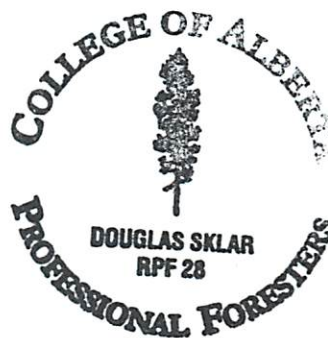


Forest Management Plan Approval Decision

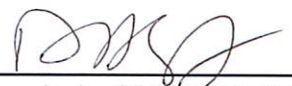
Grande Prairie Regional College Training Forest Grande Prairie, Alberta

Forest Management Unit G13

Date: September 20, 2007
Effective: May 1, 2006



Approved by: _____


D. (Doug) A. Sklar, RPF
Executive Director
Forest Management Branch
Forestry Division

Executive Summary

The Grande Prairie Regional College forest management plan for forest management unit G13 dated July 2006 is approved subject to the satisfactory completion of the following approval conditions.

Approval Conditions

Condition	Requirement	Approval Authority	Date
<i>7.1 – Spatial Harvest Sequence</i>	<i>SHS Implementation</i>	<i>Senior Manager, FPS</i>	<i>April 30, 2008</i>
<i>8.1 – Structure Retention</i>	<i>Methodology to monitor and report</i>	<i>Senior Manager, FPS</i>	<i>April 30, 2008</i>
<i>10.1 – Industrial Timber Salvage</i>	<i>Tracking and reporting system</i>	<i>Senior Manager, Timber Production, Revenue and Audit Section</i>	<i>April 30, 2008</i>
<i>11.1 – Public Involvement</i>	<i>Summary report</i>	<i>Senior Manager, Forest Planning Section</i>	<i>December 31, 2007</i>
<i>12.1 – Watersheds</i>	<i>Operational review</i>	<i>Area Forestry Manager</i>	<i>On-going</i>
<i>13.1 – Performance Standards and Performance Monitoring</i>	<i>Stewardship reporting</i>	<i>Senior Manager, Forest Planning Section</i>	<i>December 31, 2007 and September 30, 2012</i>

Authorization

The Forest Management Plan for the GPRC Training Forest dated July 20, 2006 is approved subject to the Approval Conditions being met, and the Annual Allowable Cuts presented in this Approval Decision.

The Annual Allowable Cuts are effective beginning May 1, 2006.

The next FMP shall be submitted to the department for approval prior to May 1, 2016

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1.0 Introduction

The approval of forest management plans is the mandate of the Executive Director of the Forest Management Branch (FMB), Forestry Division of the Department of Sustainable Resource Development (department). This Approval Decision documents the rationale, and conditions of approval for the Grande Prairie Regional College (GPRC) Training Forest - Forest Management Plan (FMP) dated July 2006. This approval provides direction for the successful and efficient implementation of the FMP.

The FMP has been validated by a Regulated Forestry Professional (RFP). The department recognizes RFP-validated work as complete, accurate, and prepared with professional due diligence. The FMP has been reviewed and approved by government RFPs (see Table 1).

I commend GPRC and those people who have contributed to the FMP for their efforts to address the complex issues of forest management.

The Conditions Approval are consistent with the terms of the Memorandum of Understanding (MoU) and failure by GPRC to fulfill the direction provided in this Approval Decision shall place the College in default of this agreement.

2.0 Government of Alberta Participants: Forest Management Plan Appraisal

The following Government of Alberta staff participated in the appraisal of the GPRC Training Forest FMP. Their comments and recommendations are addressed in this Approval Decision. I extend my thanks to the staff for their personal and professional commitment to the task.

Table 1. Government of Alberta Participants

<u>Government Reviewers</u>	<u>Position</u>	<u>Registration</u>	<u>DFMP Component</u>
Forrest Barrett, RPF	Wildfire Science Forester	CAPF # 894	All Chapters
Mike Russell	Wildlife Biologist	-	Chapter 4.0
Craig Johnson	Fisheries Biologist	-	Chapter 4.0
Mark Feser, RPF	Area Forester	CAPF # 532	All Chapters
Vicky Bossé, RPF	Forest Management Planning Forester	CAPF # 843	All Chapters
Marty O'Byrne, RPF	Provincial Silviculture Specialist	CAPF # 118	All Chapters
Robert Stokes, RPF	Senior Manager, Forest Planning Section	CAPF # 500	All Chapters

CAPF – College of Alberta Professional Foresters

3.0 Forest Management Unit

The area under consideration is the Crown-managed Forest Management Unit (FMU) G13, also named the GPRC Training Forest, allocated to the GPRC through MoU, dated February 16, 2000. The GPRC Training Forest is located in central Alberta (southeast of Grande Prairie), and situated within the dry-mixedwood natural sub-region of the boreal forest. Sections 8

(Description of the GPRC Training Forest Area) and 9 (Biophysical Description of the Training Forest Area) of the FMP describe the GPRC Training Forest in greater detail.

