

**CARIBOU LANDSCAPE MANAGEMENT
ASSOCIATION**

Integrated Industry Access Plan

Written and prepared by Wayne Thorp

October, 2007

ACKNOWLEDGEMENTS

The Caribou Landscape Management Association (CLMA) Integrated Industry Access Plan (IIAP) was developed with the support of the Foothills Model Forest (FtMF).

The IIAP was created through the work of many individuals (listed below) representing forest and energy companies. Alberta Government staff from Sustainable Resource Development (ASRD) and Energy provided support, advice, and local expertise.

Special thanks are due to Chantelle Bambrick and Melissa Pattison from the Foothills Model Forest who coordinated input from the industrial sectors and created databases and map products to work from.

The databases will be updated periodically to reflect the most recent information on roads and will be available to ASRD and the industrial partners of the CLMA via the Foothills Model Forest web server.

IIAP Contributors:

Energy Industry

Rob Gibb, Talisman Energy Inc.
Darcy Janko, Encana Corporation
Brent Korolischuk, Canadian Natural Resources Ltd.
Sandy Russell, Suncor Energy Inc.
Garth Davis, ConocoPhillips Canada Resources Ltd.
Chris Walsh, Devon Canada Corporation
Carol Engstrom, Husky Oil Operations Ltd.

Forest Industry

Erik Kok, Foothills Forest Products Inc.
Ryan Blackmore, Foothills Forest Products Inc.
Chris Spytz, Hinton Wood Products, a division of West Fraser Mills Ltd.
Marian Cowan, Alberta Newsprint Company
Dwight Weeks, Canadian Forest Products Ltd.

Alberta Sustainable Resource Development

Bill Tinge, Foothills Area
Wayne Johnson, Woodlands Area
Eugene Baranski, Northwest Region – Smoky Area
Stuart Taylor, Northwest Region
Dave Hugelschaffer, Northwest Region

Department of Energy

Brad Lloyd, Land and Development

Foothills Model Forest

Melissa Pattison

Chantelle Bambrick

Fran Hanington

Debbie Mucha

Brian Coupal, Caribou Range Restoration Project (CRRP)

TABLE OF CONTENTS

AKNOWLEDGEMENTS..... I

TABLE OF CONTENTS..... III

LIST OF TABLES..... IV

LIST OF FIGURES IV

LIST OF MAP PRODUCTS V

EXECUTIVE SUMMARY 1

1.0 OVERVIEW OF THE CLMA..... 3

 CLMA VISION STATEMENT 3

2.0 CLMA PRINCIPLES..... 3

 2.1 GOVERNMENT RELATIONS 3

 2.2 RESEARCH 3

 2.3 CORPORATE STEWARDSHIP 4

 2.4 INTEGRATED LAND MANAGEMENT (ILM) 4

3.0 CLMA RELATIONSHIP TO THE WEST CENTRAL CARIBOU RECOVERY TEAM..... 4

4.0 INTEGRATED INDUSTRY ACCESS PLAN (IIAP) 6

 4.1 INTRODUCTION..... 6

 4.2 AREA OVERVIEW / RESOURCE ALLOCATION 7

 4.3 PURPOSE 7

 4.4 SCOPE / GEOGRAPHIC AREA..... 8

 4.5 ROAD PLAN 8

 4.6 RESOURCE VALUES 9

 4.7 PRINCIPLES 9

 4.8 OBJECTIVES 10

 4.9 DATA SOURCES 10

 4.10 PREPARATION AND CONTENTS 11

5.0 IIAP CORRIDORS 14

6.0 RECLAMATION / RESTORATION PLAN 14

 6.1 HISTORY 15

 6.2 IDENTIFICATION OF NEED 15

 6.3 OBJECTIVES 16

 6.4 RESTORATION PLANNING..... 17

 6.4.1 *Inventory*..... 17

 6.4.2 *Intact Area* 17

 6.5 RESTORATION ACTIVITIES..... 18

 6.5.1 *Company obligation restoration (Reclamation Certificates)* 18

 6.5.2 *Project specific restoration*..... 19

 6.5.3 *Landscape level restoration*..... 19

 6.6 VEGETATION RESPONSE MONITORING 21

 6.7 FUNDING (APPLICABLE TO “6.5.3 LANDSCAPE LEVEL RESTORATION” ONLY) 21

 6.8 OTHER COMPANIES..... 21

7.0 MONITORING REPORT..... 22

 7.1 FUTURE REPORTING 24

8.0 DATA SHARING 24

9.0 INTEGRATED MANAGEMENT	25
10.0 FOREST MANAGEMENT THREATS	25
11.0 CONFLICT RESOLUTION.....	26
12.0 LEGAL AUTHORITY.....	26
13.0 APPROVAL.....	26
14.0 IMPLEMENTATION / PROCESS OF APPLICATION	27
15.0 COMMUNICATIONS	28
16.0 PUBLIC INVOLVEMENT	29
17.0 SUMMARY / NEXT STEPS	30
APPENDIX I.....	31
APPENDIX II.....	38
APPENDIX III.....	38
APPENDIX IV	38
APPENDIX V	38

LIST OF TABLES

Table 1. Datasets used in the development of the IIAP as of September 30, 2007.....	11
Table 2. Base Features Road Classification System.	12
Table 3. IIAP Corridors - New vs. Existing Clearing as of September, 2007.....	14
Table 4. Kilometers of road proposed for reclamation and deactivation as of September, 2007.	19
Table 5. Existing Disturbance as of September, 2007.	22
Table 6. Tracking Effectiveness in 2007.	22
Table 7. Caribou habitat influenced (Twps 58-26 & 27, 59-26 & 27 only) as of September, 2007.	23
Table 8. Comparison of habitat influenced by township: Hypothetical, fully developed and IIAP as of September, 2007.	23

LIST OF FIGURES

Figure 1. Macro Scale Intact Patch Ranking Process	18
Figure 2. Role of the CLMA.	28

LIST OF MAP PRODUCTS

The following map products are attached on Disc 1:

Map 1. CLMA Planning Area.....Appendix II
Map 2. All Roads by Class..... Appendix II
Map 3. All IIAP Corridors..... Appendix II
Map 4. Proposed Reclamation and Deactivation Routes..... Appendix II
Map 5. Access Corridors by Planning Horizons..... Appendix II
Map 6. Caribou Habitat (RSF Summer 2004).....Appendix II
Map 7. Caribou Habitat (RSF Winter 2005)..... Appendix II
Map 8. Grizzly Bear Habitat (RSF August 2005)..... Appendix II
Map 9. Access Controls..... Appendix II
Map 10. All Active Roads and Caribou Habitat (RSF Summer 2004)...Appendix II
Map 11. All Active Roads and Caribou Habitat (RSF Winter 2005).....Appendix II
Map 12. All IIAP Corridors by Primary, Trunk and Roll-Up.....Appendix II

EXECUTIVE SUMMARY

The Caribou Landscape Management Association (CLMA) mandate is to facilitate the implementation of proposals for integrated landscape management and conservation actions for the Little Smoky and A la Pêche caribou herds in west central Alberta. The CLMA operates under the umbrella of the Foothills Model Forest (FtMF). The first initiative of the Caribou Landscape Management Association is the Integrated Industrial Access Plan.

Increasing road access in the ranges of these two caribou herds is needed to support allocated resource extraction and associated economic and social benefits. In November of 2005 the CLMA submitted a Long-Term Access Plan (LTAP) for consideration by government. After government reviews an amendment to deal with timing of development, additional route justification and an assessment of new vs. existing clearing were submitted to government on February 22, 2006. The LTAP has since been renamed the “Integrated Industry Access Plan” (IIAP). The new title was selected as it better reflects the current state of development of access planning in the area. It is believed that, over time, a fully integrated access management plan will prevail and it will become a long-term access management plan. The government endorsed the November report and February amendment as a guiding tool on June 23, 2006, which reinforced the need to integrate and coordinate the access requirements of the forest and oil and gas sectors, and to develop a monitoring and reclamation plan. For consistency, this report will refer to the Long-Term Access Plan as the Integrated Industry Access Plan. In the 2007 submission, the IIAP has evolved from an access plan to more of an industrial footprint management plan.

The CLMA believes that upfront road planning will reduce the road footprint resulting from the current “plan as you go” approach. Minimizing the footprint from long-term access through a coordinated approach will benefit the caribou herds, other species and the environment. This approach will reduce road construction, maintenance, and reclamation costs.

The IIAP identified the “backbone” of permanent all weather access requirements for the energy and forest industrial sectors within the caribou ranges. The plan represents the needs of the forest companies and a majority of the oil and gas companies with operations in the area.

Integration of activities requires a fully cooperative approach to doing business and this plan is a first step. The IIAP is a “living” document that will be continually updated and monitored. There are many issues that will be worked on over the next several months such as landscape objectives, best practises, reclamation, continued integration and a monitoring program to ensure effectiveness.

The CLMA was initiated prior to the Minister’s adoption of the “Alberta Caribou Committee” and the subsequent formation of the West Central Caribou Recovery Planning Team. The CLMA is committed to augment and add value to the provincial processes. In that regard, the CLMA will continue to develop best practices for caribou

conservation and will be the logical mechanism for industrial implementation of recovery strategies for the area.

As first priority, the CLMA will promote and support practices consistent with concurrent caribou conservation and industrial development. Working together to develop and apply innovative solutions is considered the best alternative to simultaneously achieve the Association's mandate.

The current members of the CLMA are:

- Alberta Newsprint Company (ANC),
- Aseniwuche Winewak Nation of Canada (Grande Cache)
- Canadian Natural Resources Ltd.
- Canfor (Canadian Forest Products Ltd.)
- ConocoPhillips Canada Resources Ltd.
- Devon Canada Corporation
- Encana Corporation
- Foothills Forest Products Inc.
- Hinton Wood Products, a division of West Fraser Mills Ltd.
- Husky Oil Operations Ltd.
- Suncor Energy Inc.
- Talisman Energy Inc.
- TransCanada Pipelines Limited

The members represent all of the forestry companies and a majority of the larger energy companies in the target area. The membership is also comprised of a local Aboriginal community.

Working together to develop and apply innovative solutions is considered the best alternative to simultaneously achieve the Association's mandate and government's goals for caribou. This is not new, however; the fact that the CLMA is committed to long-term ongoing management is a significant innovation in the sustainable delivery of integrated land management (ILM).

