

Alberta Newsprint Company

# 

# **Revised October 2002**



SILVACOM



# **1999 Detailed Forest Management Plan**

revised October 2002







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# **Chapter 1 INTRODUCTION**

ANC Timber Ltd. has been granted a Forest Management Agreement (FMA# 8900026, see Appendix 1) by the Province of Alberta that covers approximately 374,000 ha, of which over 355,000 ha is classified as forested. This detailed forest management plan (DFMP) outlines ANC Timber Ltd.'s management plan for the next ten-year period. The DFMP will not necessarily describe, in detail, how all the commitments are to be delivered. Rather, the DFMP describes the commitments by ANC Timber with respect to how the FMA area is managed over the period of this plan. It provides a framework within which lower level plans and policies are developed. Much greater detail will be provided in documents developed after the approval of the DFMP: Operating Ground Rules, General Development Plans, Annual Operating Plans, Alberta Government policy, and Company policies and procedures.

ANC is committed to the approach that the path to sustainability of forests and their benefits and products must involve an adaptive management process: management activities are modified using experience gained from previous activities; performance monitoring and analysis provide feedback for future management decisions; and the process is repeated during each planning phase, resulting in better strategy development.

# 1.1 Purpose of the DFMP

Alberta Newsprint Company (ANC), a joint venture of the Stern Group and West Fraser Timber Company Ltd., is a leading manufacturer of premium quality newsprint. Using proven, state-ofthe-art equipment and technology throughout its processes, for maximum production efficiency and quality control, the Whitecourt, Alberta mill produces environmentally friendly chemithermomechanical (cTMP) pulp and saleable newsprint.

The mill facility requires about 265,000 Bone Dry Tonnes (approximately 690,000  $m^3$ ) of virgin coniferous wood fibre and 17,000 Tonnes of recyclable paper annually. The virgin fibre is supplied from the area defined by the Forest Management Agreement (FMA) #8900026 and from a Commercial Timber Quota in FMU W6. Total virgin coniferous fibre available is 391,000  $m^3$  per year. The waste paper is supplied through purchases from community recycling programs.

During recent years, forest management has become increasingly complex as societal values have shifted and scientific knowledge has increased. The government has adopted a multipleuse philosophy with respect to forested areas in the province. This means that forest companies have to consider not only the sustainability of fibre flow, but also the sustainability of other resource values such as recreation, wildlife, and water quality. It is the intent of this plan to provide a description of the management of the FMA area—which will incorporate all resource values, in addition to fibre flow, within the FMA area—and how it will be managed in a long-term, sustainable manner. The Alberta Government, through the Department of Sustainable Resource Development, sets the regulations and guidelines that are intended to protect **all** values of the forest.

The detailed forest management plan is a requirement of FMA #8900026. The Forest Management Agreement defines the roles and responsibilities of ANC Timber Ltd. and the Alberta Government with respect to the management of the forest management area. It is the



intent of this plan to follow the direction of that agreement in terms of management goals, objectives, and strategies.

The FMA Agreement gives ANC Timber Ltd. the right to establish, grow, and harvest timber within the forest management area. It defines ANC's rights with regards to the land and our management obligations including reforestation and forest protection. It outlines our harvest reporting procedures, dues payment requirements and mill development requirements. The intent is to renew the agreement in perpetuity. The Forest Management Agreement is included as Appendix #1.

This DFMP establishes the sustainable level of harvest for coniferous and deciduous tree species for both ANC Timber and the quota holders who operate within the FMA area. It also fulfills Section 10.(3.) of ANC Timber Ltd.'s Forest Management Agreement which states that the Company shall, "Not later than the tenth anniversary date of this (FMA) agreement...submit a revised detailed management plan...". This version of the DFMP is a result of revisions made on the original draft plan, submitted on June 28, 1999. Figure 1.1 illustrates where this DFMP fits within the Alberta provincial planning hierarchy for Forest Management Planning.

