



Nova Scotia's

Code of Forest Practice

*A Framework for the Implementation of
Sustainable Forest Management*

Report FOR 2004-8


NOVA SCOTIA
Natural Resources

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Introduction

The forests of Nova Scotia are an important component of the province's environment, economy and social structure. Traditionally, forest management has concentrated on the growing and harvesting of trees. The focus has shifted to sustainable forest management whereby the well-being of the forest as a whole is considered. This approach recognizes that forests provide many other values all of which are important to the health of the forest and to society in general. Therefore, the primary objective of sustainable forest management is to sustain the integrity of the forest for future generations while providing for the multiple uses, experiences and needs of Nova Scotians.

Past approaches to establish policies on the management of Nova Scotia forests resulted in the Forestry (1986), Wildlife (1987), and Parks (1988) policy documents, Legislation, which includes the revised Forests Act, Crown Lands Act, Forest Enhancement Act and regulations on Forest Sustainability, and Wildlife Habitat and Watercourses Protection, contributes significantly to the concept and implementation of sustainable forest management. The province has also committed to numerous national and provincial initiatives pertaining to the concepts of sustainable forest management. These include: National Forest Strategy (2003), Canada Forest Accord (2003), Canadian Biodiversity Strategy (1995), Nova Scotia Strategy for Sustainable Forestry outlined in a position paper (1997) and the Canadian Council of Forest Ministers Criteria for Sustainable Forest Management (2002). The Department of Natural Resources has also incorporated the concepts of Integrated Resource Management (IRM) into the planning process on Crown lands with the adoption of the IRM Land Use Strategy in 2002.

This framework document for Nova Scotia's Code of Forest Practice presents the principles for implementing sustainable forest management on Crown lands. These principles will set the course for a forest management approach that will conserve natural forest biodiversity and enable the sustainable utilization of forest resources including timber. Each set of code principles is presented in a separate section describing the overall intent and context at a broad forest level. Detailed guidelines and technical references, designed at appropriately defined forest scales, will also be developed.

The Code of Forest Practice will provide direction and practical guidance for the sustainable management of a range of forest uses and values to benefit present and future generations of Nova Scotians.

Code Format

The code is comprised of three (3) parts:

Part I - Nova Scotia's Code of Forest Practice - A Framework for the Implementation of Sustainable Forest Management

This first document will outline the code principles that provide the guidance necessary in planning for sustainable forest management on Nova Scotia Crown lands.

Part II - Code of Forest Practice Guidebooks

The specific detail required to meet the code principles will be found in a series of guidebooks that provide forest managers and operators with guidelines that must be followed in practising forestry on Crown lands. The guidebooks can also provide landowners, contractors and operators with a sound basis for practising forestry on private lands.

Part III - Code of Forest Practice Technical References

The final component will be a set of technical references which provide options for forest management that have been found, through research and practice, to be applicable to Nova Scotia's forest conditions.

Code Review

The code will be implemented with the intent of a periodic review process to reflect the need for continual improvement of forest practices in Nova Scotia. Each part of the code will be reviewed every five years from the date of its approval and implementation.

Applying the Code

Nova Scotia Crown lands

Application of the code on Crown lands will occur within the framework of the Integrated Resource Management planning process at the strategic and local levels for each region of the province. Code principles will provide the vision for sustainable forest management at the strategic level of the IRM process, and the guidebooks and technical references will be used to develop the local area and operation plans on all Crown lands. All forest operations on Crown lands will be consistent with the Code of Forest Practice as policy of the Department of Natural Resources.

Private lands

The code provides a comprehensive set of principles and practices which, when implemented, can lead to sustainable forest management. Some practices are now implemented through existing regulations such as Forest Sustainability, Wildlife Habitat and Watercourses Protection and others that apply (Appendix I). Voluntary application of the code by private landowners will be encouraged by government through extension and education activities. By incorporating the code principles, guidelines and technical details into their practices, private landowners can make a significant contribution to sustainable forest management in Nova Scotia.

Principles for Management

Forest Ecosystems

The diversity of forest ecosystems in Nova Scotia have been classified at various hierarchical scales in the Ecological Land Classification (ELC) system of Nova Scotia which will form the basis for ecosystem management as part of this code.

In forest ecosystems, trees are the major biotic component upon which biodiversity depends. By maintaining biodiversity we enable existing forest ecosystems to withstand environmental changes, maintain an opportunity to develop new resource uses, and we preserve Nova Scotia's natural wealth of living organisms. To maintain forest ecosystems and species across their historical ranges, biodiversity must be protected in all forest areas managed for resource use.

This section of the code outlines the principles for maintaining biodiversity in forests under management. The focus is on managing Nova Scotia's forest ecosystems to sustain or restore their natural patterns and attributes. By incorporating these principles into forest management planning, we can provide habitat for all organisms, maintain diverse gene pools, and maintain the processes that support biodiversity and healthy ecosystems.

Along with the biotic elements, air, soil and water are the basic abiotic components of forest ecosystems. Air, soil and water quality and quantity are strong controlling factors on forest development processes and must be kept in sufficient quantities and/or quality to maintain the health of our forest environment.

Air, soil and water experience and suffer from many human intrusions that could ultimately affect the quality of our own lives and that of our forest environment. Forests can influence and mitigate these effects to some degree if maintained in a diverse and healthy growing condition. To prevent adverse effects on air, soil and water by human intervention, forest practices must be designed in accordance with the following principles that commit to conserving and protecting these critical elements of our forests.

