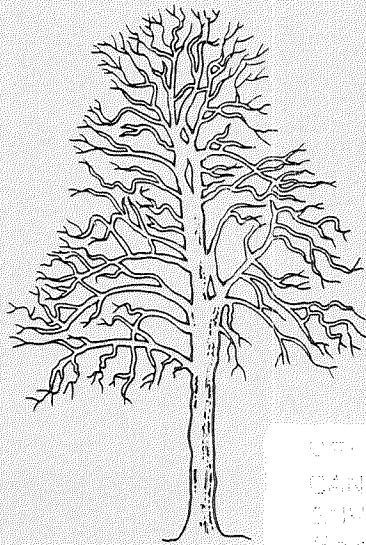


FORESTRY AND ASSESSMENT

*Development of the Class Environmental Assessment for Timber
Management in Ontario*



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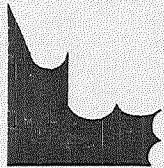
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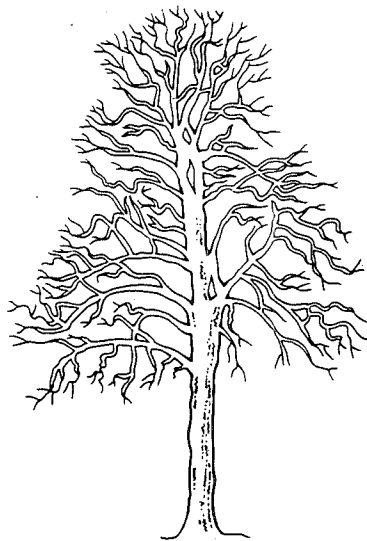
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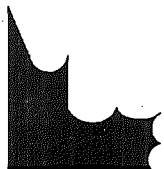
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Forestry and Assessment

Development of the Class Environmental Assessment for Timber Management in Ontario

by Julian A. Dunster and Robert B. Gibson

Executive summary

Over the past decade or more, the Ministry of Natural Resources has taken many creditable steps to improve management of the crown forests in Ontario. Forest management in the province nevertheless remains a subject of great controversy and concern. The bulk of these worries has centred on the apparently increasing number and intensity of conflicts between advocates of competing forest purposes, and on continuing doubts about the sustainability of extractive activities, especially logging, at current and projected rates of harvest and renewal.

In this context, the Ministry spent over ten years preparing a response to its obligations under the province's *Environmental Assessment Act* to carry out an environmental assessment of its forest management activities. The Ministry's efforts, through a succession of draft documents and the eventual result, *The Class Environmental Assessment for Timber Management on Crown Lands in Ontario* submitted in 1987, have been reviewed in detail in this report. We have found MNR's general approach to environmental assessment and forest management wanting on three main grounds:

First, MNR's approach does not meet the reasonable basic requirements for environmental assessment of forest management activities. It focuses narrowly on timber management planning rather than the more comprehensive forest management issues that were the proper subject of assessment. It also focuses narrowly on planning matters at the management unit level rather than addressing these along with the cumulative effects and

the regional and provincial level issues (e.g. regarding timber production policy) that are equally important and worthy of attention. And perhaps most seriously for the particular purposes of environmental assessment, MNR's approach in the class assessment document is not based on an accurate appraisal of existing biological dynamics in specific forests or on a clear understanding of the actual effectiveness and impacts of silvicultural activities in these forests. Moreover, it is not well designed to ensure such information is collected for management planning in the future.

Second, decision making following this class assessment is unlikely to respond effectively to the challenge of resolving land use conflicts. This results in part from the inadequacy of information about specific forests and impacts. But the likelihood of effective conflict resolution is also undermined by an approach, which centres on planning at the management unit level, sees the forest primarily as a resource base for the timber industry, and appears to recognize non-timber interests only grudgingly in arrangement for special treatment of "areas of concern" and in guidelines for timber management practices. There is little reason for optimism that the proliferating conflicts over forest land use can be addressed successfully through an approach that treats forest management as the equivalent to timber management with marginal adjustments.

Third, the Ministry's approach to timber management provides little basis for confidence that its implementation will ensure sustainability even within the limited ambit of timber purposes. Again this is chiefly because MNR has not prepared sound biological inventories and analyses of the conditions prevailing in individual forests in the province. The Ministry's reliance on inadequate and imperfect data about the existing stocks of growing trees and the biological capability of the land to support future tree "crops" continues to foster apparently optimistic, but unverifiable, assumptions about the likely future quality and quantity of harvestable trees.

The proposed *Class Environmental Assessment for Timber Management on Crown Lands in Ontario* is now being examined in lengthy hearings before the Environmental Assessment Board. MNR submissions in the course of these

hearings may well clarify and strengthen specific aspects of the class assessment document. They are, however, unlikely to alter substantially the scope and basic framework of the current approach. This will leave the Board with the task of deciding how best to deal with an unsatisfactory assessment and process for forest management planning. The task is complicated by the realities that the proposed timber management process is already in place and that timber management activities (building access roads, logging, replanting and tending new growth) must continue under some regime.