# **1.2 Planning Process**

Figure 1.1 outlines the planning processes of Alberta Newsprint Company. As indicated, there are many layers or levels within the process, all of which are important in meeting the company's and society's Goals. The hierarchical planning structure ensures that higher level initiatives are implemented at the proper level of operations. Regardless of the level within the hierarchy, a similar process takes place. Five steps can be identified:

1. Identification of the current conditions

- 2. Development of Goals and Objectives
- 3. Selection and implementation of the most applicable strategy
- 4. Implementation of a monitoring system that will allow evaluation/modification of the selected strategy (key step in adaptive management)
- 5. Revise strategies as appropriate

This DFMP is one of the fundamental documents in setting company Policies, Goals and Objectives. It outlines the broad strategies that we have selected to help us meet those Objectives. Finally, it outlines some of the monitoring systems we have in place to ensure that our strategies are working effectively. The complete set of monitoring systems will be developed, in consultation with Alberta Sustainable Resource Development, during the post-approval negotiations concerning the Operating Ground Rules and the Commitment Matrix.

ANC's latest DFMP has been developed through industry and government cooperation. ANC forest managers have compiled information from several sources, incorporated the applicable legislation (Table 1.1), along with our Goals and Objectives, and devised a sustainable management plan for the FMA area.





Figure 1.1 Forest Management Planning Hierarchy. Blue boxes are planning levels after the DFMP approval.



Provincial	Federal
Environmental Protection and Enhancement	Canadian Environmental Assessment Act
Act	
Fisheries (Alberta) Act	Canada Environmental Protection Act
Forests Act	Federal Fisheries Act
The Forest Prairie and Protection Act	Fertilizers Act
Forest Reserves Act	Migratory Birds Convention Act
Historical Resources Act	Navigable Waters Act
Natural Resources Conservation Board Act	Pest Control Products Act
Occupational Health and Safety Act	Transportation of Dangerous Goods Act
Provincial Parks Act	
Public Highways Development Act	
Public Lands Act	
Public Transportation Act	
Soil Conservation Act	
Water Act	
Weed Control Act	
Wilderness Areas, Ecological Reserves, and	
Natural Areas Act	
Wildlife Act	

Table 1.1 Provincial and federal acts applicable to ANC's forest operations

As indicated in Figure 1.1, there are three additional planning levels after the approval of the DFMP whereby further and more detailed implementation strategies are developed. Probably of most significance are the ANC Operating Ground Rules and Standard Operating Procedures, along with the Government policies, which provide the framework for the development of detailed goals, strategies and implementation programs.

Upon approval of this DFMP, a new set of Operating Ground Rules will be negotiated with Alberta Sustainable Resource Development. These ground rules will be unique to the ANC FMA (per section 11 of the FMA) and will meet the Goals and Objectives contained within this plan.

# 1.3 Description of the Operating Area

The FMA area's east-west boundary is marked by Ranges 5-17 and its north-south boundary is marked by Townships 55-63 (Figure 1.2). Figure 1.2 also shows the subdivision of the FMA area according to areas (called FMUs) that are used for forest management planning: Pine/W8 (38,700 ha), Little Smoky/W1 (225,600 ha), Foothills/E7 (86,200 ha), and Berland/E6 (23,300 ha), to equal approximately 374,000 ha.

Figure 1.3 is a more detailed depiction of the FMA area, showing its subdivision into the natural subregions: central mixedwood (8,800 ha), lower foothills (171,400 ha), upper foothills (179,300 ha), and subalpine (14,400 ha). Included in these areas is a special management area, the Caribou Zone (172,000 ha). ANC's Forest Management Agreement (FMA) area is approximately 373,900 ha. The FMA area comprises 94% of productive forests, 5% of non-forested and 1% of recreational areas. The close, but not exact, area totals are due to rounding areas.