In its first two years, the CLMA accomplished many things including: developing an integrated access plan for the Little Smoky and A la Pêche caribou ranges, compiling an up-to-date inventory of roads, performing an audit of operational mitigation practices, facilitating the formation of an industrial working group to provide direct input into the West Central Caribou Landscape Planning Team (WCCLPT), gaining acceptance of an adaptive management process, and accepting a holistic conceptual model of how limiting factors of caribou work together.

The most significant change in this submission is in the area of reclamation / restoration whereby the CLMA is proposing a sustainable plan to deal with the recovery of historical anthropogenic footprint. This portion of the plan necessitates the need for a more formal approval from ASRD than in past submissions so the restoration plan can be fully implemented. The IIAP is only one part of the complex puzzle of successful caribou recovery and the CLMA will play a significant role in the future.

1.0 OVERVIEW OF THE CLMA

Several industrial companies operating in the Hinton, Alberta area discussed the concept of developing a caribou management association in November of 2004. In May 2005 the concept came to fruition as the Caribou Landscape Management Association (CLMA). At the Association's inception, it was agreed it would operate under the umbrella of the Foothills Model Forest (FtMF).

The Association's efforts will focus on:

- 1) Cooperation to reduce the future industrial footprint in caribou habitat;
- 2) Restoration of caribou habitat by reclaiming the industrial footprint;
- 3) Support of applied research to increase knowledge about caribou and caribou habitat for the purpose of caribou conservation;
- 4) Partnering and supporting Alberta government initiatives to manage caribou recovery through the Alberta Woodland Caribou Recovery Plan; and;
- 5) Implementation of the West Central Caribou Landscape Planning Team (WCCLPT) recommendations.

CLMA Vision Statement

" In North America, the CLMA will be viewed as an exemplary industrial leader in regional Integrated Landscape Management."

" The Caribou Landscape Management Association (CLMA) will conserve caribou habitat in west-central Alberta while continuing responsible development."

2.0 CLMA PRINCIPLES

The CLMA adopted the following principles to guide development:

2.1 Government Relations

- Exceed government regulation by being proactive and proposing and implementing solutions that work from both business and biological perspectives.
- Cooperate with the Alberta Government to recover caribou populations.
- Support and implement caribou recovery strategies within industrial responsibilities developed by the West Central Caribou recovery team.
- Expedite approvals.
- Work within the existing policy and regulation framework. However, direction contained in the Provincial Caribou Recovery Plan or new government policy may require the IIAP to be amended.

2.2 Research

- Promote science-based solutions.
- Direct, support, and use research, and identify research gaps. However, the CLMA will not coordinate or conduct research.

- Improve/increase funding for caribou monitoring and research.

2.3 Corporate Stewardship

- Be responsible corporate stewards participating in land management solutions.

2.4 Integrated Land Management (ILM)

- Provide a coordinated multi-sectoral industrial voice with a common approach working towards preferred solutions.
- Mitigate the future industrial footprint on the home ranges of the Little Smoky and A la Peche caribou herds.
- Improve management techniques with an aim to reduce the existing footprint to improve caribou habitat.
- Be the support mechanism for Integrated Land Management in the target area.
- Develop an Integrated Industry Access Plan for the Little Smoky and A la Peche caribou herds.

3.0 CLMA RELATIONSHIP TO THE WEST CENTRAL CARIBOU RECOVERY TEAM

The CLMA was established in May 2005 before the development of the West Central team, which had its first meeting on March 30, 2006. By the time the West Central team held its first meeting, the CLMA had submitted and amended the original IIAP as a guiding tool for access development. It has always been recognized that changes to plans may be necessary to accommodate recovery strategies as they are developed.

It was perceived that the provincial recovery process lacked a clear mechanism for the industrial sectors to provide meaningful input into the West Central Team. The CLMA provided support and expertise in the development of an industrial working group along with other partners outside the CLMA, which will concentrate on several key issues and indicators regarding forest age class, human footprint and forest pattern. The CLMA facilitated the implementation of an industrial working group to provide direct input into development of the province's West Central Recovery Plan for woodland caribou. This industrial working group is outside the scope of the CLMA as it includes the Narraway and Red Rock caribou herds north of the Little Smoky River. The CLMA, however, focuses its efforts and resources solely on the Little Smoky and A la Peche caribou herds.

In November of 2006, the WCCLPT submitted "Interim Strategies" to the Alberta Caribou Committee (the provincial governing body for caribou recovery plan development). The most relevant interim strategy to this IIAP is:

Indicator #5

Anthropogenic Footprint.

Desired Outcome

To manage for a landscape that contains sufficient un-fragmented stands of older forests (minimizing the industrial footprint) to preclude the need to conduct wolf culls in perpetuity.

Strategy(s)

- a. When submitting linear disposition applications, companies must demonstrate coordination with other industries in the area that minimizes overall footprint and impacts on caribou habitat.

CLMA Response:

The CLMA will, on behalf of its members, ensure that coordination occurs. Any routes proposed will be tracked in the IIAP. The CLMA will also encourage the government to provide an “Information Letter” to advise all energy (member and non-member) companies to contact the CLMA once they have been awarded their dispositions (see Section 14: Approval).

- b. Identify medium-scale (e.g. watershed of 4th or 5th order streams) access management units for companies to do the multi-industry planning of secondary roads.

CLMA Response

This work has been completed for planning purposes. However, the development of an “intactness” management plan may be a more appropriate planning tool to meet the intent of this strategy. This will be identified in the WCCLPT recommendations and subsequent implementation plan to be developed by the CLMA and ASRD personnel.

- c. Focus re-vegetation of linear features by prioritizing appropriate areas for restoration of habitat directly linked and consistent with the ecological strategies / objectives / principles to maintain a landscape pattern suitable for caribou use. Strategies will include reduction of primary prey browse species, access control, joint industry / government funding, working with AENV to change reclamation criteria to allow for planting of appropriate tree species and for natural recovery, and assessment of program effectiveness with applied adaptive management strategies. There is a requirement to complete a full inventory (regeneration surveys) of historical lineal features to prioritise areas for restoration.

CLMA Response

The restoration component is viewed as an important tool available to the CLMA members (see Section 6: Reclamation / Restoration Plan).

- d. Investigate LOC tenure options in caribou areas with the objective of timely reduction of road quality within the context of the Integrated Industrial Access Plan - similar to strategies contained in the Grizzly Bear Recovery Plan. (e.g. De-commission an oil and gas road after the drilling and “tie-in” stage of development.

CLMA Response

The CLMA will investigate this aspect of access development with emphasis on the effectiveness of certain mitigation techniques for caribou including road standards and access controls (see Section 17: Next Steps).

The CLMA partners will provide a mechanism to implement the practices developed by the industrial working group for the Little Smoky and A la Peche caribou herds. Industrial partners that have operations within the habitat of the

Red Rock and Narraway caribou herds, north of the Little Smoky River, will implement strategies for those two herds.

4.0 INTEGRATED INDUSTRY ACCESS PLAN (IIAP)

4.1 Introduction

Increasing road access in the ranges of these two caribou herds is needed to support allocated resource extraction and associated economic and social benefits. However, increased road access and associated development is correlated with declining caribou populations. Although the cause and effect mechanism of the correlation is not well understood, planning the overall long-term road footprint in caribou ranges is generally accepted as desirable and beneficial for caribou conservation as well as conservation of other ecological values.

The IIAP was developed using the best available knowledge to develop a guiding plan for access development. There are many factors that could cause the plan to be revised such as:

- Mountain pine beetle could significantly affect timing of forest harvesting;
- New information about ongoing energy exploration and development may affect location and timing of corridors;
- Better on-the-ground route selection (compared to preliminary reconnaissance) to deal with safety and environmental concerns and caribou habitat.

In order to achieve the objective of reducing the industrial footprint when compared to the “plan as you go approach” to road development, it is believed that all weather permanent roads will eventually be required for the primary corridors. Although not generally desirable, there are certain advantages that all weather roads provide such as:

- Ability to build temporary “spur roads” off the primary corridor to support timber and energy resource extraction that can be deactivated or totally reclaimed when no longer required (reduce footprint). All weather roads tend to remain open and are generally difficult to reclaim;
- Ability to lengthen the operating season particularly in the fall to allow for “early in - early out” development to accommodate critical times for caribou such as mid to late winter;
- Ability for access for management of alternate prey species;
- Ability to provide for coordinated, safe, and orderly economic development;
- Ability to enhance protection of forests from fire events, which is critical when considering the short-term effect of fire on caribou habitat and the threat of mountain pine beetle;
- Ability to support the development of energy sector production facilities as the sector is moving from exploration to production.

The IIAP is intended to be an iterative document with annual resubmissions outlining access corridor refinement (location, timing, and justification), monitoring (industrial footprint), and reclamation (recovery of caribou habitat). The resubmission will be

completed annually, at a minimum, each September. However, if there is a requirement for substantive change from one or more of the partners the IIAP will be revised and updated and posted on the Foothills Model Forest website.

4.2 Area Overview / Resource Allocation

The target area encompasses a tract of land in west-central Alberta in the foothills region of the Rocky Mountains totaling approximately 5000 (4954) square kilometers. It is situated east of the town of Grande Cache and has the Willmore Wilderness Park along its west boundary and extends east, near to Highway 43. It has vast resource values including scenic landscapes, timber, energy (gas and oil), wildlife and water.

The timber resource is comprised predominately of lodgepole pine, and has been allocated to the following five companies, three of whom have Forest Management Areas (FMA):

- Ainsworth – Deciduous Timber Allocation (DTA G150003)
- Alberta Newsprint Company – FMA holder
- Canadian Forest Products Ltd. – FMA holder
- Foothills Forest Products – Coniferous Quota
- Hinton Wood Products, a division of West Fraser Mills Ltd. – FMA holder
- Tolko Industries Ltd. – Deciduous Timber Allocation (DTA G150002)

Their initial and ongoing investment in processing facilities is based on full access to timberlands. Some companies have deferred harvesting in the caribou ranges in the short term, while awaiting direction and advice on the conservation of caribou habitat and population recovery from the WCCLPT. Industry eventually must access this area to support their investment and the sustainability of the respective resource-based communities. Additionally, forest companies are currently developing plans to deal with the immediate “green attack” of mountain pine beetle. An infestation of mountain pine beetle has the potential to significantly impact their operations and the economic and social health of the associated resource-based communities.

