires with the goal of having the fire under control by 10:00 am of the day following discovery.

A Fire Preparedness Plan will be submitted annually to the Kamloops Fire Center and Kamloops Forest District - District Manager in accordance with the Forest Practices Code of BC Act, Forest Fire Prevention and Suppression Regulation and Kamloops Forest Region requirements.

6.2. Prescribed Fire

Weyerhaeuser has not employed prescribed fire in the form of broadcast burning as a site preparation tool since 1988. However, prescribed fire is employed as a tool to dispose of landing debris piles.

Prescribed fire will be utilized in accordance with the Forest Practices Code of BC Act, Forest Fire Prevention and Suppression and Open Burning Smoke Regulations and Kamloops Fire Center requirements.

6.3. Fuel Management

Hazard abatement on all harvested areas will be specified in the Silviculture Prescription and approved by the District Manager.

7.0 Forest Health

It is the objective of Weyerhaeuser

- to minimize, where practical and appropriate, losses caused by pests and disease;
- to continue to monitor and manage the existing and endemic populations we are aware of; and
- to detect any new populations (or moving populations) before they become a serious problem.

Appendix 16 contains a copy of the TFL 35 Forest Health Plan including the 2001 Update of the Operational Plan for the TFL 35 pest Unit. This plan, which is updated annually, identifies the current forest health situation of TFL 35, management tactics and strategies. The plan will be referred to the MOF Staff and to be coordinated with adjacent licensees as much as possible.

8.0 Silviculture

8.1. Silviculture Objective

Weyerhaeuser is committed to implementing a silviculture program that will optimize the growing of timber while considering water quality, fish and wildlife habitat, soil productivity and cultural, historical, recreational and aesthetic values.

This will be achieved through prompt site preparation and regeneration of ecologically suited species followed by extensive monitoring and remedial measures (if necessary) to ensure all sites are managed towards target stocking standards at free growing.

Weyerhaeuser continues to lead, partner and participate in research efforts that will provide improved information and understanding of stand dynamics. The focus of this work is towards continuous improvement of standards and silviculture regimes that will result in increased stand and product value.

8.2. Silviculture Prescriptions

Silviculture prescriptions will be developed for each cut block in accordance with the Forest Practices Code of BC Act, Regulations and Policy, and the standards set out in this Management Plan. Where the MP standards are higher than those set out in Ministry Policy and Guidelines, the MP will take precedence.

8.3. Stocking Standards

The stocking standards for TFL 35 Management Plan #9 are based on those prescribed in the Establishment to Free Growing Guidebook for the Kamloops Forest Region (May 2000). Weyerhaeuser has modified the standards to align with the enhanced forest management philosophy of TFL 35. Weyerhaeuser is committed to ensuring all managed stands on TFL 35 meet or exceed these stocking standards at free growing.

The TFL 35 stand replacement strategies and stocking standards are included in Appendix 5

8.4. Regeneration Delay

Prompt reforestation is essential to the achievement of successful regeneration and sustained growth at a reasonable cost on a consistent basis. The planned maximum regeneration delay, measured from start of logging, is:

Natural Regeneration	6 years
Planting	3 years

Currently, on TFL 35 the average regen delay is one year. This number is represented as current practice within the Timber Supply Analysis for stands managed under the EFM program initiated in 1990. Attaining the regeneration delay objectives is the key to good survival, immediate and continued growth and minimal future stand tending requirements.

8.5. Reforestation Methods

The primary method of reforestation on TFL 35 will be planting.

Natural regeneration will be prescribed in areas most suited and where historically successful. To date this has primarily been in the Interior Douglas-fir ecosystems located in the south and eastern portions of TFL 35.

8.6. Species Selection

Species selection will consider ecological suitability, desired stand structure and product objectives, site productivity, reliability and silvicultural feasibility, non-timber objectives, forest health, natural disturbance types and biological diversity.

8.7. Deciduous Species

The establishment or retention of deciduous in a stand may be desirable to address forest health concerns or to achieve other resource objectives such as biodiversity and wildlife habitat.

The establishment of deciduous will be primarily through natural regeneration. Deciduous will be prescribed (usually as a Tertiary Species) to a level where the impact on conifer crop establishment is acceptable.