# 1.4 1996 Detailed Forest Management Plan

Approved by the Assistant Deputy Minister, Alberta Land and Forest Service on July 5, 1996, the 1996 DFMP describes ANC Timber Ltd.'s original management approach for the FMA area. It was the initial DFMP for the FMA area and it set the stage for future management. The 1996 plan is sound and requires only minor adjustments, rather than a complete change in focus, to ensure that management activities are reflective of new technology, new information and new approaches to resource management. To that end this DFMP enhances the 1996 plan.

Once this Detailed Forest Management Plan is approved by Alberta Sustainable Resource Development, it will replace the 1996 DFMP.

# 1.5 Company Philosophy

Three statements of intent describe how ANC Timber Ltd. approaches the management of Forest Management Agreement #8900026.

COMPANY MISSION STATEMENT: "We will consistently provide our customers with the best newsprint and service by working together as an efficient, safe and publicly responsible team."

COMPANY CORPORATE CITIZENSHIP OBJECTIVE: "ANC will be trusted by the public to act responsibly with our resources, our environment and within our community."

COMPANY FOREST MANAGEMENT PHILOSOPHY: "ANC Timber Ltd. will adaptively manage the Forest Management Agreement Area based on best available knowledge while being responsive to public desires."

The key word that ties these three statements together is the word "public". In particular, the term "publicly responsible" provides the basis of ANC Timber Ltd.'s approach to forest management. To be publicly responsible, ANC must conduct its operations in a manner that is sustainable in every area of influence. This includes not only ANC's responsibility to its shareholders, but also to the environment, to the local community, and to future generations. ANC takes these obligations very seriously, and we intend to put into place operating procedures that will protect society's interests, while fulfilling the economic benefits that ANC brings to the communities within and adjacent to the FMA area. We will do this by adopting procedures based on current industry and provincial guidelines and by developing new procedures based on current developments in scientific literature. This DFMP is a reflection of our commitment to the public in the form of a responsible forest management plan.

# **1.6 Document Structure**

There is a vast amount of information within a detailed forest management plan and much of it is technical. This DFMP attempts to make the reader's task a little easier through its basic structure and through its use of section introductions that tie the various aspects of the plan together. The DFMP is subdivided into five chapters:

Chapter 1 – Chapter 1 contains background information that lays the foundation for the rest of the DFMP. It includes our company background and philosophy, and the general purpose and cites the supporting documents for the DFMP.



The chapter concludes with a presentation of the Goals and Objectives of this DFMP, which will be used to guide the implementation of the DFMP at the three lower levels of planning (Figure 1-1). These goals and objectives have been adapted from the "Criteria and Indicators for Sustainable Forest Management" developed by the Canadian Council of Forest Ministers (CCFM 1997). ANC believes that the industry-wide approach represented by the CCFM's Criteria and Indicator concept is necessary to deal with goals and objectives that are broader in scope than what can normally be dealt with at an individual company level.

- Chapter 2 The landscape assessment chapter describes the FMA area according to its abiotic, biotic, and socio-economic features. The information presented in this chapter is a snapshot in time of the existing conditions of the various forest resources.
- Chapter 3 The detailed forest management strategy of ANC is modelled in the timber supply analysis (TSA). This chapter contains a condensed version of the TSA. The TSA is vital to the DFMP because it analyzes how much timber can be sustainably removed from the FMA area. This in turn, determines the annual allowable cut (AAC) on which many of ANC's strategies depend. The assumptions and models used to determine the AAC are based on sound scientific principles. ANC has spent considerable effort ensuring the TSA reflects realistic levels of timber removal and is sustainable in the long term. The analyses in this chapter are based on the operational units used in forest planning, the FMUs (also called sustainable yield units).
- Chapter 4 Several of the forest resource components described in Chapter 2 have been predicted in the 180-year planning horizon, as a result of the proposed forest management scenario modelled in the timber supply analysis. By comparing current and predicted forest conditions, ANC assesses the potential impact of forest management activities on the landscape and determines necessary adjustments to the selected forest initiatives. The analyses in this chapter are based on the ecological characteristics of the landbase, as described by the natural subregions and Caribou Zone subdivisions.
- Chapter 5 This chapter outlines the strategies ANC has developed to meet the Goals and Objectives defined in Chapter 1. It is the most important chapter in the DFMP because it contains the methodologies by which ANC will meet its commitments. The strategies developed in this chapter will form the basis for the operating ground rules and procedures that will be implemented in ANC's day-to-day operations. These are the strategies that will protect such societal values as wildlife, recreation, biodiversity and watersheds. ANC Timber's general approach is to obey all legislated guidelines and standards, while adopting more stringent standard operating procedures (SOP's) wherever we feel that would be beneficial. ANC has developed company-specific SOP's, based on current scientific principles, when we felt that legislation and other guidelines were not enough to meet our stated Goals and Objectives.



