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THE ALBERTA FOREST LEGACY

**IMPLEMENTATION
FRAMEWORK FOR
SUSTAINABLE
FOREST MANAGEMENT**

THE
ALBERTA
FOREST
LEGACY

The Alberta Forest Legacy sets out a management approach that reflects citizens' desire to maintain, on provincially-owned land, their access to the diverse economic, cultural and recreational benefits that are provided by, and dependent upon, sustainable forest ecosystems.

The Alberta Forest Legacy is an implementation framework built upon the recommendations provided to government through public consultation since 1990, including Alberta's Round Table on the Environment and Economy, Forest Management in Alberta: Report of the Expert Review Panel, and the Alberta Forest Conservation Strategy. It is a continuation of a 60-year process of incremental change, driven by advancements in knowledge and changes in public demands on the forest landscape.

The Alberta Forest Legacy shifts us beyond land management practices designed for single outputs, such as timber and oil. It challenges us to look at a much broader landscape, and to blend consideration of all resource values, measurable and perceived, when making our management decisions. We opt for this shift because it points us to sustainability. Sustainability is the state in which we can be confident that the forest resource and all its values will be available to us not just today, but also tomorrow. We do not know all the answers as to how to make this shift because it is a process that will take place over many decades, during which time forest ecosystems, human economies and social pressures will continue to change. However, we believe that the principle of Adaptive Management will allow us to move forward in an experimental, informed, and continuously improving fashion. It sets out a process of hypothesis-testing at the scale of whole systems, continually evaluating and adjusting our management relative to predicted responses, objectives and predetermined thresholds of acceptable change. Adaptive Management will bring us closer than ever before to knowing, beyond reasonable doubt, that we are doing the right thing.

The Alberta Forest Legacy will reinforce and safeguard Albertans' view of the kind of forest we want - a forest capable of providing us with diverse social and economic benefits today and tomorrow, while at the same time retaining the ecological vibrancy that has made it such a special part of our lives and our landscape.

It is time to set the Alberta Forest Legacy implementation framework in place to provide context, continuity and consistency to the shift that will occur in how we conduct our activities within Alberta's forest landscape.

Economic Opportunities Today and Tomorrow

Albertans' Expectations

Alberta's forest lands provide livelihood, and a quality of life, to thousands of Albertans who expect their rights to these benefits to continue not just today, but into the future.

The forest economy encompasses a broad range of resources: land-based resources such as forestry operations, agriculture, recreation and tourism; sub-surface resources such as oil, gas and coal; and non-market values which include traditional use, fish and wildlife habitat and forest soils, as well as ecosystem services such as clear air and clean water, and society's expressed perceptions about aesthetic and other values of the forest landscape. The long-term economic asset of the forest must figure prominently in our management approaches, which in turn must recognize the considerable importance of retaining and gaining access to international markets.

Alberta has developed management approaches that integrate many of these needs and values. The Alberta Forest Legacy framework refocuses and reinforces this integrative direction under the priority of sustainable development and the guiding principle of adaptive management. The Alberta Forest Legacy moves us forward along the path set out by Alberta's Round Table on the Economy and the Environment (1992), which directed that this province be "a leader in sustainable development, ensuring a healthy environment, a healthy economy and a high quality of life in the present and the future."

This leadership will require certain changes at the provincial level. We will require policies that recognize and respond to changing values and demands resulting from new knowledge, expertise and facilities, as well as changing demographics resulting from increasing populations and urbanization.

These demographic changes will lead to greater emphasis on protecting the forest from inherent disturbance such as fire, as well as on access to the forest for recreation. At the same time, economic opportunities must be preserved if society is to retain the capability of managing its forests for any and all of these purposes.