4.0 FMP Background

The GPRC MOU required a Forest Management Plan be prepared. The FMP was received on July 25, 2006 at which time the government initiated its review.

The department has identified a number of items to be addressed during the implementation of the FMP. These are documented and comprise the discussion and conditions of FMP approval contained herein.

5.0 Approval Scope

This Approval Decision relates to the GPRC Training Forest FMP dated July 20, 2006. All coniferous and deciduous operators within FMU G13 shall conduct their activities in accordance with the FMP and the Approval Conditions.

GPRC shall meet the requirements (dates and content) of the Approval Conditions unless the Executive Director, Forest Management Branch agrees to alternate requirements in writing. GPRC will execute meaningful dialogue with the designated department decision-maker during the development of the required submissions. Where deadlines for submissions are specified, GPRC shall submit the documents at least one month prior to the date in order to allow department staff sufficient time for review.

In the Approval Decision **bold text** identifies specific timelines, requirements and the department manager responsible for the review. Non-bolded text provides the rationale for the condition and specific considerations to be addressed in meeting the condition.

In the event of an inconsistency between the FMP and existing, new, or revised legislation or regulation, the legislation or regulation shall apply.

Approval Conditions

6.0 Timber Supply Analysis

The timber supply analysis was developed by FMB Resource Analysis Section staff with management input from GPRC. The TSA was prepared to the department standard and is appropriate for the sustainable management of the management area.

7.0 Spatial Harvest Sequence

The spatial (mapped) harvest sequence (SHS) is the most important output of the FMP as it implements the strategies the companies must follow to achieve the predicted future forest condition. While dependent on many factors, the future forest condition is strongly influenced by harvest patterns, intensity and schedules. It presents spatially and temporally how the integration of environmental, economic, and social values will be achieved on the FMU. Adherence to a properly planned harvest sequence is imperative to achieving the forecasted future forest.

The College will comply with the following conditions to implement the SHS.

Approval Condition 7.1 – Spatial Harvest Sequence

- i. GPRC must follow the mapped 10-year harvest sequence as presented in the FMP.**
- ii. To address operational planning concerns, GPRC is authorized to modify the SHS by deleting no more than 20% of the total sequenced area by compartment by decade, while harvesting no more than 100% of the total area within the SHS by compartment, by decade.**
- iii. Preference should be given to selecting stands from the second 10-year period of the SHS (years 16-25) when replacing deleted stands (from ii above). Where this is not feasible, replacements may be from any other stands identified in the approved net landbase of the FMP, with the following exception:**
- iv. Where GPRC exceeds the variance described in (ii), the Area Manager, may require the completion of a compartment assessment and the Senior Manager, Forest Planning Section may recommend the adjustment of the approved AAC to reflect the impact of the variance.**
- v. By April 30, 2008 GPRC shall develop a methodology to track variance from the approved SHS. The department requires the variance from the SHS to be reported annually, and the 5-year Stewardship Report to analyze the variance from the SHS.**
- vi. The department will generally not request a modification of the approved harvest sequence for the first 15 years of the planning period unless required by a change in legislation or a policy approved by the Minister.**

8.0 Structure Retention

Throughout the province, forest managers practice green tree retention within harvested areas to create residual (post-harvest) stand structure. The department has approved FMPs that proposed structure retention targets ranging between 1% and 15% of the merchantable volume. A variety of forest conditions will result; that when assessed, will provide a useful comparison and enable refinement of future targets. GPRC's strategy to maintain a target of 8% of volume within harvest areas is acceptable.