# 1.7 Goals and Objectives

Developing Goals and Objectives applicable to a large FMA area like the one ANC Timber administers, is a difficult task considering the number of factors that must be taken into account during the planning process. The Government of Alberta has embraced a multiple-use concept for public forestland in our province, which adds to the complexity of forest management. Forest planners must consider profitability, environmental sustainability, societal goals, community interests, and the interests of other resource users, to name but a few. Fortunately, the forest industry in Alberta has a long history of cooperation with government agencies and other stakeholders. This has led to the development of strong provincial legislation aimed at creating a sustainable forest industry. It has also led to the development of self-imposed guidelines and operating procedures in addition to government guidelines. These regulations and guidelines assist individual companies in making the right choices during the development of short- and long-term goals, objectives, strategies and operating procedures. Finally, an atmosphere has arisen during the development of the forest industry in Alberta that has attracted many top-level professionals to individual companies' management teams. At ANC Timber, we believe that we have attracted the best people available to fill those positions.

During the process of developing goals and objectives, ANC Timber Ltd. engaged in discussions with Alberta Environmental Protection, Millar Western Industries, Blue Ridge Lumber (1981) Ltd., and Mostowich Lumber Ltd. to determine if it was feasible to develop a series of regional Goals and Objectives for the sustainable management of the forest areas within the Whitecourt region. Consensus was reached that the Canadian Council of Forest Ministers (CCFM) had developed a framework (CCFM 1997) necessary to begin development of regionally based forest management principles. Several discussions and meetings were held among this group with the final consensus that the CCFM wording was an excellent description of sustainable forest management. The Criteria and Indicators (C and I) developed by the CCFM were intended to provide a common understanding and scientific definition of sustainable forest management in Canada. The C and I framework reflects an approach to forest management that is ecosystem based and recognizes that forests provide a wide variety of values to all Canadians.

This DFMP, then, defines a series of Goals and Objectives that address the various topics recognized by the CCFM. In order to provide a sense of scale around the objectives a statement of scope was also defined for each objective. Four scopes or scales recognized: National, Provincial, Landscape/Regional, and Forest/FMA area. If an objective could only be met by implementing strategies across the entire country it was given a National scope. Similarly, if strategies could be developed at a provincial scale then the scope is Provincial. Some objectives could be met by having regional strategies and others could be only approached at the scale of an FMA area. Generally, but not exclusively, if the scope is Forest/FMA area, then ANC Timber will take a significant level of ownership in the development of strategies and measurement criteria associated with determining success or failure in meeting the objective. As the scope broadens towards Provincial and National levels, detailed forest management plans will be less applicable. Every Objective listed within this DFMP has an associated strategy, and the location of this strategy in the DFMP is identified.

The ANC level of involvement statements give the reader some insight into how ANC expects to become involved in the varied aspects of managing the FMA area. A list of definitions is provided for the involvement category given each Indicator:



O: *Owned* by ANC Timber. Fundamental to the internal values, mandate or mission of ANC Timber. ANC Timber will normally wish to set indicators and objectives and to take a lead role in forecasting and monitoring performance against these goals.