Similarly, the energy sector has purchased dispositions from government within the area and has invested extensively in the exploration of the energy resource. Their investment in exploration continues, as well as in the infrastructure that transports and processes known energy reserves. In order to access resources that have been allocated by the government, more roads are required. However, both industrial sectors recognize that in order to access the land they must ensure their impact on other resources is minimized. While there are many other resource values in the area in addition to caribou, it has been identified as the most critical and is the focus of this effort.

4.3 Purpose

The primary purpose of the IIAP is to identify the “backbone” of industrial road corridors for accessing resources in the Little Smoky and A la Peche caribou ranges. There are two types of roads identified in the IIAP. They are:

- Permanent, all weather roads, classed as “primary” and “trunk” roads as shown on Map 12 and,
- Secondary, temporary spur roads, classed as “roll-up” on Map 12.

It is the desire of industry to develop permanent all weather roads within the access corridors identified in the IIAP. However, a road may not be initially constructed to the standard of permanent all weather. The IIAP is intended to provide guidance on the location of primary corridors regardless of road standard. The specific LOC's will deal with the need and necessity of each route as they are applied for. The level and type of activity (e.g. sour gas development, safety concerns and anticipated traffic volumes) will dictate the right of way width and road standard.

The IIAP will guide integrated industrial development and government reviews for approval regarding development of energy and forestry resources. It is assumed that this approach minimizes industrial impact on caribou habitat because secondary access roads are temporary and permanent all weather roads are shared by the energy and forest companies when they are developing their respective resources. Finally, the IIAP includes a monitoring and reporting program (discussed later in this document) to determine if this approach is proven.

This is the third submission of the IIAP and it concentrates on further refinement of the location of corridors to guide resource development, reclamation, monitoring and timing. This document identifies roads that support resource extraction for both sectors, and multiple resource users while conserving identified resource values, with a special focus on the conservation of caribou habitat. This will help to ensure the sustainability of caribou habitat while facilitating resource extraction within the IIAP area.

4.4 Scope / Geographic Area

The IIAP reclamation plan covers the range of the Little Smoky and A la Peche caribou herds within the Caribou Planning Area identified in the 1996 Operating Guidelines for caribou ranges in west central Alberta (Map 1). The target area encompasses a tract of land in west-central Alberta in the foothills region of the Rocky Mountains totaling approximately 5000 (4954) square kilometers. The western portion of the A la Peche caribou range in Willmore Wilderness Park and Jasper National Park was not included.

4.5 Road Plan

The IIAP identifies current and future permanent Licence of Occupation (LOC) road access corridors for the entire plan area based on resource values (see below) and the projected access needs of all industrial resource users. The IIAP does not include temporary or permanent spur roads (short roads branching off main roads). However, as they are constructed they will be tracked in the monitoring process discussed later. Existing roads by class are indicated on Map 2. Resource users planning spur roads will link to the IIAP and to operational guidelines (e.g. 1996 Operating Guidelines, West Central Producers Group (WCPG) Best Practices).

4.6 Resource Values

The process considered issues related to road access development in the area for multiple resource values including:

- Caribou;
- Grizzly bear;
- Stream classification for fish (emphasis on bull trout and arctic grayling) and aquatic habitat.

4.7 Principles

The following principles were developed and agreed upon early in the process to represent the interests and values of the various participants involved in development, approval and implementation of the IIAP. The principles provided guidance in the development of the IIAP. When planned individual access routes deviate from these principles, strong rationale and justification must be provided.

- a) Industry, government and all other stakeholders will cooperate in development and implementation of the IIAP.
- b) Roads will be constructed to the appropriate standard considering resource values to be conserved and anticipated level of use and safety.
- c) Pipeline and related linear corridor development will be coordinated with approved road corridors.
- d) The IIAP will follow provincial legislation and policy direction and other legal requirements, and will link to related processes and plans including:
 - Public Lands Act (disposition approval process);
 - Water Act and Codes of Practice (road and pipeline watercourse crossings);
 - Federal legislation (Fisheries Act, Navigable Waters Act);
 - Detailed Forest Management Plans (DFMP);
 - Existing Long-Term Industrial Access Plans;
 - Northern East Slopes Integrated Resource Management Strategy (when available);
 - Alberta Woodland Caribou Recovery Plan;
 - West Central Alberta Caribou Steering Committee (WCACSC) 1996 Operating Guidelines;
 - WCACSC Habitat Supply Subcommittee initiatives;
 - Oil and Gas Access – Best Practices Within the West Central Caribou Range; and
 - Landscape fire management initiatives.
- e) The IIAP will honour current resource commitments, provide fair access to resources and all industrial users will be treated equally.
- f) Improve land use management guidelines and technological practices for road planning, operations, and restoration.
- g) The IIAP development process will provide an opportunity for industries and ASRD to participate directly in plan development, and other stakeholders to participate through a consultative process.
- h) A process will be developed to monitor the effectiveness of the IIAP and to allow for the future review and update of the plan to address changing conditions.

- i) Reclamation and rehabilitation of existing access that is no longer required will be of equal consideration in development of the IIAP.
- j) Loop roads should not be considered in development of the IIAP.
- k) A connector corridor between Grande Cache and Fox Creek / Whitecourt was considered on the direction of ASRD in the refinement of corridors in the summer of 2007.
- l) High value caribou habitat should be identified and every attempt made to reduce the access footprint in these areas.
- m) Direction contained in the Alberta Caribou Recovery Plan or new government policy may require the IIAP to be amended.

4.8 Objectives

The primary objective for the IIAP is to reduce the industrial footprint by:

1. Improved coordination, integration and management of access on the landscape, by all users from cradle to grave;
2. Identification of opportunities to reduce the long-term access footprint (e.g. reduced right-of-way (ROW) widths and reduced access duplication, reduce the number of access routes into the caribou ranges, reduce the number of main corridors within the ranges when compared with the “plan as you go” approach;
3. Proactive determination of acceptable road corridors within the planning area;
4. Provide recommendations for operational policy relating to integrated access management in caribou ranges;
5. Minimize the impact of access on caribou and caribou habitat and other identified resource values;
6. Provide an improved level of certainty for future development opportunities;
7. Equitable sharing of access development, maintenance and reclamation costs by all industry sectors;
8. Joint road monitoring, reporting and maintenance by all industry sectors and through similar initiatives such as the Foothills Stream Crossing Program.

4.9 Data Sources

Several data sets were used in the development of the IIAP, from the process of corridor development to the creation of the reclamation plan (Table 1).

Table 1. Datasets used in the development of the IIAP as of September 30, 2007.

Dataset	Application	Source	Date
Roads	<ul style="list-style-type: none"> Foundation for building single roads dataset across multiple jurisdictions using a single classification scheme. Updated annually. 	<ul style="list-style-type: none"> HWP ANC Canfor FFP ASRD (Hinton, Edson, AltaLIS) CNRL ConocoPhillips Husky Devon Talisman 	September, 2007
Pipelines	<ul style="list-style-type: none"> Mapping reference 	<ul style="list-style-type: none"> DOE 	February, 2007
Well sites	<ul style="list-style-type: none"> Mapping reference 	<ul style="list-style-type: none"> DOE 	February, 2007
Harvest operating units	<ul style="list-style-type: none"> Mapping reference 	<ul style="list-style-type: none"> HWP ANC Canfor 	2005
Terrain	<ul style="list-style-type: none"> Roads planning constraint 	<ul style="list-style-type: none"> ASRD 	2005
Caribou RSF	<ul style="list-style-type: none"> Roads planning constraint 	<ul style="list-style-type: none"> ASRD, Fish and Wildlife University of Alberta 	Summer 2004 Winter 2005
Grizzly bear RSF	<ul style="list-style-type: none"> Roads planning constraint 	<ul style="list-style-type: none"> FtMF Grizzly Bear Research Program 	August, 2005
Streams	<ul style="list-style-type: none"> Roads planning constraint 	<ul style="list-style-type: none"> ASRD FtMF Fish and Watershed program 	2005
SPOT Imagery	<ul style="list-style-type: none"> Mapping reference 	<ul style="list-style-type: none"> ASRD 	February, 2007
AVI data	<ul style="list-style-type: none"> Mapping reference 	<ul style="list-style-type: none"> ANC Canfor HWP ASRD 	2005

4.10 Preparation and Contents

The preparation of the IIAP was conducted in stages as follows:

Stage 1 – Inventory of existing access – completed once, now ongoing

- a) Designate the geographic area that the IIAP will cover.
- b) Identify and map existing roads. While field verification may be required, an initial assessment and categorization is required.

One of the challenges encountered was that individual companies and sectors use different road classifications. It was necessary to adopt a common classification system. The CLMA adopted the Base Features Road Classification System (Table 2).

Table 2. Base Features Road Classification System.

Class	Description	CLMA Map Colour Code
1	<p>Gravel – 2 lane</p> <ul style="list-style-type: none"> • Gravel Surface (Stable) • Main access route • Surface +7 metres wide • ROW +30 metres wide 	Black
2	<p>Gravel – 1 lane</p> <ul style="list-style-type: none"> • Gravel Surface (Stable) • Main access route • Surface – 6 metres wide • ROW – 20 metres wide 	Red
3	<p>Unimproved</p> <ul style="list-style-type: none"> • Dirt Surface • Minor access route • Surface up to 7 metres wide • ROW up to 20 metres wide 	Green
4	<p>Truck Trail</p> <ul style="list-style-type: none"> • Dirt Surface • Minor access route • Surface +6 metres wide • Streams are generally forded • Ditches are few 	Orange
5	<p>Winter Road</p> <ul style="list-style-type: none"> • Clearing that is accessible by vehicle in winter only • Snow or ice surface (usually over swamp, bog or muskeg) 	Blue
6	<p>Unclassified / unknown</p> <ul style="list-style-type: none"> • Work is being done to determine road class for these roads 	Purple
7	<p>Deactivated Road</p> <ul style="list-style-type: none"> • A deactivated road is one that has been temporarily retired and will be used again in the future 	Light Grey
8	<p>Reclaimed Road</p> <ul style="list-style-type: none"> • A reclaimed road is one that has been returned to its previous productive state 	Medium Grey
9	<p>Overgrown ROW</p>	Dark Grey

Only roads that are permanent will be inventoried. They are shown in the existing dataset and subsequent maps. Temporary roads that are used and then reclaimed within a short period of time (i.e. interior cutblock roads) are not included in the dataset and subsequent maps. Winter roads that will be used are inventoried. As a rule of thumb, any LOC road is included.