Balancing the Use

The Alberta Forest Legacy adopts the concept of a range of management intensities. This range allows for a better balance and tracking of human activities in relation to the change in inherent disturbance in Alberta's forested landscapes. Users, in cooperation with one another and with other users, will plan how the categories of management intensity can best be applied on various portions of the landbase. In this way, remedial actions are taken in response to

what Albertans want their forest to look like. The four categories of management intensity are as follows:

- *Extensive* - The majority of forest areas will continue to support a range of uses through an extensive management approach. Extensive management incorporates a number of principles. It provides for multiple benefits such as recreation, tourism, energy, timber, grazing and precious metals. It allows for forest regeneration through disturbance, and for human activities that approximate, in terms of scale and impact, disturbances such as wildfire through the development of new models such as mixedwood management. Extensive management recognizes the importance of maintaining forest structure and age class in a way that perpetuates the patches and structures of the forest left after wildfire. Ecosystem flows between protected, extensive and enhanced forest landscapes are integrated to ensure the maintenance of inherent disturbance, and/or its approximation by human activity.
- *Heritage* - Certain portions of the landbase will lend themselves to identification as heritage areas under instruments such as Alberta's Special Places program.
- *Facility* - This intensity of use applies to very localized facility areas, reserved for tourism or industry-related construction, or for community development.
- *Enhanced* - Some areas within the forest will prove to be well suited to support increasing levels of production and employment through the application of enhanced management practices. Enhanced forest management increases the productivity of a site for a particular output, beyond that of sites managed to meet basic and current forest management standards. Enhanced management will be proposed and implemented as part of a comprehensive process such as development of a forest management plan (which involves public involvement), and ongoing research, monitoring and assessment. The areas allocated for an enhanced management regime will respect ecological limitations, as defined by sound science, and a need for positive economic return. Enhanced management principles could be applied to a wide range of outputs, including timber, grazing land, wildlife and tourism attractions. Enhanced forest management will need secure long-term tenure that adequately protect the public trust, while recognizing the economic risk of the proponent. More detailed information can be found in the final report of the Enhanced Forest Management Task Force (1997).

Under each of the four intensities, planning and management activities will be monitored, evaluated and adjusted as science increases our knowledge. Our activities will approximate, more closely than at present, the range of inherent variability generated over time by natural processes and disturbances within the forest.

Woodlots

The Government of Alberta and the wood products industry will encourage the development of sustainable woodlots in the province as an economic option for private landowners, as market conditions warrant.

Level Playing Field

The Government of Alberta will work with national and international organizations to ensure the highest standards of sustainable forest management are consistently applied as widely as possible, to maintain a level playing field for those who support its precepts and application in Alberta.

Support for Sustainability

The Alberta Forest Legacy recognizes that economic instruments can provide a better mechanism for forest conservation than a more regulatory approach. The Government of Alberta will employ the principle of user-pay and other regulatory and contractual arrangements that will encourage a sustainable forest economy, where they are shown to be of good practice as determined by the application of sound science.

Ecological Integrity of the Forest

Forest ecosystems are diverse, complex and subject to change. This change results from ecosystem dynamics and inherent disturbances, ranging from catastrophic forest fires to gradual alterations in temperature and rainfall patterns, as well as by historic and recent human activities. Alberta's Forest Legacy recognizes the importance of learning from the inherent disturbances that have sustained and shaped forests to this point in their evolution, as well as from the consequences of our own present-day activities.

Ecological Management

The Alberta Forest Legacy calls for activities in the forest to be managed in such a way as to allow the forest landscape to continue to evolve under the influence of disturbances that are, in scale at least, similar to those disturbances that shaped them in the past. This requirement, and the principle of adaptive management, will demand flexibility in how we manage our activities, whether they be for resource extraction, resource protection or ecological conservation. Each action will be related to a hypothesis which will be based on the best available science before being tested on the ground. Research will indicate deviations from the desired result, and the action will then be modified and re-tested in a continuous cycle of improving our knowledge, and our results.

Ecological management is the practice of designing our activities on forest lands so that they do not interfere with the ecosystem's ability to perpetuate itself, as it has for millennia. In some instances this might lead to limits on consumption; in others it will increase economic and societal opportunity within the forest. The Provincial Government will play a role in developing and promoting ecological management as a tool. Citizens and industry will use this form of management as a tool as they plan and assess activities according to the impact of those activities on the ecosystem. Ecological management applies to the full range of land-use scales, from localized stand-level planning to broad landscape-level planning. It emphasizes the contribution of science and public input in forming hypotheses and framing desired outcomes. It leads us to plan our activities so that they maintain, to the extent possible, the level of inherent disturbance processes common to any particular ecosystem, so that the diversity and productivity of the forest landscape is maintained.