8.8. Mixed Species/Species Restrictions

Weyerhaeuser is committed to increasing stand diversity through establishing successful mixed species stands that will optimize the growing potential of the site and increase forest resource management options and opportunities.

Mixed species stands will be established through a combination of planting and natural regeneration. The planting of other species in association with Lodgepole Pine will be prescribed based on ecological suitability with a focus towards riparian areas or wet site series.

Based on our experience, we expect that species diversity will also be achieved through natural ingress of species such as Balsam, Douglas-fir, Trembling Aspen and Paper Birch.

8.9. Site Preparation

The objective is to complete site preparation the first full growing season after logging, provided suitable planting stock will be available for the following planting season. The intent will be to take full advantage of the most favorable regeneration and growing conditions, which occur immediately after logging.

Prompt site preparation will be prescribed as necessary to:

- Aid natural regeneration and/or provide preferred planting spots
- Reduce vegetative competition
- Reduce fire hazard

Based on site conditions a range of site preparation methods will be used singly or in combination including:

- Mechanical – power disc-trenching, excavator patch scarification, and mounding
- Fire – broadcast and accumulation burning, pile or windrow and burn
- Chemical – single tree pre-treatments of aspen, post treatment brushing

The selected site preparation treatment will be:

- Suitable for the species being regenerated;
- Suitable for the site; and
- Consistent with the limits for soil disturbance specified in the prescription.

8.10. Target, Minimum, and Maximum Stocking Standards

Management Practices

Weyerhaeuser's objective is to have all productive forestland on TFL 35 producing at or near its biological potential. To this end, Weyerhaeuser is committed to ensuring all stands on TFL 35 meet or exceed the targets prescribed at regeneration delay and free growing as specified in the Establishment to Free Growing Guidebook – Kamloops Forest region (May 2000). Refer to Appendix 5 for a comparative summary of the Stocking Standards for TFL 35.

Lodgepole Pine

The objective will be to establish 1600 to 1800 stems per hectare at the establishment (planting) stage and also to meet MOF targets at the free growing stage.

Prescriptions for crop establishment, at regeneration delay will be based on managing the areas to within 20 percent of the target objective.

The target stocking standard at free growing will be 1200 sph.

The minimum stocking standards at Free growing will be 1000 stems per hectare.

Fir, Spruce and Balsam

The objective will be to meet the targets prescribed consistent with the Establishment to Free Growing Guidebook – Kamloops Forest Region. The prescribed target at regeneration delay and free growing will be within 20% of the guidebook targets.

Maximum Density

Maximum stand density at free growing will be 10,000 sph

Stand density management is continually being explored through various research initiatives in effort to develop silviculture regimes focused on increasing stand value, while maintaining stand volume. As new developments in stand density management are presented, Weyerhaeuser may revise TFL 35 stocking standards accordingly.

8.11. Stand Monitoring

Post Harvest regenerated stands on TFL 35 will be monitored at several development stages:

- to ensure compliance with standards;
- to ensure MP commitments are achieved; and
- to ensure forest stewardship commitments are achieved.

In addition to survival, stocking and free growing surveys, Weyerhaeuser is currently considering the development of a mid rotation inventory survey for TFL 35.

Stand monitoring surveys will be completed consistent with the Silviculture Surveys Guidebook.

The following table summarizes, Weyerhaeuser's regenerated stand monitoring program on TFL 35.

Table 4: TFL 35 Regenerated Stand Monitoring System

Survey Type	When	What Information	Comments
Planting Quality	At Time of Planting	Species, Density (WS and Total Trees by SU	Required to show achievement of regen delay
Survival	At 6 weeks and 1 and 2 years following planting	Species, Density, Assessment of seedlot performance.	Walk-through or single line transect of 100 trees.
Regeneration	2 – 5 years	Species, Density, Ht, Age, Crop trees, Leader Growth	Survey at 3-year interval up to achievement of FG Stand. Assessment of B&W needs.
Early Free Growing	5 – 8 years	As above plus, pest incidence, site index, tallest tree	
Late Free Growing	8 – 12 years	Same as early FG.	As required.
Walk Through	8 – 20 years	General Assessment of stand condition.	Scheduled depending on stand condition and latest FG Assessment.
Mid-Rotation Survey	25 – 35 years	Species, Density, Age, Ht, SI, Volume, Wood Quality Indicators, Forest Health, Ecosystem	Mid-Rotation Survey Methodology to be developed and tested in 2001. Data incorporated into inventory files.