Roads were colour coded to indicate their standard and given a number, which is common to all the map products.

Stage 2 - Planned Access Corridors (lines on a map stage) - First Submission – completed November 2005

The following information, knowledge and tools were considered when making corridor routing decisions:

- Higher-level plans (Integrated Resource Plans (IRP), Forest Management Plan (FMP), etc), if any exist for the IIAP area;
- Other wildlife
 - Wildlife zoning maps;
- Future operating schedule (to year if part of Development Plan window, to decade if part of FMP window);
- Caribou (from WCACSC and FWD)
 - Caribou habitat maps (WCACSC maps, RSF maps, etc)
 - Caribou location maps;
- Oil and Gas
 - Identify and map areas of future interest by oil and gas companies;
- Grizzly bear (from Foothills Model Forest)
 - Grizzly bear Resource Selection Function (RSF) maps, mortality risk maps, movement corridor maps; and
- Fish and aquatic habitat (from FWD)
 - Sensitive streams from FWD stream classification map.

Stage 3 – Updated resubmission – completed September 2006

Corridor refinement, monitoring and reclamation plan.

Further refinement of the routes may consider the following:

- Updated information from Forestry and Energy sector;
- Threats such as fire or mountain pine beetle;
- Updated data on road inventory and standards;
- Access controls.

Stage 4 Maintain an up-to-date Inventory (dataset) – ongoing

An essential step to ensure that the objectives of the CLMA are met is to have a current and accurate inventory of all access disturbances. This was incorporated into the 2006/07 CLMA business plan, and has now been addressed with a consultant who is responsible for:

Maintaining a current inventory of access:

- Reviewing with ASRD ownership status;
- Confirming and tracking “as built” roads from companies, ASRD records (develop data standards and annual submission requirements);

- Acquiring disturbance layer from FMA holders and Government for the area (harvesting, road and linear disturbances from land use layer);
- Maintaining data tables for corridors and match to map products;
- Maintaining data tables for reclamation and match to map products;
- Maintaining a data set for access controls by category (i.e. gates, pulled bridges and culverts, barriers, etc.);
- Contacting all companies listed as owners for potential reclamation of roads (identify issues, concerns, timing of deactivation or reclamation);
- Tracking and reporting on roads that have been reclaimed or deactivated;
- Confirming LOC #'s and update data tables for all roads (corridors);
- Developing a monitoring and tracking program for road density (i.e. net disturbance); and
- Continual reviewing of ASRD records on deactivation plans, reclamation plans as per data and update datasets as necessary.

The objective of the CLMA is to have the “best available data,” at any given time, for resource managers and CLMA partners to use. Therefore, the data must be updated in a timely manner to accurately reflect reality on the landscape.

5.0 IIAP CORRIDORS

The CLMA identified corridors that are required for the forest and energy industrial sectors (Maps 3 and 12). This identification complies with Objectives 1 and 3 of the IIAP whereby coordination is achieved.

There is a corresponding database for each route attached as the route database file. The route database includes a description of the road, purpose, selection criteria, analysis, mitigation factors, and consideration of other values. In keeping with the principle of reducing the future industrial footprint, many of the corridors proposed are within existing cleared right of ways (Table 3) (Map 3).

Table 3. IIAP Corridors - New vs. Existing Clearing as of September, 2007.

Number of Corridors	Total Kilometres	New Clearing (Km)	Existing Clearing (Km)	New Clearings (%)
48	707	109	598	18

6.0 RECLAMATION / RESTORATION PLAN

As per Objective 2 of the IIAP, the CLMA will develop a landscape level restoration program to manage the historical industrial footprint to support enhancement of caribou habitat in the short and long term. However, the restoration plan cannot be completed until the West Central Caribou Landscape Recovery Plan is completed and accepted by the government. The acceptance of the landscape level plan and the anticipated concepts are a prerequisite to successful implementation. The reclamation / restoration plan is included in the IIAP to provide a sustainable mechanism for restoration within the

CLMA caribou ranges and to comply with the recent LOC approval letter for Route 506 (ANC).

This reclamation plan will be reviewed annually by the CLMA Steering Committee to ensure effectiveness, track funding levels and requirements, and approve a detailed work plan. Formal approval of the IIAP by ASRD is required to move forward with this reclamation plan.

6.1 History

In 2001, the Caribou Range Restoration Project (CRRP) was launched with the goal of restoring lineal features so that their negative effects on woodland caribou are lessened and eventually eliminated. The project arose in response to the Boreal Caribou Committee's Strategic Plan and guidelines (BCC 2001), which emphasized the importance of restoring lineal features within caribou ranges. A full time project manager administers the CRRP in conjunction with a team of representatives from ASRD and the West Central Alberta Petroleum Producers group. Restoration activities were carried out over five years in the Redrock – Prairie Creek, Little Smoky, Red Earth, and East side Athabasca caribou ranges.

In early 2007, as the WCCLPT was developing its recovery plan, the CLMA recognized that the restoration of caribou habitat would be an important part of long-term caribou recovery strategies. This necessitated the need for the two programs (CRRP and CLMA) to collaborate and consider merging. Once again the FtMF recognized the value of this and offered to provide both programs administrative support. The CRRP will now be managed by the CLMA.

6.2 Identification of Need

The CLMA first recognized the need to develop a reclamation plan when it decided to prepare the initial Integrated Industry Access Plan. This was outlined in the approved terms of reference in August of 2005. However, it is difficult to locate and develop an extensive plan when an area is under development regardless of the desire to have no net loss of habitat. The justification and background to develop a reclamation plan is shown below:

a) Principle # 9 from the IIAP TOR August 2005:

“Reclamation and rehabilitation of existing access that is no longer required will be an equal consideration in development of the IIAP.”

b) Government letter of November 17, 2005:

- “Conduct a landscape assessment that summarizes all human land use disturbances in the Little Smoky/A la Peche caribou ranges.”
- “We also wish to state the importance of having your plan address decommissioning, reclamation, and access controls as part of you overall access management strategy.”

c) Excerpt from the Integrated Industry Access Plan document November 2005

“The CLMA recognizes that a comprehensive reclamation strategy for habitat is necessary for caribou as new development occurs. There is acknowledgement by members that when temporary roads are no longer needed they should be reclaimed and returned to the “productive land base.”

d) Government prelim (verbal) response to the IIAP January 11, 2006

“Government wants a reclamation plan as there is concern about the increase in roads from what currently exists”. (“This IIAP means a net increase in access.”)

e) Endorsement Letter from ASRD June 23, 2006

“ASRD also encourages the CLMA to continue working on a plan with particular emphasis on the reclamation and monitoring program as outlined in the submission, as the intent of reducing the industrial footprint for future development remains a priority.”

It is important to note that the following reclamation plan is intended to recover historical lineal disturbances but that an actual reduction of footprint may not be feasible given the current state of resource development. The IIAP, however, is expected to result in fewer footprints than without as previously discussed. This, combined with a reclamation plan to deal with historical footprint, will result in a more favourable environment for caribou in the longer term.

f) A condition of LOC approvals

While it was not a specific condition of recent LOC’s, it was suggested that the LOC applicant supports the CLMA in a landscape reclamation plan as follows:

“The LOC holder (and partner companies) must provide support to the CLMA for a road and linear disturbance reclamation plan with a “target” of 3 to 1 (3 km of reclamation per 1 km of road upgraded or new roads constructed). This must be developed and submitted to Sustainable Resource Development for review and approval by October 15, 2007.”

This section of the IIAP is intended to be the plan to satisfy this expectation.

6.3 Objectives

The specific objectives of the reclamation plan are:

- 1) To reintroduce areas disturbed by access onto a seral trajectory that will allow it to contribute to the long-term conservation of caribou habitat;
- 2) To reduce the impact of new development of access route corridors identified in the IIAP by reducing the “net” amount of active roads in the area;
- 3) To accelerate the recovery of human-caused linear disturbances;
- 4) To return disturbed areas to natural tree / vegetation cover; and
- 5) To influence predator and human access.

6.4 Restoration Planning

6.4.1 Inventory

Prior to undertaking any actual restoration on the landscape an inventory is required to assess the state (abundance, rate, species, ecosite, etc.) of natural recovery and its spatial distribution. The intent is to develop a predictive model of vegetation responses and then to determine the need and priority (areas) for restoration to meet habitat / caribou objectives. The process may help define natural recovery, its range of variation and the spatial, temporal and functional set of attributes. To complete this, five projects are already underway:

1. An initial pilot project (Appendix 1V) will select a specific area with previously measured plots to assess remote sensing techniques. CRRP Pilot: Complete.
2. A second project will assess growth and yields at a cutblock level to assess four basic questions (Appendix V). Fiera Biological Consulting: project is underway and is to be completed by November 15, 2007.
3. A third project is currently investigating existing PSP information for its utility in determining vegetation response by ecotype (Appendix V). Fiera Biological Consulting: project is underway and is to be completed by November 15, 2007.
4. A fourth project will assess the pilot project to determine cost effectiveness using ground truthing, the ability of new technology (LiDAR) to provide additional information in determining species cover (especially height). Subject to the availability of government LiDAR: project is ongoing.
5. A fifth project will identify the ability of both natural regeneration and artificial programs to meet the preceding objectives through an integrated sampling program (Appendix III – to be revised to meet a broader range of intent and objectives). CRRP Monitoring: ongoing.

The inventory project has been included in an application for open FRIAA funding, dated October 11, 2007, and, if successful, will be completed for the CLMA area by the fall of 2008. This will provide a basis for the development of a landscape restoration plan. If the application is not successful, the CLMA will submit a request for funding once the WCCLPT process is complete.

6.4.2 Intact Area

The industry, as part of the government's WCCLPT, developed a ranking process for intact areas for caribou (Figure 1).