Forest Planning

More collaborative forms of forest management planning will evolve between the various industrial, commercial and community users of the forest whose areas of interest overlap. These planning approaches will utilize full landscape planning and integration of the full range of management intensities - heritage, extensive, facility and enhanced. Public involvement is a legislated requirement. The Government's planning role will be refocused on the setting of broad objectives.

Research

New research will underpin policy and operational changes set out in the Alberta Forest Legacy. It should be noted in this regard that Alberta is a prime contributor to the Network of Centres of Excellence in Sustainable Forest Management and an active supporter of Canada's Model Forest program. The province funds the Alberta Forest Management Science Council, and supports the Alberta Science and Research Authority's work to coordinate and encourage research that has direct influence on the quality of life of all Albertans. The government encourages, through the FMA renewal process, the commitment of money from private industry towards sustainable forest management research. The new Forest Resource Improvement Regulation channels some of Alberta's royalty funds into better research, planning, inventory and regeneration practices. The Alberta Forest Research Advisory Council will, in collaboration with the Alberta Science and Research Authority, channel strategic research funds into "Alberta Advantage" projects.

Reference Areas

Reference areas will be established to allow interpretation of research and monitoring of results. The reference areas will be of a size and longevity appropriate to the experiment, as well as benchmark information about unrelated or "background" ecosystem changes that occur. More detail on the practical approach to ecological management and adaptive management is provided in the report of the Alberta Forest Management Science Council, written in response to the Government of Alberta's request for advice on the implementation of sustainable forest management.

Tenure

Alberta's forest tenure agreements are considered for renewal on a periodic basis. During the renewal process there is an opportunity to ensure that tenure agreements are updated to serve the Province's best interests, which in the long term include realizing sustainable forest management for economic, social and ecological reasons. The government should provide sufficient flexibility in existing and new resource allocations (and tenures) including timber supply to support a changing management environment. In cases where enhanced forest management is proposed, secure long-term tenure and stumpage systems must be developed. These systems will adequately protect the public trust, but also recognize the economic risk accepted by the proponent.

Special Places 2000

Maintenance of heritage areas in support of forest conservation will be achieved as necessary through the Government of Alberta's Special Places 2000 policy. This policy will complete a network of areas representing the environmental diversity of the province, including representative landscapes.

Society's Options

Society's view and requirements of the forest have changed significantly over the last century, and will continue to evolve. The Alberta Forest Legacy's principle of adaptive management will oblige those responsible for forest management to be responsive to these continuing changes, from a foundation of science that allows us to consider all elements of the equation and to adjust our course as our knowledge grows. Strong partnerships, including the partnership between provincial and municipal governments, will provide context and guidance to this process. An effective partnership is one in which all parties know the role they are expected to play, and fulfill those expectations for the common good of all.

Public expectations of environmental management have escalated substantially in recent years. In addition, an extraordinary increase in Alberta's population over the last 80 years, coupled with forecasts of continuing growth, require us to be ready for increased demands on all the attributes of the forest.

The Alberta Forest Legacy accepts the vision, goal and principles of the Alberta Forest Conservation Strategy. It lays the groundwork for building on these, and for making the definition of society's vision a ceaseless and on-going work. The Alberta Forest Management Science Council has advised the Government of Alberta (1997) that defining a vision of a desired future forest in Alberta is a necessary step in implementing a sustainable forest management program. Arriving at this vision requires the involvement, participation and partnership of all landbase users, including local communities and the general public. Forecasts of the "future forest" should include population characteristics and expected relationships between human values and the maintenance of ecological integrity.

Quantifying Social Values

We have increasing capability to apply science to identifying the social and economic values related to the forest landscape. Just as timber values and the impact of alternative management methods can be quantified, so can some non-timber values using structured public input. Others are less easily quantified and integrated into management activities, but the use of public involvement in identifying, analyzing and weighing them will help inform the management process. The marketplace also provides a fairly transparent index of social values placed by the consumer upon various goods and services provided by the forest landbase.