8.12. Vegetation Management

Weyerhaeuser is committed to the successful regeneration of harvested areas including the management of vegetative competition during the regeneration process.

A key focus of the Company's efforts towards minimizing the impacts of competing vegetation is through emphasis on prompt regeneration of well-prepared sites. This program will result in successful regeneration with reduced impacts from competing vegetation.

The objective of vegetation management is to control competing vegetation that may significantly impact the future crop. Control measures are not required when stand growth will not be significantly affected by non-commercial vegetation on the site. On most sites, competing vegetation will have the greatest potential impact during early stand development – the first five years following stand establishment.

Where prompt reforestation treatments do not or are likely to not adequately control competing vegetation, one of the following tactics may be used:

- Manual brushing
- Use of cattle
- Treatment of mature Aspen with herbicide prior to logging
- Selective use of herbicides.

The Company will inform all resource users and the public of all, future plans, on-going projects and results regarding herbicides. Referral of plans will be completed consistent with herbicide application processes.

8.13. Stand Tending

Stand tending will be carried out as necessary to ensure sustained acceptable growth. Stand tending will focus on maximizing the productive potential of the site, increasing stand value consistent with desired product objectives. Stand tending prescriptions will be prepared in accordance with the Stand Management Prescription Guidebook.

Stand tending may include one or more of the following;

- Spacing
- Brushing and Weeding
- Pruning
- Fertilization

9.0 Roads and Bridges

Weyerhaeuser's objective is to plan, construct and maintain a viable road system on TFL 35 considering:

- The safety of Weyerhaeuser employees and Contractors, Stakeholders and the public;
- Short and long term forest management requirements;
- Forest protection and forest health;
- Integrated Forest Management (Multi-Stakeholders); and
- EMS – Significant Aspects (soil productivity; water quality, fish passage).

All roads will be planned and constructed and governed by the Forest Practices Code of BC Act, Forest Road Regulations, Engineering Guidebook and consistent

with Weyerhaeuser's Environmental Management System and Sustainable Forest Management Plan.

9.1. Road Construction

The company will manage its road development program consistent with EMS targets. The current objective is to have roads constructed at least two years prior to harvesting.

9.2. Road Maintenance/Monitoring

Road, culvert and bridge maintenance activities will be planned annually and identified in the approved Forest Development Plan. Weyerhaeuser has developed a road management system that will provide record keeping, tracking, scheduling and reporting of road, culvert and bridge maintenance obligations.

The objective of Weyerhaeuser road maintenance program is to inspect and maintain roads, focusing on:

- The protection of the structural integrity of the road prism and right of way;
- The maintenance of drainage structures
- Minimizing sediment production and the effects on other resources; and
- To meet user safety requirements.

9.3. Road Deactivation

Weyerhaeuser's objective is to plan and implement deactivation of TFL 35 roads considering:

- The safety of Weyerhaeuser employees and Contractors, Stakeholders and the public;
- Short and long term access requirements;
- Integrated Forest Management (Multi-Stakeholders); and
- EMS – Significant Aspects (soil productivity; water quality, fish passage).

Road deactivation and rehabilitation plans will be planned as a component of the Forest Development Plan and will be conducted in accordance with the FPC of BC Act, Operational Planning Regulations, Forest Road Regulations, Guidebooks and Kamloops LRMP.

Plans will be developed considering other resource users and the general public.

The level of deactivation (temporary, semi-permanent or permanent) prescribed will be commensurate with the risk and future use of the road. The intent of road deactivation is to maintain water quality and to manage siltation from waterflow.

Signage indicating a road as being deactivated will be posted where deactivation has created a safety hazard to any user.