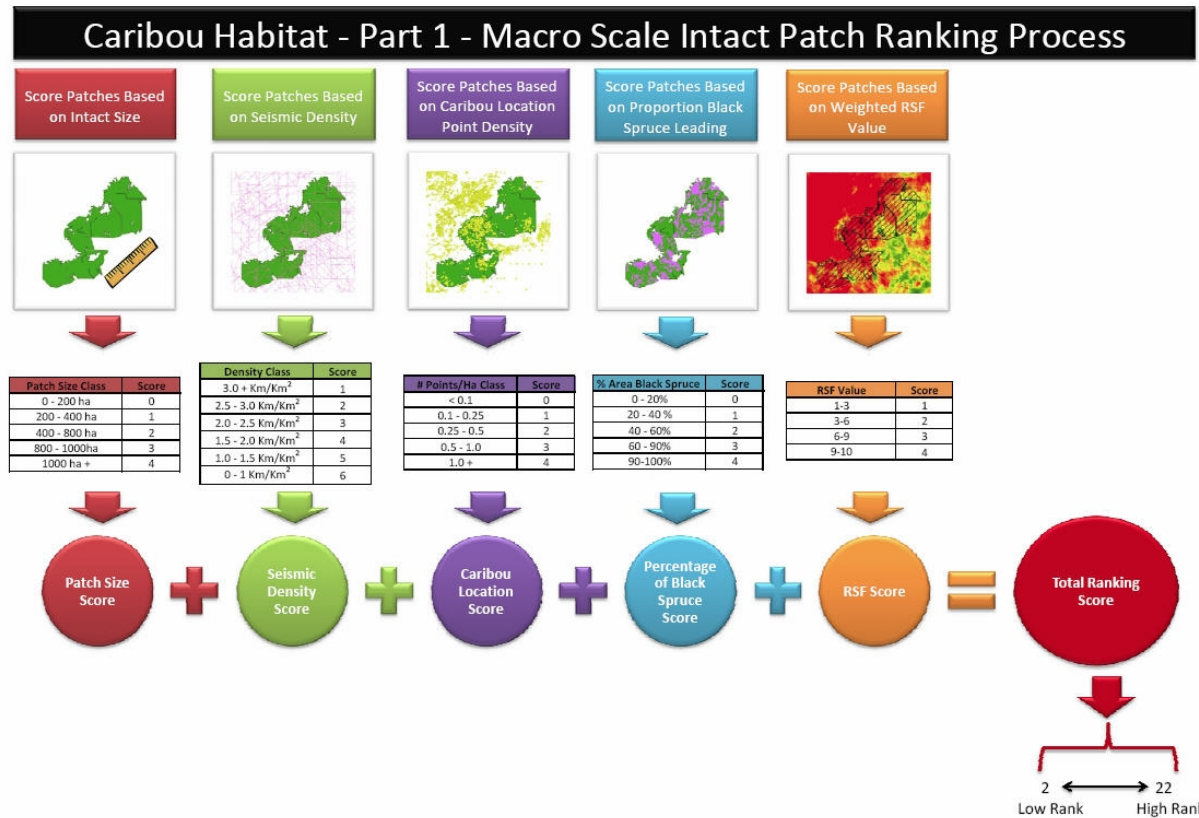


Figure 1. Macro Scale Intact Patch Ranking Process

It is anticipated that the intact areas identified for the Little Smoky and A la Pêche caribou ranges will assist in providing priority areas for restoration. The draft intactness areas are currently being reviewed by the WCCLPT and will be shared once they are accepted for the development of plans.

6.5 Restoration Activities

There are three categories of restoration:

1. Company obligation;
2. Project specific; and
3. Landscape level (CLMA).

6.5.1 Company obligation restoration (Reclamation Certificates)

This is ongoing company-specific restoration for abandonment of roads (LOC's), well sites, inter-cutblock roads, and other disturbances once activities are complete. This category will continue to be dealt with by the company and the regulator (government). The only role the CLMA will have is tracking the reclamation and disturbance layers as part of the IIAP monitoring report. The following criteria will be used for this category:

Deactivated Road

A deactivated road is one that has been temporarily retired and will be used again in the future. Deactivation includes the retention of the road grade and could include removal of watercourse crossings, seeding, rollback, water bars and other methods to reduce maintenance needs and prevent on-highway vehicle use.

Reclaimed Road

A reclaimed road is one that has been returned to its previous productive state. This includes establishing stable water drainage, contouring surfaces to a stable landform and reforestation.

The kilometers of road proposed for deactivation or reclamation will be tracked over time with a baseline of 2007 (Table 4) (Map 4).

Table 4. Kilometers of road proposed for reclamation and deactivation as of September, 2007.

Amount of road planned for deactivation (km)	Amount of road planned for reclamation (km)	Amount of active roads (km)
84	32	1,624

6.5.2 Project specific restoration

In certain areas it may be determined that a company’s project plans may warrant project specific restoration. This would be determined by the scale of the project, location and activity being undertaken and will be specific to the company.

6.5.3 Landscape level restoration

This category is intended to develop a sustainable mechanism to restore historical industrial footprint in the CLMA area. It does not replace the other categories or specific company obligations for reclamation certificates (RC’s). This category will be managed by the CLMA (CRRP), on behalf of its member companies, for the entire range areas to ensure that the best value for caribou is achieved. This will mean that a road or other disturbances “area of influence” may not be a priority for restoration and the commitment will be in an area that is determined to be the most effective for caribou. In fact, it may be that the resources would best be placed in other areas of caribou management such as research. It is recognized by the CLMA that population management of primary prey and predators may be the most effective for immediate positive caribou response and provide the maximum benefit. However, any future industrial restoration funding is not intended to replace or supplement ASRD’s responsibility for this.

The WCCLPT has identified linear disturbance as a potential impact to the west central caribou herds. Linear disturbance reduces the amount of caribou habitat over 80 years of age, may retard its regeneration, may promote early successional species palatable to primary prey, may enhance travel by predator species, may promote habitat avoidance by caribou and improve recreational access which increases disturbance.

The current industrial footprint in the CLMA area that are available for restoration include: seismic lines, roads, pipelines and well sites. However, the actual impact has been more difficult to identify because there has been a lack of inventory and limited response monitoring. This results in a lack of information on:

- The amount and quality of natural recovery;
- Delay rates of natural recovery;
- Rates of recovery response;
- The range of successional pathways;
- Ecosite map availability and ecosite response;
- Species composition response – Pl, Sw, Sb;
- Ground story species composition and response;
- Historical treatments for erosion control and associated reasons;
- Slope, aspect, elevation and line orientation differences;
- The relationship of linear disturbance response to existing PSP data; and
- The relationship between cutblock response and linear disturbance response.

The WCCLPT has agreed, through modeling and tactical planning endeavors, that restoration of linear disturbance, prioritized by range and intactness maps, can be beneficial to the long-term maintenance and improvement of the west central caribou populations.

The assessment of linear disturbance, recovery pathways, rates and species composition, etc., will be undertaken by the following restoration objectives:

1. To assess the current status of natural recovery attributes (previously identified) including spatial distribution and temporal parameters (age). The program will include a pilot project to assess methodology and a follow-up implementation program.
2. To identify the effectiveness of natural recovery and various artificial treatments for their ability to produce a closed coniferous canopy which restricts the palatable browse species response.
3. To identify the effectiveness of high (varied) density coniferous stocking rates and early establishment of successional pathways in their ability to reduce the palatable browse species response.
4. To determine whether the current PSP program and the current stocking program on cutblocks can be transferred directly to the objectives required for linear disturbance.
5. To determine if treatment response on cutblocks, at an ecosite level, can be utilized to set stocking standards for linear disturbance by ecosite.
6. To determine if stocking rates required to curtail the browse response produces delays in volume production for timber harvest and / or reduction in habitat quality (high stem density, lichen production) at 80 years of age.
7. To determine if stocking rates required to curtail the browse response produces adequate restrictions for access by predators and recreational activity, over what time period.

Restoration area priorities:

- ROW's (roads, pipelines, seismic lines) within identified Intact Areas;

- Reclaim ROW's in the centre of caribou range;
- Reclaim ROW's that either prevent or eliminate "loop roads";
- Reclaim ROW's within known high caribou use areas;
- Roads immediately adjacent to high use main roads may not be as beneficial as roads in low use areas.

6.6 Vegetation Response Monitoring

Use methods / protocols as written in the CRRP Monitoring Manual (Appendix III). Data will be entered into a database that will be maintained at the Foothills Model Forest (FtMF). Copies will be provided to CLMA member companies and ASRD. In addition, any completed restoration projects will be marked as such in the inventory database.

6.7 Funding (applicable to "6.5.3 Landscape level restoration" only)

The primary intent is to provide a sustainable funding mechanism to restore historical industrial footprint. The CLMA, on behalf of its members, will manage landscape level restoration. The commitment of funding is subject to the completion of the WCCLPT and successful joint development of an implementation plan by March 31, 2008 which will determine funding sources from industry and / or government for dealing with the historical industrial footprint. The criteria for establishing a funding mechanism will be developed in the future once the WCCLPT completes its report.

6.8 Other Companies

All CLMA member companies provided input into this plan, however, many roads identified for reclamation may be owned by other companies as listed in the reclamation plan database. Participating companies:

- Alberta Newsprint Company (ANC)
- Canadian Natural Resources Ltd.
- Canadian Forest Products Ltd. (Canfor)
- ConocoPhillips Canada Resources Ltd.
- Devon Canada Corporation
- Encana Corporation
- Foothills Forest Products Inc.
- Hinton Wood Products, a division of West Fraser Mills Ltd.
- Husky Oil Operations Ltd.
- Suncor Energy Inc.
- Talisman Energy Inc.
- TransCanada Pipelines Ltd.

However, once the restoration plan is completed, there may be many lineal disturbances that are a priority of restoration/reclamation that are owned by other companies. The difficulty in this will be that the owner of the road may not agree with restoration (e.g. MD roads). ASRD may be required to provide support for ensuring that

reclamation can occur in these areas. As well, ASRD may be required to ensure that approvals are not given for clearing areas that have already been reclaimed.

7.0 MONITORING REPORT

The annual reporting and monitoring report measuring the plan's effectiveness of reducing the industrial footprint is a necessary and important component of this plan. The results of effectiveness monitoring will be considered a part of the annual review of the IIAP and the plan will be amended as necessary. The baseline will be the year as of September 30, 2007. The initial baseline report for existing disturbance is shown in Table 5. Tracking effectiveness in 2007 is shown in Table 6. The amount of caribou habitat influenced is shown in Table 7.

Table 5. Existing Disturbance as of September, 2007.