Effective Public Involvement

The government, along with forest stakeholders - including aboriginal peoples and municipalities - will continuously review existing decision-making and review processes that allow for public input. Participants will develop new mechanisms, where necessary, to ensure that local views, values and needs are balanced and addressed in the planning process. New approaches for involving the public in the allocation of resources will be tested on a regional basis to provide information about the merits of such mechanisms. There should be respect for and trust in our mutual commitment to make the best decisions possible, using the best available information. Effective public involvement also requires accountability for our actions, backed up by adequate education, monitoring and enforcement, and an openness to the diverse social expectations of our forest ecosystems.

Stewardship Enforcement and Monitoring

Alberta in the 1990s has moved increasingly toward the view that trust is the preferred basis for management and stewardship of activities that affect natural resources, such as the forest. A strong emphasis remains, however, on the use of strict enforcement and meaningful penalties in cases where that trust is breached.

Commitment to the Landbase

Alberta's Forest Legacy maintains Alberta's commitment to the Green Area, a planning zone which encompasses the province's forested landbase. The area was established in 1948 and continues to provide a foundation for a multitude of economic and ecological benefits. The Alberta Forest Legacy also continues Alberta's forest protection program aimed at fire, insects and disease.

Project Assessments

Integrated, science-based assessments of new projects will address environmental, social and economic aspects; market and non-market values and resource supply, and processing components. Public involvement will contribute at a variety of levels, from the global demand- and- supply local interests.

Exercising Caution

Caution will be exercised when the consequences of actions in the forest are uncertain. The threat of serious or irreversible damage to society's options, whether through damage to a forest ecosystem, economy or social value will be considered before action is taken.

Community Participation

The Government of Alberta, along with forest stakeholders - including aboriginal peoples and municipalities wherever appropriate - will review existing decision-making and review processes that allow for public input. The importance of elected local government structures will be recognized. Because policy and operational changes have a different, and sometimes greater, effect at the local than the global level, better mechanisms will be developed where necessary to facilitate local participation and agreement, and to ensure that local views, values and expertise are incorporated into the planning process.

Transparent Process

Processes used to make decisions about activities in the forest will be reviewed, with the intent of ensuring clear and consistent processes, clear identification of responsibilities and accountability, and full disclosure of the rationale for decisions.

Implementation

Adaptive Management is key to implementation of the directions presented in the Alberta Forest Legacy. Adaptive Management utilizes the best science available in reaching decisions made to keep pace with the evolving nature of the forest, and of the economic and societal desires of Albertans.

The Provincial Government will continue its commitment to a facilitative and collaborative role with all forest users in relation to a number of governance issues, including:

- Overlapping tenures
- Cumulative effects of multiple resource objectives, as defined and allocated by government;
- Provision of sufficient flexibility in existing and new resource allocations, including timber supply, to support the changing management environment.

Assessment of Performance

The Alberta Forest Legacy calls for the Government of Alberta and all forest users, together with national and international parties as appropriate, to generate sustainability indicators and targets to evaluate the sustainability of the forest and the forest-based economies and communities of Alberta. This process already has a working foundation in the 1995 Canadian Council of Forest Ministers (CCFM) document "Defining Sustainable Forest Management: A Canadian Approach to Criteria and Indicators."

The six criteria identified by the CCFM as broad yardsticks of sustainable forest management can be paraphrased as:

- 1) Conserving biological diversity
- 2) Maintaining healthy and productive forest ecosystems
- 3) Conserving soil and water
- 4) Monitoring the forest's contribution to global ecological cycles
- 5) Maintaining the forest's multiple benefits to society
- 6) Opportunities for society to take responsibility for sustainable development.

In Alberta, some work has already begun to develop locally-relevant indicators that will measure our own specific achievements in regard to all of these criteria, including enforcement, monitoring and auditing processes.

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Publication #I-689 ISBN #0-7785-0131-0