9.4. Road Rehabilitation

Weyerhaeuser's objective is to plan and implement rehabilitation of TFL 35 roads considering:

- The safety of Weyerhaeuser employees and Contractors, Stakeholders and the public;
- Short and long term access requirements;
- Integrated Forest Management (Multi-Stakeholders); and
- EMS – Significant Aspects (soil productivity; water quality, fish passage).

Road rehabilitation plans will be planned as a component of the Forest Development Plan and will be conducted in accordance with the FPC of BC Act, Operational Planning Regulations, Forest Road Regulations, Guidebooks and Kamloops LRMP.

The intent of road rehabilitation is to manage soil productivity, maintain water quality and manage siltation from waterflow.

9.5. Access Management

Weyerhaeuser is committed to managing existing and planned access on TFL 35 consistent with the Kamloops LRMP, Local Level Plans and through Stakeholder input. To provide strategic direction for access management, Weyerhaeuser has developed a Draft Access Management Plan for TFL 35 (included in Appendix 18). It is included for information and comment, as Stakeholder review/referral has not occurred.

10.0 Consultation with Other Resource Users

Weyerhaeuser's TFL 35 Stakeholder List and communication plan is included in Appendix 4. The Stakeholder List provides a summary of all First Nations, Agencies, Trappers, Range Tenure Holders, Water Licensees and other individuals or groups that may have an interest or be affected by management practices. Management Plans and Operational Plans will be referred to affect individuals and groups for their input.

11.0 Public Review Strategy for MP 10

Preparation of Management Plan 10 for TFL 35 will commence as per the replacement process and review strategy contained in Appendix 19 in accordance with the TFL License document and the Guide for TFL Management Plans and Calendar Year Reports (March 2001).

12.0 Other Information

12.1. Public and Agency Involvement

The Draft MP #9 will be available for review and comments from May 4, 2001 to June 8, 2001. The MP will be referred to Resource Agencies and First Nation Communities as per the Review Strategy.

Agency and Public comments or concerns (including measures to address) as a result of the referral of the Draft MP #9 are summarized in Appendix 2 and 3 respectively..

12.2. Planning – Higher Level Plans

Kamloops Land and Resource Management Plan

During 1995, the Kamloops LRMP was completed for the Kamloops Timber Supply Area including both the Kamloops and Clearwater Forest Districts. The Kamloops LRMP provides overall objectives and strategies for guiding management of the land, water, ecosystem and natural resources within the Kamloops TSA. The goals of the LRMP are to:

- Maintain a balanced use of the land and resources, which respects and accommodates all interests;
- Ensure security of the land and resources for future generations;
- Implement sustainable resource management practices, which recognize the biological and physical limitations of the land and resources, and provide the highest and best values from these resources;
- Ensure compatibility with natural watershed processes and respect for the intrinsic value of nature;
- Ensure social and economic stability and vitality of local communities; and
- Promote communication, education and awareness of all values, including those of aboriginal peoples.

It is the objective of Weyerhaeuser Company to manage its activities in accordance with the Kamloops LRMP. TFL 35 is within the Skull Landscape Unit and is situated within the General Management Zone of the Kamloops LRMP.

A small area in the southwest corner of the TFL is within the Tranquille Community Watershed.

12.3. Local Resource Use Plans

The planning of activities on TFL 35 is conducted in accordance with the Bonaparte, Lac du Bois and Lakes LRUPs and the Bonaparte Park Management Plan. Activities adjacent to the Porcupine Meadows Provincial Park will be referred to BC Parks.

12.4. Schedule B Prorate

There are no Schedule B Lands associated with TFL 35.

13.0 Key Similarities and Differences Between MP #8 and MP #9

The following summarizes the key similarities and differences between MP #8 and MP #9:

13.1. Similarities

- Forest Inventory – no change except for depletion and new information relating to planting and surveys. Forest inventory is updated annually.
- Continuation of the TFL 35 Enhanced Forest Management Program.
- Recognition of the Wildlife Capability Mapping completed in 1991 and Wildlife Special Management Areas
- TFL 35 Recreation Plan
- Kamloops Forest District Landscape Inventory
- Range Resource Analysis
- KLRMP AOA – (internal process have been enhanced)
- Kamloops Land and Resources Management Plan