Disturbance	Linear Km	Density Total area = 4954 km ²	Source	Date of Data
Roads/class				
Class 1	219	0.044 km/km ²	Foothills Model Forest	September 30, 2007
Class 2	525	0.106 km/km ²		
Class 3	369	0.074 km/km ²		
Class 4	35	0.007 km/km ²		
Class 5	404	0.082 km/km ²		
Class 6	25	0.005 km/km ²		
Class 7	45	0.009 km/km ²		
Class 8	48	0.010 km/km ²		
Class 9	18	0.004 km/km ²		
Total	1735	0.350 km/km²		
Railways	58	0.012 km/km ²	ASRD	Unknown
Highways (Paved)	46	0.009 km/km ²		
Powerlines	31	0.006 km/km ²		

Table 6. Tracking Effectiveness in 2007.

Measurement	No IIAP ANC (hypothetical) Twps. 58-26,27 & 59- 26,27	59 – 26 only	Fully developed Twp. 59-24	Active roads Class 1 – 6 + Paved Sept, 2007
Total # Linear Kilometres	360	105	78	1624
Density (Km/km ²)	1.07	1.1	0.8	0.328

Table 7. Caribou habitat influenced (Twps 58-26 & 27, 59-26 & 27 only) as of September, 2007.

Range	Caribou Habitat	Hectares within 250m of linear features, no IIAP (Hypothetical) (Twps 58-26&27, 59- 26&27 only)	Hectares within 250m of linear features, with IIAP (2007) (Twps 58-26&27, 59- 26&27 only) Class 1–6 + paved (see map 2)
Summer 2004	High (8-10)	9147	3045
	Medium (4-7)	5724	3065
	Low (1-3)	2628	1393
Total		17,499	7,503
Winter 2005	High	8280	2408
	Medium	6450	3274
	Low	2769	1821
Total		17,499	7,503

*This will be monitored and reported on annually as it currently is not a valid comparison.

The energy sector hypothetical access completed by ANC for its FMA will be used to compare unconstrained access development to that of the CLMA IIAP area. This unconstrained access will be compared to the IIAP area with the above criteria.

The townships of 58 – 26 & 27 and 59 – 26 & 27 were selected for the hypothetical benchmark. The township of 59-24 was selected to show an area that has been fully developed (Table 8). This will demonstrate how the IIAP process compares to these two samples. The linear disturbance within the IIAP area will be tracked and reported on annually, and then compared within the townships identified above. This comparison will help assess the overall effectiveness of this new approach, which will be applied to townships 58 – 26 & 27 and 59 – 26 & 27 compared to the “plan-as-you-go” approach which occurred in township 59-24. The other measurement to be tracked and reported on is: “how consistently did the IIAP get applied by government approvals and industry development?”

Table 8. Comparison of habitat influenced by township: Hypothetical, fully developed and IIAP as of September, 2007.

Total Habitat influence	*Hypothetical (Twps 58-26&27, 59-26&27 only)	Township 59 - 24 Fully developed	IIAP
Hectares/township	*4,812	3,489	2,045

* Adjusted to show by Township by applying 88.6% factor as some of the 4 townships are not full townships. In addition, to compare township 59-24 to the four townships, the total was divided by 4. (e.g. 17,499 / .886 /4 = 1 township equivalent).

7.1 Future Reporting

It is the intention of the CLMA to continually improve the data and reporting and provide a report that will track the amount of new disturbance by year, % change / year, track reclaimed and deactivated kilometres / year, and finally a net area over time. 2007 is our baseline year.

8.0 DATA SHARING

The CLMA is a voluntary organization led by a group of proactive companies that desire to “do the right thing” and feel that if they work together they will be able to accomplish the goals set out. However, there also has to be good business reasons to continue to support the CLMA. A significant benefit of being a member will be to have access to up to date and accurate datasets to meet business and resource management needs. It is also recognised that datasets are valuable to resource managers such as ASRD and a method of providing access to the data is required.

The FtMF will maintain the “official” version of the road data for and on behalf of the CLMA members as well as make it available through ArcIMS Internet Mapping software. Other supporting datasets such as AVI is up to the owner (FMA holder) to provide access, not the FtMF.

Data access methods:

- Potential for online internal and/or external web-enabled access; and
- Potential for date-stamped published data sets (CD, DVD, external hard drives).

Not all information is the same; four types of information have been defined.

Unrestricted Information – Information that is available to the public.

Protected Information – Information that is sensitive outside the government (*and/or forest industry*) and could impact service levels or performance.

Confidential Information – Highly sensitive information that could cause serious loss of privacy and/or loss of confidence in the government (*and/or forest industry*) programs.

Restricted Information – Highly sensitive information that could cause extreme damage to the integrity, image or service delivery of government (*and/or forest industry*).

It should be noted that information is extracted from data by example through manipulation or processing. Once processed, manipulated, or interpreted, and also depending on context, data can then have meaning and become information.

In relation to the types of information, there are levels of use associated with data:

1) Basic use; for use by any Sustainable Resource Development (ASRD) staff, CLMA member or public in the form of read-only data. In this case, the users can view the data and “print screen” copy or use pre-published .jpg or .pdf files for specified data. In some cases attributes may be removed in order to make some datasets suitable for viewing.

2) Intermediate use; for use by only specific levels of resource staff within ASRD and member companies in order to conduct planning and analysis using the data. This will allow limited access to view and download GIS data. This is limited to specific users and by geographic extent. In some cases attributes may be removed in order to make some datasets suitable for viewing and usage.

3) Advanced Use; for high-end specific member company analytical staff who will have full access to view and download authorized data sets on a periodic basis for sanctioned use. In addition, this level of user will be required to personally sign a confidentiality agreement that outlines the data use to ensure it does not get released to a third-party. The FtMF retains the data and will not distribute data in raw form unless there is a proven and agreeable need of the owners of the data and the FtMF.

Currently, the structure of accessing/viewing internet GIS maps and data is being investigated. For defining access to internet map services, the following will need to be determined over the next few months:

- What users will be accessing the map services?
- What datasets are available for each level of use (will link to data sharing)?
- What level of use is required for each user?
- How will the data be secured?
- On what level will the data be secured (application, web-server, or operating system)?
- What level of security is possible to attain with the current architecture and staff support?

In the interim, until web access of GIS data can be investigated in more detail, GIS shape files will be provided through CD, DVD, or external hard drives to members and will include data sharing agreements as part of the data exchange process.

9.0 INTEGRATED MANAGEMENT

The CLMA successfully identified the known energy and forest industry access needs through the previously mentioned processes. The collaboration and cooperation between industry sectors and government support staff at the landscape level is an example of how things can be done to achieve objectives. While this has worked extremely well thus far, there will undoubtedly be issues that will need to be addressed as the CLMA continues to mature and grow as an Association.

The CLMA believes its membership will continue to increase as its programs produce results that demonstrate it is beneficial and in the best business interest of the members.

10.0 FOREST MANAGEMENT THREATS

Forests are dynamic. Forest structure, age, renewal, and patterns are constantly changing. Threats to the forest may occur that require changes in plans due to fire,

insects (mountain pine beetle), and land base deletions. Losses to the timber resource can be compounded considering that the entire forest resource has been allocated and companies are dependant upon full access to support their operations, which leaves little or no flexibility. The impact of significant fire or major pine beetle infestations could be devastating to the forest industry and communities reliant upon forestry, and, in the short-term, to caribou habitat. A large fire or outbreak of mountain pine beetle would change the forest. It would result in a shift to the current age-class distribution of the target area. Forests would become young and no longer provide caribou habitat for several years. The loss of caribou habitat can come from industrial development, as well as the aforementioned natural processes. Protecting old forests and the values they provide paradoxically threatens old forests and the values they provide. This reinforces the need to manage at the landscape level thereby lessening the impact on a smaller area and perhaps an individual company. Cooperation and sharing of impacts may be necessary to adequately deal with these across administrative boundaries. The CLMA structure provides a unique mechanism to assist in the facilitation of the cooperation between individual companies as necessary.

11.0 CONFLICT RESOLUTION

Resolution of the issues listed above will require a cooperative and flexible approach by the industrial sectors and between companies. The CLMA essentially operates as a voluntary group with common interests and with recognition that integration is essential. However, it cannot be the sole mechanism for resolving conflicts between companies. The CLMA will encourage companies to work out their differences and cooperate on the landscape for the best interest of industries as a whole. The CLMA is an excellent mechanism for development of relationships and for the different sectors to learn more about the other's business needs, which is a significant step forward.

12.0 LEGAL AUTHORITY

The legal authority for roads rests with the Alberta government, which approves road plans for all developers. Control of access use is also the responsibility of the Alberta Government, which may use disposition conditions to require the owners of access dispositions to install access control structures. The Alberta government is also responsible for regulating Off Highway Vehicle (OHV: motorcycle, quad, snowmobile, etc.) use and other anthropogenic use of access. In some cases it may be necessary to control public use of access to protect important resource values.

13.0 APPROVAL

Alberta Sustainable Resource Development - Public Lands and Forests Division (PLFD) and Fish and Wildlife Division (FWD) Assistant Deputy Ministers collectively reviewed and endorsed the IIAP on June 23, 2006. The plan is intended to be an iterative process that will be resubmitted annually by the CLMA by September 30. This submission represents the second annual resubmission with amendments. **It is still anticipated that ASRD will provide a process that is similar to Information Letter 2005-01 for the Chungo Creek Industrial Access Management Area (ASRD 2005).** It is recognized that endorsement does not constitute approval of individual roads, only

the general location of the corridor at a landscape level. When a road is proposed it will have to go through normal approval processes. However, it should require less review and time provided the road complies with the IIAP. Approvals and schedules for road construction and use will occur through the existing LOC and related approval processes. ASRD may require LOC conditions be related to site-specific concerns. It is at this stage that site-specific resource values will be identified and addressed by the proponent.

This IIAP, particularly due to the significant change in the reclamation / restoration section discussed earlier, requires formal approval by ASRD to allow the CLMA to move forward.

14.0 IMPLEMENTATION / PROCESS OF APPLICATION

There is a need to address the current road application process. Now that the IIAP has been endorsed, a government guideline for road development similar to the Chungo Creek “information letter” is necessary.