Approval Condition 8.1 – Structure Retention Levels and Monitoring

- i. GPRC will plan and carry out their operations to achieve the 8% structure retention target. Species composition and timber profile representative of the original stand conditions shall be retained to achieve acceptable biodiversity results. Non-merchantable timber may also be used where it occurs in sufficient quantity, pattern and profile to achieve the desired condition.**
- ii. Structure retained is chargeable to the AAC as production and GPRC must annually monitor and report the volume (merchantable and non-merchantable (area)) retained. The Stand Level Retention Monitoring Report shall report the results and analysis of the structure retention monitoring program in the Stewardship Report.**
- iii. By April 30, 2008 GPRC shall develop a methodology for monitoring, measuring and reporting retained structure. The methodology shall be acceptable to the Senior Manager, Forest Planning Section.**

9.0 Silviculture Strategy

Defining the silviculture practices that will be used to establish managed stands and forecasted timber yields is important. FMPs must present the reforestation strategies to be used to achieve the timber yields from the regenerated stands. Silvicultural practices must be appropriate for the local range of conditions.

The Silviculture table presented in FMP (Appendix 6-1) is a reasonable summary of the silviculture tactics to be used to regenerate the future forest. These prescriptions are to be applied by all timber operators operating in FMU G13.

10.0 Industrial Timber Salvage

Accounting for all sources of timber volume drain is critical to ensuring the approved AACs are sustainable. In Alberta, non-forestry industrial operations contribute to this drain and must be included in the total.

GPRC shall develop an Industrial Timber Salvage strategy that;

1. Accounts for all salvaged and non-salvaged merchantable timber as production,
2. Charges timber volumes to timber dispositions in proportion to allocations, and
3. Maintains an annual tracking and reporting system.

Approval Condition 10.1 – Industrial Timber Salvage

- i. All salvaged and non-salvaged merchantable timber depleted from the net land base by non-forestry operations shall be reported as production for cut control purposes. Timber produced by low impact seismic programs where the average line width is less than 2.5 metres is exempted.**
- ii. The volumes used shall be those published in the Timber Damage Assessment Tables, or as otherwise agreed by the Senior Manager, Timber Production, Auditing and Revenue Section.**
- iii. The volumes shall be charged to each timber disposition proportional to the timber allocation by cover group (C, CD, DC, D). Salvage timber from D and DC stands shall be charged to the GPRC allocation. The Community Timber Permit Program (CTPP) allocation will be charged for timber salvage from C and CD stands.**
- iv. By April 30, 2008 GPRC shall implement a salvage timber volume tracking and reporting system acceptable to the Senior Manager, Timber Production, Auditing and Revenue Section.**

11.0 Public Involvement

FMP Objectives 3.1 through 3.4; and the GPRC Training Forest Public Involvement Process describe the public involvement work completed. A Forest Resources Advisory Committee was formed with stakeholders representing a wide range of interests. The Committee provided feedback and facilitated the broader public awareness of GPRC's forest management activities. The Committee is ongoing as the FMP is implemented.

The results of the public and first nations discussions are not included in the FMP. Required is a summary of the activities carried out, and a list of the concerns raised and how GPRC addressed them.

The following is required:

Approval Condition 11.1 – Public Involvement

- i. By December 31, 2007, GPRC shall provide the following information to the Senior Manager, Forest Planning Section.**

- a. **A report summarizing the public involvement activities and dates carried out by GPRC during the development of the FMP including specific reference to the public review of the FMP submitted for approval.**
 - b. **A summary of comments received from each public involvement activity including those received during review of the completed FMP. The list shall identify how GPRC addressed each comment and, where possible, identify specific references in the FMP.**
- ii. **On an on-going basis, GPRC shall keep complete and accurate written records of its consultations with the public, stakeholders, FRAC, and First Nations (i.e., comments received, and how concerns identified have been addressed and incorporated into forest management planning). This information shall be summarized and reported in the Stewardship Report and future FMPs.**
 - iii. **GPRC shall meet the requirements of Alberta's policy for First Nations consultation.**

12.0 Watersheds

A watershed analysis *Hydrologic Effects of Proposed Forest Harvesting (2005-2014) in the GPRC Training Forest* was completed. The modeled water yield responses for the SHS projected that watersheds 1 and 24 to 28 exceeded the natural variability for water yield. The environmental risk is anticipated to be long-term changes to stream channel morphology which may affect fish habitat in those streams that are fish-bearing.

The projected water yield and peak flows are not absolute, as the report's author noted. Therefore the risk is equally uncertain. Considering this I believe there is ample opportunity to revisit the SHS during operational planning and modify the layout and scheduling to reduce the hydrologic impacts of the current SHS. Therefore the following is required.