A: *Adopted* by ANC Timber. Originally external to ANC Timber but are accepted by or imposed upon ANC. ANC will normally want to agree on indicators of performance and will be willing to modify conflicting objectives and share in the cost of forecasting and monitoring performance.

R: *Recognized* by ANC Timber as valid aims of others. ANC may be unwilling to modify conflicting objectives and to incur uncompensated effort in forecasting and monitoring performance.

D: *Disputed* by ANC Timber. These are not accepted as valid aims by ANC. ANC will likely contest any activities in pursuit of such goals and will be unwilling to participate in cooperative monitoring and forecasting.

The Goals and Objectives include traditional concepts, such as timber values, but go beyond timber values to encompass other environmental and social values. ANC used an adaptive management approach to further define the specifics of how an Objective would be met in practice. These are defined as strategies, which are described in Chapter 5 of the DFMP. The following is a complete description of the Goals and Objectives that will be used to achieve aspects of sustainable forest management within ANC Timber's Forest Management Agreement area.



# ANC Goals and Objectives

#### GOAL 1—CONSERVATION OF BIOLOGICAL DIVERSITY

It is the goal of this detailed forest management plan to not cause a reduction in ecosystem diversity, species diversity, or genetic diversity as a result of the activities directed by the plan.

**Objective 1.1:** Maintain, both spatially and temporally, within the natural range of variability the relative percentage and extent of historical forest types, as measured by the extent, in area, of forest types, relative to the historical condition and total forest area.

Scope: Forest/FMA

ANC Level of Involvement: Owned

The strategies for addressing this objective are in Section 5.1.1.1.

**Objective 1.2:** Assess the current condition and ensure the current condition is within or moves toward the natural range of variability as measured by percent and extent of area by forest type and age class.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

The strategies for addressing this objective are in Section 5.1.1.1.

**Objective 1.3**: Maintain the integrity of the ecosystem by not exceeding critical thresholds for levels of fragmentation and connectedness of forest ecosystem components, as measured by the level of fragmentation and connectedness of forest ecosystem components.

Scope: Landscape/Regional

ANC Level Of Involvement: Owned

Strategies for meeting this objective are in Section 5.1.1.2.

**Objective 1.4:** To maintain or decrease the number of known forest dependent wildlife species classified as extinct, threatened, endangered, rare or vulnerable relative to the total number of known dependent species, as measured by the available habitat.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to meet this objective are in Section 5.1.2.



**Objective 1.5:** Ensure the populations of select species and species guilds are not put at risk, as measured by the availability of wildlife habitat and the change over time of habitat types.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to meet this objective are in Section 5.1.2.

**Objective 1.6:** Ensure that the number of known forest dependent species, as measured by the availability of habitat, that occupy only a small percentage of their former range does not increase.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to meet this objective are in Section 5.1.2.

**Objective 1.7**: Maintain regionally adapted genetic populations for commercial and endangered forest vegetation species, implemented by an insitu/exsitu genetic conservation strategy for commercial and endangered forest vegetation species.

Scope: Landscape/Regional

ANC Level Of Involvement: Adopted

Strategies to meet this objective are in Section 5.1.4.1.

# GOAL 2—MAINTAIN AND ENHANCE FOREST ECOSYSTEM CONDITION AND PRODUCTIVITY

Sources of disturbance and stress typically include insects, disease, fire, pollutants and exotic pests. The goal of this DFMP is to not cause disturbance and stress to forest ecosystems that results in a state or condition beyond the range of natural variability. Forest ecosystems have an inherent capacity to recover from disturbances. This DFMP intends to ensure that ecosystem resilience is not diminished.

**Objective 2.1**: Area and severity of insect attacks are maintained at rates appropriate to ensure other natural processes are not disrupted.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies for addressing this objective are in Section 5.2.2.3.



**Objective 2.2:** Area and severity of disease infestations are maintained at rates appropriate to ensure other natural processes are not disrupted.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies for addressing this objective are in Section 5.2.2.3.