The purpose is to ensure early dialogue and integration between sectors. Member and non-member energy companies should first contact the FMA holder or quota holder before submitting surface rights applications to government. This will initiate the coordination and integration process internally between forestry and energy needs before the government reviews the application. The government will use this plan to guide its regulatory decision-making with respect to applications for linear corridor development such as roads and pipelines. If any applications are received without this referral, the government should make it a condition in the application process. If CLMA member companies require changes to the IIAP, the CLMA will work with that company to resolve any conflicts and track the changes on its databases and post the latest plan on the FtMF web site.

This process also needs to apply to companies who currently are not part of the CLMA IIAP to ensure both sectors are aware of the application and activity. All resource users developing roads within the Little Smoky and A la Pêche caribou ranges will be required to incorporate the intent of the IIAP in their planning process. Any companies that are not currently part of the CLMA will be encouraged to contact the CLMA should they propose any access development in the area. The first road (Route 506 upgrade) under the IIAP was submitted for approval on March 5, 2007 (although it was in the works in various forms for almost two years). Subsequent negotiations to “get to approval” resulted in a unique process that will undoubtedly set the stage for the future and most importantly will provide member companies with clear direction on how future LOC’s will be dealt with for the CLMA area. The Route 506 approval is a first step in moving away from past “one off” approvals which could have included comprehensive LOC conditions that are more appropriately dealt with at the landscape level. This will involve moving to a system that deals with appropriate landscape management conditions such as restoration and monitoring under the management of the CLMA. The IIAP deals with location so the only mitigation requirements in the LOC should be for that route only.

This is a significant improvement over past approval processes in that there were attempts to include conditions on individual dispositions that were not appropriate in time or in scale to the project. LOC conditions should now only include those relating to the standard, use and construction of the road itself. Landscape management conditions will be included in the CLMA IIAP. This allows for adaptive management for the benefit of caribou by truly working with a continuous improvement program that is based on monitoring.

Provided the CLMA follows through with the adaptive management commitments, LOC applications should become more streamlined and easier for ASRD to approve. In addition, the development of an implementation plan to follow the recommendations that may be endorsed from government in response to the pending WCCLPT plan will include the development of a management plan for “intact areas.” This will also improve the direction for regulators, setting clear objectives and application of effective conditions for approval. The implementation plan development, subject to government endorsement, should commence immediately following the completion of the WCCLPT plan. The CLMA intends to take a lead role in this (Figure 2).

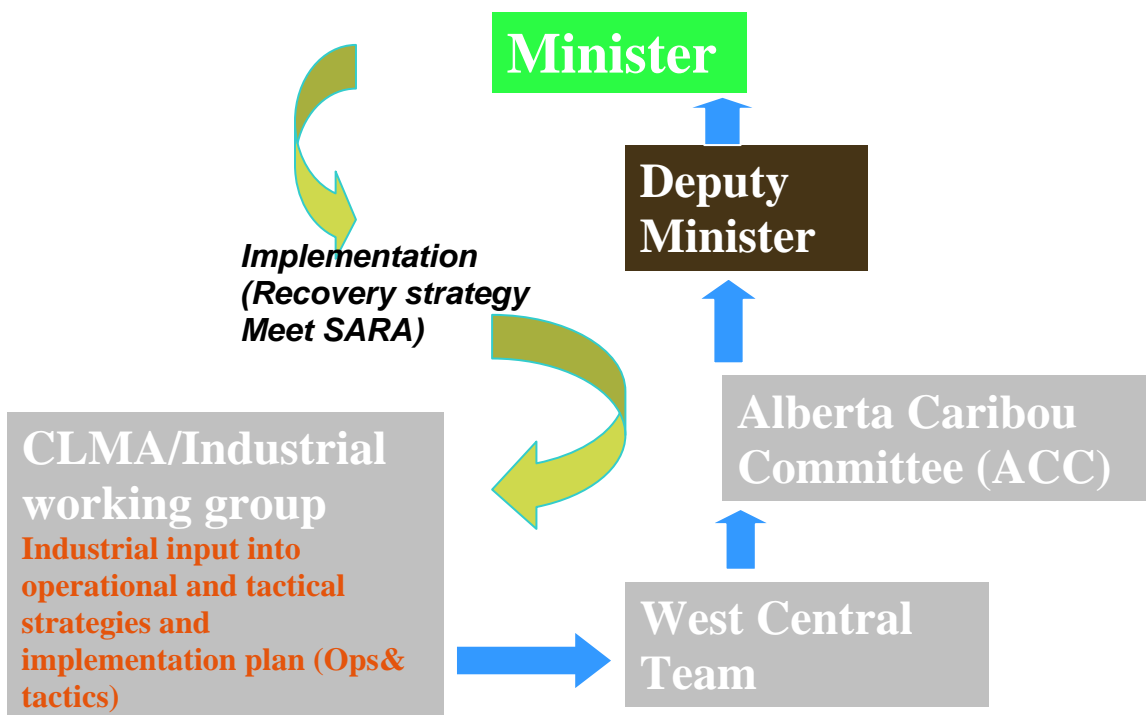


Figure 2. Role of the CLMA.

15.0 COMMUNICATIONS

The CLMA has developed a process for communications between industrial proponents to collaborate on access planning and development and is key to the success of the IIAP.

The CLMA will utilize the FtMF infrastructure to ensure the IIAP and other related initiatives are transparent and readily accessible to all interested parties (Appendix I).

16.0 PUBLIC INVOLVEMENT

The CLMA is committed to public involvement as part of the development of its plans when necessary. Public involvement includes using the FMA holder's public advisory committees. The CLMA will also work with individual members on developing a public involvement process for specific activities. Public involvement is important when proposing to reclaim or deactivate a road used by the public and/or Aboriginal communities. Participants in the public involvement process may include:

- Trappers
- Aboriginal communities
- Energy companies
- Forestry companies
- Local politicians, MD's, counties, town councils (i.e. Hinton, Grande Cache, Fox Creek, Valley View, Edson etc.)
- Public advisory committee(s)
- Snowmobile/ATV clubs.

The effort will be to seek representation of those directly affected by or interested in access management in the IIAP area. In addition, it is important to consider the broader public interest, particularly where decisions are likely to be seen as regionally significant or contentious.

Interested parties will be engaged in public participation processes in several ways. Specific groups or individuals will be personally invited to participate in discussions about proposed changes in access. Additionally, a broader audience will be given an opportunity for input through processes such as Open Houses. The access planning process will be ongoing as access is developed and reclaimed therefore; there will be an annual review of the active participants and, as necessary, new participants will be invited.

For Aboriginal forest users, there will be presentations given to Chief and council, elders and within the communities to educate and provide information about the CLMA, IIAP and its proposals. At additional meetings and gatherings the CLMA and its affected members will seek input in important plan development areas such as access management and traditional use. One of the key outcomes will be to incorporate aboriginal interests into access reclamation and development with an emphasis on caribou concerns. It is anticipated that the Foothills Model Forest Aboriginal Involvement Program and the Referral Process being developed through that Program can facilitate communication and involvement with local Aboriginal communities. The Aboriginal involvement process will be dynamic and evolve throughout the development of this plan dependant upon participation and issues identified.

17.0 SUMMARY / NEXT STEPS

As this is a living document the CLMA will be continually updating databases over the next year and posting updates to the FtMF website. In addition, the CLMA is committed to facilitating the implementation of any strategies that may come from the Alberta West Central Caribou Recovery team.

The CLMA will, in its business plan for the next year, include an assessment of various mitigation strategies currently employed operationally on caribou ranges. For the most part these are untested guidelines which have been utilized to replace effective strategic and tactical planning. Many of the guidelines and conditions imposed on industry have no clear objectives associated with them. It is the intention of the CLMA to assist government in moving to objective based management and away from prescriptive management.

Operational planning has three requirements:

- a) Identification of the procedures most likely to be effective.
- b) Testing and validation of these procedures
- c) Integration within a strategic and tactical planning framework and prescribed application within core and general habitat areas.

The first step will be to have ASRD identify the objectives for each of the guidelines and then conduct a process of validation and assessment of the effectiveness of meeting the objective.

Two mitigation strategies currently employed in the caribou ranges are gates (manned and un-manned) and rig matting which should be objectively assessed and validated for effectiveness. The first step will be in asking ASRD to provide measurable objectives for these requirements so that assessments can be completed. Other considerations should include how these may affect other objectives such as primary prey control. Other conditions that should also be assessed in the future are: speed limits, and timing of operations.

There are many factors that effect caribou population. Therefore the IIAP is not intended to be an end point or a "be all - end all." That is one of the reasons that the IIAP will be a dynamic (living) document. The CLMA and its members will also support the government on population management and predator control when it is necessary.

APPENDIX I

Communications Plan

The communications plan identifies audiences, key messages and is a beginning to outline communication goals, objectives, strategies and tactics for the IIAP.

Background and Introduction

The following communications plan supports the vision, goals and objectives of the CLMA and more specifically the IIAP. The CLMA is relatively young; therefore it is natural that discussions will continue to solidify the CLMA vision, goals and objectives. Therefore, this Communications Plan provides a broad overview of the communication activities that are planned by the Association. The goals of the Caribou Landscape Management Association are:

- a) Conservation of caribou habitat.
- b) Support the recovery of caribou populations.
- c) Fund research gaps.
- d) Communicate the efforts and activities of the Association.

Audiences

- a) Partners or potential partners.
- b) Stakeholders.
- c) Public.

At a minimum, the audiences need to be aware of the intent and activities of the Association. Ideally, audiences will support the Association, its vision and its activities. The Communications Plan for the IIAP will be tailored to each audience group. Communications will take a phased-approach. Initial attention and priority was focused on partners and potential partners. The second phase involves communicating with stakeholders and the public.

The following key messages will be used by all the partners to communicate with internal and external clients, potential partners, public, ENGO, First Nations, and government.

KEY MESSAGES:

Partnership and Cooperation for Caribou Landscape Management

- The CLMA operates under the umbrella of the Foothills Model Forest
- The association is a partnership of forest companies, energy companies, government, and other stakeholders committed to making on-the-ground changes for the long-term conservation of caribou habitat in West Central Alberta.

- The members of the Association are cooperating to reduce their collective industrial footprint in the ranges of the Little Smoky and A la Pêche caribou herds.
- The members of the Association are cooperating to mitigate the impact on caribou habitat for the Little Smoky and A la Pêche caribou herds.