Approval Condition 12.1 – Watersheds

- i. **GPRC will review the watershed analysis *Hydrologic Effects of Proposed Forest Harvesting (2005-2014) in the GPRC Training Forest* so as to understand the findings and recommendations.**
- ii. **During operational harvest area layout, GPRC will consult with the local Area Forestry Manager to modify the SHS to reduce size and intensity (timing) of the harvest area while ensuring feasible and economical forestry operations.**
- iii. **The next FMP (due 2016) will revisit the SHS with consideration for reducing long-term impacts to watersheds and stream morphology.**

13.0 Performance Standards and Performance Monitoring

The FMP performance standards are described by Goals, Objectives, Indicators, Measures, Targets and Strategies. These components will be used to monitor the College's performance implementing the FMP. Information collected will report accomplishments against planned forecasts to assess the operational compliance with the plan. Annual Reports (included as part of Annual Operating Plans) and 5-year Stewardship Reports are used to monitor the successful implementation of the FMP.

Approval Condition 13.1 – Performance Standards and Performance Monitoring

- i. By December 31, 2007, GPRC shall review the FMP performance standards with the Senior Manager, Forest Planning Section to identify the standards the department considers a priority for reporting.**
- ii. GPRC shall submit Annual and Stewardship Reports for objectives and indicators described in FMP Chapter 19.0. Where variance exists, an analysis shall discuss the reason for the variance and corrective action taken or proposed.**
- iii. A Stewardship Report acceptable to the Senior Manager, Forest Planning Section shall be submitted by September 30, 2012.**

14.0 Editorial Comments

The department's review identified a list of editorial inconsistencies and typographical errors. This will be provided under separate cover for the College's information and consideration. A review and editing of the FMP would be beneficial, although, it is not mandatory that it be done.

15.0 Approved Annual Allowable Cuts

Refer to Tables 2. and 3., Historical Allocations, and Approved Annual Allowable Cuts

Refer to Tables 4. and 5., Quadrant Allowable Cuts

16.0 Authorization

The Forest Management Plan for the GPRC Training Forest dated July 20, 2006 is approved subject to the Approval Conditions being met, and the Annual Allowable Cuts presented in this Approval Decision.

The Annual Allowable Cuts are effective beginning May 1, 2006.

The next FMP shall be submitted to the department for approval prior to May 1, 2016.

Table 2.
G13 Historical Allocations and Annual Allowable Cuts
(2001 to 2006)

Disposition Holder	Disposition #	FMU	Allocation (%)	Coniferous (m ³)		Deciduous (m ³)		Total (m ³)		Utilization Standard
				Primary	Secondary	Primary	Secondary	Coniferous	Deciduous	
Grande Prairie Regional College	DTP	G13	100	-	-	14,958	140	2,806	15,098	15/10
CTPP	CTP	G13	100	1,138	1,668	-	-	-	-	15/10

Table 3.
G13 Allocations and Approved Annual Allowable Cuts
(2006 to 2011)

Disposition Holder	Disposition #	FMU	Allocation (%)	Coniferous ¹ (m ³)		Deciduous ² (m ³)		Total (m ³)		Utilization Standard
				Primary	Secondary	Primary	Secondary	Coniferous	Deciduous	
Grande Prairie Regional College	DTP	G13	100	-	-	17,806	451	1,795	18,257	15/10
CTPP	CTP	G13	100	546	1,249	-	-	-	-	15/10

^{1,2} The 8% merchantable volume structure retention commitment has been removed from the coniferous and deciduous AACs shown in this table.

Table 4.
G13 Quadrant Allowable Cuts
(May 1, 2006 to April 30, 2011)

Disposition Holder	Disposition Type	FMU	Quadrant Cut Control Period	Coniferous Quadrant Allowable Cut (m ³)	Deciduous Quadrant Allowable Cut (m ³)	Comments
Grande Prairie Regional College	DTP	G13	May 1, 2006 to April 30, 2011	-	91,285	No reconciliation volume.
CTPP	CTP	G13	May 1, 2006 to April 30, 2011	8,975	-	

Table 5.
G13 Periodic Allowable and Quadrant Cuts
(May 1, 2011 to April 30, 2016)

Disposition Holder	Disposition Type	FMU	Quadrant Cut Control Period	Coniferous Quadrant Allowable Cut (m ³)	Deciduous Quadrant Allowable Cut (m ³)	Comments
Grande Prairie Regional College	DTP	G13	May 1, 2011 to April 30, 2016	-	91,285	No reconciliation volume.
CTPP	DTP	G13	May 1, 2006 to April 30, 2016	8,975	-	