13.2. Differences

- Proposed increase in harvest level to 136,000 m3

- Use of WOODSTOCK MODEL for Timber Supply Analysis
- Use of COMPLAN to generate Twenty Year Plan
- Site Index by Site Series for each major species (Site Index Adjustment Project)
- Ecosystem Based Timber Supply Analysis (TEM Mapping)
- Use Inventory Label as base for yield curve development
- Development of the Silviculture Era concept for Timber Supply Analysis.
- Commence development of a Growth and Yield Monitoring System for TFL 35

- TFL 35 Biodiversity Strategy and KLRMP Biodiversity Impact Analysis
- Fish Inventory/Stream Classification
- Kamloops Forest District Recreation Inventory
- The 1990 Fish and Wildlife Plan outdated and replaced by the FPC/KLRMP
- Level C Terrain Stability Mapping

- Forest Health - Current Mountain Pine Beetle infestations on TFL 35 have resulted in priority development to address salvage harvesting the MPB infested stands.

- Forest Certification (ISO 14001/CSA Z809)

**Weyerhaeuser Company Ltd. BC Interior Forestlands
TFL 35 Proposed Management Plan #9**

14.0 Special Projects

Table 5: TFL 35 Special Project Summary

Project	Funding Source	Project Description
TFL 35 Site Index Adjustment	FRBC	The TFL 35 Site Index Adjustment project was completed in February 2000. The project objectives were to provide reliable estimates of potential site index (PSI) for post-harvest regenerated (PHR) stands. The SIA project resulted in overall average PSI of 19.3 for PI, 20.0 for Sx, 18.9 for Bl and 20.0m for Fd. The PSI estimates were used to generate MSYT for MP 9 Timber Supply Analysis.
Growth And Yield Monitoring Pilot	FRBC	In 1999, Weyerhaeuser initiated a Growth and Yield Monitoring (G&YM) Pilot Project on TFL 35. The project objective is to develop a G&YM program to periodically measure actual growth and yield of PHR stands to check with projections used in timber supply analysis. During 2000, the sample plan and the establishment of 20 G&YM plots were completed. The plan for 2001/02 is to complete the remaining 40 plots, enter data, develop analysis program, complete analysis and final report. Project is scheduled for completion in March 2002.
Regional Weyerhaeuser Lodgepole Pine Research Projects with applicability to TFL35	FRBC/ Weyco.	PI Stand Density Management PI Ingress PI Upper Stem Diameter Growth PI Diameter Distribution Analysis PI research trial Review PI Tree Improvement Review PI Pruning Analysis PI Stand Dynamics
Permanent Sample Plots	Weyco	Currently conducting a review of old TFL 35 PSP for re-measurement opportunities
TFL 35 TEM Enhancements/Upgrade	FRBC	Planned completion of revisions is April 30, 2001. The updated TEM (June 2001) is complete. Sample information has been forwarded to KFR for review (June 6, 2001). Data comparisons included in Appendix 15.
TFL 35 Wildlife Capability Mapping	FRBC	Wildlife Capability Mapping for Moose, Deer, Goshawk and Martin. May 31, 2001 Completion.
Soil (Landing) Productivity Research	FRBC	Partnered with Graeme Hope of KFR

15.0 Forest Development Plan

A Forest Development Plan for TFL 35 will be submitted in accordance with the Forest practices Code of BC Act, Operational Planning Regulation, Kamloops Land and Resource Management Plan and Kamloops Region and District Guidelines.

16.0 Contracting

Weyerhaeuser employs an independent contractor work force to complete the harvesting and hauling on TFL 35. Road construction and maintenance is split between Weyerhaeuser Company staff and equipment and independent contractors.

Weyerhaeuser will continue to comply with the Contractor Clause requirement of the TFL License document and to monitor our compliance against this requirement.

17.0 Revision

Amendments to the Management Plan will be submitted to the Chief Forester of the Ministry of Forests with copies to the Regional and District Manager as well as affected resource agencies. Significant changes to the plan will occur only after affected users have been consulted. The public will also be advised of these changes and given an opportunity to comment. Adjustment to the operational aspects of this plan will be summarized in the annual report and highlighted during the referral process.

All revisions will be done in accordance with the Forest Practices Code of BC Act, Regulations and Ministry Guidelines.