Caribou Conservation

The association's management efforts will focus on:

- Cooperating to reduce the future industrial footprint in caribou habitat;
- Reclaiming the industrial footprint to restore caribou habitat;
- Supporting applied research to increase knowledge about caribou and caribou habitat for the purpose of caribou conservation; and
- Partnering and supporting Alberta government initiatives to manage caribou recovery through the Alberta Caribou Recovery Plan.

On the ground action

- Development of the IIAP.
- Additional funding will be provided for high priority projects endorsed by Association members.

Advancing Sustainable Forest Management

- Sustainable forest management is to maintain and enhance the long-term health of forest ecosystems, while providing ecological, economic, cultural, and social opportunities for the benefit of future generations.
- The Caribou Landscape Management Association and its actions are another example of how Foothills Model Forest and its partners are advancing management of Alberta's forests.

PHASE ONE: PARTNER COMMUNICATIONS

Communications Goal: The partners of the Caribou Landscape Management Association will communicate consistent messages relating to the association and the IIAP.

The CLMA will abide by the Foothills Model Forest Media Policy as follows:

MEDIA POLICY

Introduction and Background:

To accommodate the increased media interest and partners' concerns in a changing political and business environment the Foothills Model Forest has seen the need to develop a standard set of media guidelines to be applied across all Foothills Model Forest program areas.

The media guidelines are consistent with Foothills Model Forest's Phase III Communications and Extension Strategy and its current year work-plan (2006/2007). The focus and resources of the Foothills Model Forest communications and extension program and program leaders are on integrating knowledge and tools into forest and resource management policy and practice. Communications targeted at the general public will support and be consistent with knowledge transfer activities. Therefore, media relations at the model forest is generally reactive vs. proactive in nature. Nevertheless guidelines for working with the media are required.

Foothills Model Forest is a research organization that successfully builds partnerships. It secures financial support from over ninety organizations with the majority being from industry and government. The Foothills Model Forest *works with* its partners to develop practical solutions to forest management questions. The Foothills Model Forest approach to dealing with the media needs to remain true to the organization, more specifically:

- a) Foothills Model Forest will speak to research projects,
- b) Foothills Model Forest will speak to research findings,
- c) Foothills Model Forest will speak to how knowledge and tools guide or are integrated into land and forest management.
- d) Questions about specific land and resource management policy and practice will be directed to the appropriate partner organization.

Foothills Model Forest media dealings should not compromise the position of its partners. However, Foothills Model Forest partners need to respect the organization's need to communicate about its research findings in an honest manner.

Finally every media encounter represents an opportunity for Foothills Model Forest and its partners to communicate the message that sound research supports land and resource management decisions. Where possible, Foothills Model Forest will accommodate media requests.

Types of Media Interactions:

This document generalizes media interactions into two categories:

1. Reactive media inquiries.
 - Issue related
 - Feature piece
 - Special interest

2. Proactive (earned media) media inquiries.
 - Special event
 - New programs announcements
 - Program updates

All types of media inquiries will be directed to and managed by the communications and extension manager.

1. Reactive Media Inquiries

Reactive media inquiries are where the Foothills Model Forest is responding to calls from a reporter, writer or journalist. There are three types of reactive media inquiries at the Foothills Model Forest:

Type One:

Issue Related

An issue related media inquiry could be generated from a local, regional or national media. This type of inquiry is on an issue that links to Foothills Model Forest research such as Species At Risk Act (grizzly bear, caribou research); grizzly bear management (hunt); development (Cheviot Coal Mine; logging). Note many of the aforementioned issues are intertwined. The Foothills Model Forest needs to be prepared to answer questions relating to the science/research behind these issues as well as to direct the media to the appropriate spokesperson within the organization to answer management-related questions.

How to Handle:

- Media inquiries will be directed to the communications and extension manager.**
- The communications and extension manager will determine who will speak to the reporter. Issues-related inquiries pose particular challenges to researchers because they are experts in their fields yet in keeping with typical media relations protocol spokespersons can only speak to their areas of responsibility and authority, which in this case is Foothills Model Forest research. In the past, this dichotomy has created stress for researchers and resulted in unfavorable media coverage. Therefore, the communications and extension manager, general manager or president of the Foothills Model Forest will be the spokesperson on issue-related inquiries.**
- The communications and extension manager will notify affected partners.**
- Foothills Model Forest key messages and Q&A will be made available to partners as an information item.**

Type Two:

Feature Stories

Feature stories can be generated from local, regional, national or international media. This type of inquiry focuses on science and issues. Requests for feature stories typically come from local newspapers, large daily papers where the story will appear in a weekend edition; Discovery Channel; BBC; National Geographic; Canadian Geographic. Print stories require a significant investment from Foothills Model Forest. However, these have huge potential to communicate the message of sustainable forest management research to a large, urban audience.

How to Handle:

- Media inquiries will be directed to the communications and extension manager.**
- The communications and extension manager will negotiate terms of the story with the writer or producer.**
- The communications and extension manager will work with the lead researcher to determine if resources are available to accommodate the request.**
- If necessary, the general manager will be involved to determine the value of accommodating a request for a feature story.**
- Participation of the program lead is required for feature stories. The general manager or communications and extension manager will also participate in all feature story interviews.**

Type Three:

Special Interest Story

Special interest stories can be generated from local, regional, national or international media. This type of inquiry focuses on science or special projects. Request for special interest stories typically come from local newspapers, daily papers, Daily Planet program on Discovery Channel, daily electronic media. Special interest stories are shorter than feature stories and do not require the same level of resources from Foothills Model Forest. They have the potential to communicate the message of science to an urban audience.

How to Handle:

- Media inquiries will be directed to the communications and extension manager.**
- The communications and extension manager will work with the lead researcher to determine if resources are available to accommodate the request, as well as the value in accommodating the request.**
- Participation of the program lead is required for special interest stories. The general manager or communications and extension manager may participate in interviews.**

2. Proactive (earned media) inquiries

There are opportunities for the Foothills Model Forest to work with the media in a proactive manner. Similar to reactive media inquiries the communications and extension manager will manage these dealings with the media.

Earned media opportunities may focus on achievements, milestones or community-based involvement. Furthermore, knowledge transfer activities may be significantly more effective if Foothills Model Forest engages the media in a proactive manner. An example of this is providing media with the opportunity to learn about the Highway 40 North Demonstration Project. Proactive media events will be included in the communications plan for individual projects and approved by the appropriate activity teams. Cooperation between the program lead and communications and extension manager is necessary.

Roles and Responsibilities:

As previously noted, the Foothills Model Forest Communications and Extension Program will be the lead in initiating and responding to all media contacts. This will be done in consultation with the general manager, communications steering committee and program leads. The Foothills Model Forest communications and extension manager should be the first point of contact for the media. The Foothills Model Forest communications and extension program will respond directly to media inquiries relating to research projects, provide background information and refer calls to other spokespeople as appropriate. In addition to this document, spokespeople from partner organizations will be identified for each program area.

Foothills Model Forest spokespeople will notify the Foothills Model Forest communications and extension manager of all media interactions. Briefings are important because they serve as a warning flag for emerging issues or areas of potential concern. The briefing should include the date and time of the call, name and affiliation of the journalist; questions asked by the journalist and responses given. The

communications and extension manager will collect information on the expected time of the media story and any other relevant information.

Spokespeople should be clear in speaking to the media that they are representing the views of their organization.

Emergency Communication:

In the event of an emergency, the program lead will advise the general manager. The general manager will ensure that the appropriate people within the partners are communicated with.

Communication Objective:

Periodic “Quicknotes” will be sent to the partners of the Caribou Landscape Management Association. After the first one is done there will be one sent out each quarter.

3. Strategy and Tactics:

The Director of the Caribou Landscape Management Association will write and distribute four Quicknotes each fiscal year. Quicknotes are one to two page documents that summarize initiatives or research findings that are distributed key parties and are posted on the Foothills Model Forest web site.

Responsibility:

- Wayne Thorp and Lisa Jones (Communications and Extension Manager, Foothills Model Forest) to coordinate and support delivery of messages and products.
- Members in Association must commit to and be involved in delivery of messages.

Timeline:

Produced quarterly starting January 2006.

Deliverables:

Four Quicknotes.

PHASE TWO: EXTERNAL COMMUNICATIONS

Communication Goal:

The CLMA will communicate with stakeholders about the Integrated Industry Access Plan during its development.

Communications Objectives:

During development of the IIAP external communications was conducted with key stakeholders to ensure they were aware of CLMA activities and support.

Stakeholder Consultation:

The development of the IIAP did not involve a comprehensive public involvement program but rather a consultation process with key stakeholders. Presentations were

made to stakeholders shown below with the objective of informing them on the CLMA and specifically to seek input on the IIAP.

Information Meetings held to date:

Sturgeon Lake Cree First Nation Chief and Council	September 14, 2005
Grande Cache Mayor and Council	September 20, 2005
County of Yellowhead Reeve and Council	September 27, 2005
MD of Greenview Reeve and Council	September 28, 2005
Town of Hinton	October 4, 2005
Foothills Ojibway	October 4, 2005

In addition, FMA holders introduced the CLMA and IIAP at their Public Advisory meetings.

Communications Objective: By March 31, 2006 launch a website for the Caribou Landscape Management Association.

Strategy and Tactics:

A website for the Caribou Landscape Management Association was developed through the Foothills Model Forest. A portal to the site is on the Foothills Model Forest homepage, which accesses the CLMA subsite. The IIAP will be posted on the FtMF web site with the latest datasets and map products.

Communications Objective: By March 31, 2006 a web based referral product will be implemented by the FtMF.

The FtMF GIS group will provide GIS data to CLMA members via the Internet using Internet Mapping technology. This will provide access in a true mapping framework to not only existing and planned roads data but also supplementary data such as Caribou RSF's and terrain datasets. This data will be updated on a continual basis to provide members with the most current versions of all planning related spatial data. The data will be provided from an Internet server located and maintained at the FtMF in Hinton.

APPENDIX II

CD on back cover of report (includes .pdf files of all maps and the IIAP document)

APPENDIX III

CRRP: Guidelines for planning and implementation

APPENDIX IV

Line Classification and Inventory Pilot Using Aerial Imagery: General Summary to September 19th, 2007

APPENDIX V

Fiera Biological Consulting: Vegetation Response to Disturbance: Implications for Range Recovery for the Little Smoky and A la Peche Caribou Herds