**Objective 2.3:** Area and severity of fires are maintained at rates appropriate to ensure other natural processes are not disrupted.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies for addressing this objective are in Section 5.2.2.1.

**Objective 2.4:** Ensure changes in crown transparency on a forest level do not reflect significant changes to forest health, as measured by the percentage coverage, by class.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies for addressing this objective are in Section 5.2.1.1.

**Objective 2.5:** Ensure the area and occurrence of exotic insect and disease species does not compromise natural ecological processes.

Scope: Landscape/Regional

ANC Level Of Involvement: Adopted

Strategies for addressing this objective are in Section 5.2.2.3.

**Objective 2.6**: Identical to Objective 1.2.

**Objective 2.7**: The percentage of area successfully naturally regenerated and artificially regenerated will be 100% of all areas harvested within two years of harvest.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies for addressing this objective are in Section 5.2.1.2.



**Objective 2.8:** Not reduce, beyond the natural range of variability, the capacity of the forest to accumulate biomass by means of maintaining or increasing the mean annual increment by forest type and age class.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.2.1.2 and Section 5.2.1.3.

#### **Definition Box**

#### Biomass

Represents the mass of living organisms inherent in an ecosystem and is considered a measure of forest ecosystem condition.

#### Mean annual increment (MAI)

The average increase in volume of individual trees or stands up to a specified point in time. The mean annual increment changes with different growth phases in a tree's life, being highest in the middle years and then slowly decreasing with age. The point at which the mean annual increment peaks is commonly used to identify the biological maturity of the stand and its readiness for harvesting

**Objective 2.9**: Identical to Objective 1.6.

**Objective 2.10:** Maintain and, keep current, company forest inventories.

Scope: Forest/FMA

ANC Level of Involvement: Owned

Strategies to address this Objective are in Section 5.1.1.1.



#### **GOAL 3—CONSERVE SOIL AND WATER RESOURCES**

This goal is achieved by ensuring that the capacity of soil and water to function within the range of natural variability is not diminished. The soil and water resources of the forest underpin the long-term ecosystem sustainability.

**Objective 3.1:** Minimize the percentage of harvested area having significant soil compaction, displacement, erosion, puddling, and loss of organic matter, as measured by the percentage of harvested area affected in these ways.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.3.3.

**Objective 3.2:** Minimize the area of forest converted to non-forest land uses (e.g., urbanization and industry).

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.2.3.

**Objective 3.3:** Maintain water quality indices within acceptable levels for the Province of Alberta, as measured by water chemistry, turbidity, and other parameters.

Protection of water resources within the FMA is intended to ensure the quality and quantity of water is not affected beyond the range of variability that would potentially result from natural processes

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.3.2.1.

**Objective 3.4:** Maintain natural trends and timing of events in stream flows from forest catchments.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.3.2.2.



**Objective 3.5:** Ensure changes in the distribution and abundance of aquatic fauna are within the range of natural variability, as measured by the potential effects of ANC's management activities on aquatic fauna habitat.

Scope: Landscape/Regional

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.1.3.

**Objective 3.6**: Implement policies and guidelines that provide for specific management practices to protect ecosystems from inappropriate practices. In particular, maintain or increase the percentage of area managed for soil and water protection.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.3.2.1.

**Objective 3.7:** Ensure the total FMA area has road construction and stream crossing guidelines in place.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.3.1 and Section 5.3.2.1.

**Objective 3.8:** Ensure the hydrologic cycles are not affected or changed beyond the range of natural variability by forest management activities, measured by the amount of surface area of water within forested areas.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.3.2.2.



#### GOAL 4-MAINTAIN MULTIPLE BENEFITS OF FORESTS TO SOCIETY

This goal is achieved by not reducing the capacity of forests for generating a flow of benefits to society.

**Objective 4.1:** Ensure quadrant (5 year) removal of forest wood products does not exceed amount determined to be sustainable.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.4.2.

**Objective 4.2:** Minimize the distribution of and changes in landbase not available for timber production.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.2.3.