- Forest management practices will be designed and conducted to conserve and enhance the health and natural diversity of Nova Scotia's forest ecosystems.
- Forest management practices will be planned and conducted according to the Ecological Land Classification (ELC) system for Nova Scotia (NSDNR, 2003).
- Forest management practices will be designed and conducted to conserve and enhance habitat for Nova Scotia's wildlife species.
- Forest management practices will be planned and conducted to protect habitat for species at risk.

- Forest management practices will recognize the contribution of protected and wilderness areas in preserving the natural forest heritage within Nova Scotia.
- Forest management practices will be designed and conducted in a manner that maintains and enhances the quality of air, water and soil in Nova Scotia.
- Forest management will be designed and conducted with consideration of the potential effects of climate change, and opportunities to maintain and enhance forest carbon sinks.

Forest Products

Most forest management activities and practices in Nova Scotia are conducted for the purpose of producing forest products. Despite the increased pressures for non-timber uses, wilderness areas, endangered species habitat, recreation, tourism and many other values, the production of timber-related products in a sustainable manner will remain a vital feature of the Nova Scotia economy. Principles that establish environmentally sound, sustainable practices are required to meet the demands for forest products required by society. These principles must develop the framework for achieving sustainable growth and harvest of forest products of higher quality and economic value. Three key principles set the basis for timber supply sustainability.

- Forest management practices will be designed and conducted to secure a long-term sustainable harvest of forest products.
- Forest management practices will be designed and conducted to improve productivity, quality and value of forests and forest products.
- Forest management practices will incorporate the best available knowledge of local ecological conditions, including soil, climate, water, terrain, vegetation and wildlife habitat, in the planning process for roads, harvesting systems and silvicultural activities.

Wildlife Habitat

A wealth of natural life has evolved in Nova Scotia through centuries of climatic change and natural succession. In the past 400 years, land use in Nova Scotia has brought about changes in forest composition and wildlife species within the forest. The overall effect of these changes on biodiversity is largely unknown, but for some species the impacts of human activities on their habitat requirements is well documented. Guidelines for forest practices that provide direction to forest managers and operators can go a long way to maintaining and even enhancing habitat for many wildlife species. As new knowledge of lesser known species and habitats becomes available, practices will have to be adapted on a continual basis.

Code principles for wildlife habitat management must maintain and enhance natural forest conditions required for healthy species populations, and take steps to improve habitats of species that are in various stages of being at risk. The following principles provide the framework for regulations, guidelines and standards for Crown and private lands.

- Forest management practices will be designed and conducted to maintain or restore the natural range and structure of forest communities to benefit the wildlife species of Nova Scotia.
- Forest management practices will be planned and conducted to respect significant wildlife habitats in Nova Scotia forests.

Integrated Forest Use

The complex demands placed on forests by today's society must be balanced to ensure the sustainability of multiple uses, rural communities and the forest environment. The IRM framework for Crown lands considers society's demands and environmental concerns for multiple uses of the public forest.

Nova Scotians have a wide range of needs, interests, values and activities that are highly dependent on the forest environment. Designing forest management practices to create forest diversity and structure suited to these diverse values, and to achieve integrated forest use plans, requires meaningful participation of all stakeholders. Crown forest lands are subject to an IRM plan that respects the interests of public ownership. Private landowners, whether their holdings be large or small, are not bound to provide for a multitude of uses on their properties. However, in many cases private landowners already manage their forests for integrated uses to meet their own objectives, for protection of the health and diversity of the forest environment, and for the leisure activities of neighbours and surrounding communities.

The following principles apply when planning and undertaking forest practices for integrated forest use:

- Forest management practices will be designed and conducted to balance the economic, cultural, social, and environmental interests and values of all Nova Scotians.
- Forest management practices will be designed and conducted to consider structure and diversity elements required for the integration of public interests.

Glossary of Terms

Biodiversity

The total variability of life on Earth including the diversity of genes, species and ecosystems.

Crown land

Public land that is managed by the Nova Scotia Department of Natural Resources.

Ecosystem

A dynamic system of plants, animals and other organisms, together with the non-living components of the environment, functioning as an interdependent unit.

Forest

An ecosystem characterized predominantly of trees with associated woody, herbaceous, bryophyte vegetation and associated faunal communities both above and below ground.

Forest Practice

An intervention/activity in a forest environment by humans, either directly or indirectly, for the many purposes of existence and/or enterprise.

Forest Products

All primary forest products according to the definition in the Forests Act.

Non-timber Forest Products

Any commodity obtained from the forest that does not necessitate harvesting trees.

Protected Area

A geographically defined area which is designated or regulated and managed to achieve conservation objectives.

Wildlife

All wild mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, fungi, algae, bacteria, and other wild organisms.

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Appendix I

List of Applicable Nova Scotia Acts and Regulations

Acts:

Nova Scotia Department of Natural Resources

- Forests Act,
- Crown Lands Act,
- Forest Enhancement Act.

Nova Scotia Department of Environment and Labour

- Wilderness Areas Protection Act,
- Environment Act,
- Water Resources Protection Act.

Regulations:

- Pesticide Regulations,
- Forest Sustainability Regulations,
- Wildlife Habitat and Watercourses Protection Regulations.