**Objective 4.3:** All population trends, as measured by trends in habitat availability, of indicator animal species of economic importance will be maintained or increased.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.1.2.



**Objective 4.4:** Ensure competitiveness of ANC by maintaining returns on investments to allow increased R and D expenditures in forest products and processing technologies, even in the absence of government incentives.

#### **Definition Box**

#### Relationship between competitiveness and sustainability

Remaining competitive is an important aspect of sustainability for two reasons. First, the provision of jobs and incomes and payment of corporate taxes to governments is dependent on ANC Timber's ability to be profitable. Second, the relative efficiency and competitiveness of ANC Timber will determine its ability to absorb the higher costs that may be associated with environmentally sensitive development and production. ANC Timber intends to remain competitive and profitable in the forest products sector, ensuring a satisfactory return on investment to its owners.

Scope: National

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.4.4.

**Objective 4.5:** ANC will contribute to the national economy by maintaining or increasing its employment in forest related sectors.

Scope: Landscape/Regional

ANC Level Of Involvement: Recognized

Strategies to address this Objective are in Section 5.4.1.

**Objective 4.6:** Maintain or increase the utilization of the forests for non-market goods and services, including forestland use for subsistence purposes.

Scope: Landscape/Regional

ANC Level Of Involvement: Recognized

Strategies to address this Objective are in Section 5.4.3.



**Objective 4.7:** Maintain opportunities for economic valued non-market goods and services.

Scope: Landscape/Regional

ANC Level Of Involvement: Recognized

Strategies to address this Objective are in Section 5.4.3.3.

**Objective 4.8:** Maintain availability and use of recreational opportunities.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.4.3.1.

#### GOAL 5—ACCEPTING SOCIETY'S RESPONSIBILITY FOR SUSTAINABLE DEVELOPMENT

Sustainable forest management must recognize individual's and group's rights to protect their current and traditional way of life by allowing these individuals and groups opportunities to provide input into how FMA #890026 is being managed by ANC. ANC intends to ensure that no individual's or group's rights are reduced as a result of ANC Timber's activities.

**Objective 5.1:** Forest planning and management processes will consider and meet legal obligations with respect to duly established individual and group rights, including Aboriginals.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.2.

**Objective 5.2:** Protect unique or significant community (including Aboriginals), social, cultural, or spiritual sites.

Scope: Forest/FMA

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.5.1.



**Objective 5.3:** Continue to provide areas of forestland available for subsistence purposes.

Scope: Provincial

ANC Level Of Involvement: Recognized

Strategies to address this Objective are in Section 5.4.3.3 and Section 5.5.1.

**Objective 5.4:** Maintain or increase the diversity of forest use at the community level.

Scope: Landscape/Regional

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.5.1.

**Objective 5.5:** Provide opportunities for input to planning processes to communities and groups with stewardship or co management responsibilities.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.2.

**Objective 5.6:** Encourage public participation in the forest management process.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.2.

**Objective 5.7:** Invest in forest-based research and development.

Scope: National

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.4.4.



**Objective 5.8:** Contribute to public forestry education.

Scope: National

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.2.

**Objective 5.9:** Participate in mutual learning mechanisms and processes.

Scope: National

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.2.

**Objective 5.10:** Participate in the development of appropriate forest sector government policy, primarily at the Provincial level but also at the Federal level, where appropriate.

Scope: Forest/FMA

ANC Level Of Involvement: Owned

Strategies to address this Objective are in Section 5.5.3.

**Objective 5.11:** Ensure the participation of ANC in the defining and amending of all laws and regulations and policies pertaining to or impacting upon forestland management.

Scope: Provincial

ANC Level Of Involvement: Adopted

Strategies to address this Objective are in Section 5.5.3.

#### LITERATURE CITED

CCFM (Canadian Council of Forest Ministers). 1997. Criteria and Indicators of Sustainable Forest Management in Canada. Technical Report. Natural Resources Canada, Canadian Forest Service, Ottawa, ON.