The Board's three options - approval of the assessment and the undertaking, approval with conditions, and rejection - are evaluated in the final chapter. We conclude that the most practical and effective means of addressing the three main deficiencies of the current approach would be a version of the conditional approval option. It would involve an interim approval of the proposed class environmental assessment with two sets of conditions. The first set, governing the immediate application of the class assessment process, would be devoted to encouraging greater respect for non-timber values, improving the quality of planning information and providing fairer and more reliable means of conflict resolution. The second set would direct preparation of a new, policy/class assessment of integrated forest management, covering forest management planning and activities at the provincial, regional and district, and management unit levels.

In essence we are recommending creative use of the legal requirements for proper environmental assessment to require MNR to design and apply forest management planning practices that are broader and better informed than those that the Ministry currently favours. This recommendation is consistent with the character of environmental assessment in Ontario. The province's *Environmental Assessment Act* is aimed not simply at requiring accurate identification of environmental impacts, but at ensuring effective integration of broad environmental considerations in the planning of undertakings. While it is unfortunate that cumbersome legal obligations are needed to force environmentally enlightened planning on unwilling proponents, there appears to be no adequately effective alternative.

The proposed policy/class assessment approach would provide a vehicle for careful consideration of the broadly environmental aspects of forest management. It would establish a well-integrated means of strengthening forest management information and planning, in part by ensuring regular opportunities for public scrutiny and comment on forest management plans and performance at all levels. If implemented in an incremental fashion as recommended here, beginning with a set of immediate adjustments to the current system and a schedule for developing a more complete response, the policy/class assessment approach should provide a practical means of improving forest management in Ontario. Moreover, this initiative could set a useful precedent for application to decision making in problem areas other than forestry. A policy/class assessment process, established through modest adjustment to Ontario's existing class assessment process, could offer workable public means of evaluating environmentally significant policy options in many fields, and of assessing activities in various sectors that raise concerns about cumulative as well as specific environmental effects. Thus the decision making in this case could stand as an important example for other jurisdictions now beginning to recognise needs for better integration of environmental and economic considerations in government decision making.

Ensuring successful application of the policy/class assessment approach to forest management will not be easy. Certainly it will entail much more detailed consideration the strengths and weaknesses of the existing information base and the flexibility of current procedures than we are able to offer. This report sets out the principles lying behind our favouring of the conditional, interim approval option and identifies some of the major issues to be addressed in approval conditions. But the implications of new material that has been and will be presented at the hearings are not addressed here. The Environmental Assessment Board is left with the task of determining the priority needs for immediate action, drafting detailed approval conditions and providing what direction it can on the substantive requirements for a proper policy/class assessment for forest management.

The Board may find some difficulty in adopting the framework recommended here. The forest management case is unusual, and although the policy/class assessment approach appears to be the most appropriate and workable solution, the Board may have to test the limits of its powers in order to impose this approach.

The difficulty of the Board's task is, however, matched by the need for a strong response. We are convinced that unless a broader, more open and more rigorous approach to forest management is introduced in Ontario, concerns about sustainability and conflicts over competing forest purposes will continue to grow. This will increase the dilemmas and narrow the options of all who are involved in managing and protecting the crown forests. Stated simply, the choice is between a demanding but hopeful initiative now, and tougher decisions under less agreeable circumstances later.

Forestry and Assessment

Development of the Class Environmental Assessment for Timber Management in Ontario

Contents

Chapter 1: The Challenge	1
<i>Application of environmental assessment requirements to forest management in Ontario</i>	
<i>Introduction</i>	1
<i>Forest management in Ontario</i>	4
<i>Forest management issues</i>	4
<i>Principles of forest management planning</i>	7
<i>The current forest management planning process</i>	11
<i>Timber management planning</i>	12
<i>The timber production policy</i>	17
<i>Land use planning</i>	20
<i>Environmental assessment in Ontario</i>	24
<i>The purposes of environmental assessment</i>	24
<i>Ontario's environmental assessment process</i>	26
<i>Class environmental assessment</i>	34
<i>Application of environmental assessment to forest management</i>	37
Chapter 2: The Response	41
<i>Five attempts by the Ministry of Natural Resources to apply the class assessment process to forest management</i>	
<i>The 1977 Draft: Contents</i>	44
<i>The 1977 Draft: Reactions</i>	45
<i>The 1980 Draft: Contents</i>	45

<i>The 1980 Draft: Reactions</i>	47
<i>The 1983 Public Draft: Contents</i>	47
<i>The 1983 Public Draft: Reactions</i>	49
<i>Scope of the undertaking</i>	50
<i>Environmental effects</i>	51
<i>Public involvement</i>	51
<i>Manuals and guidelines</i>	52
<i>Modified management areas</i>	53
<i>Bump-up</i>	53
<i>Pesticides</i>	54
<i>Monitoring</i>	54
<i>The class environmental assessment approach</i>	54
<i>The 1985 Document: Contents</i>	55
<i>The 1985 Document: Reactions</i>	57
<i>Ministry of the Environment (Ontario)</i>	57
<i>The class EA, land use planning and production policy</i>	58
<i>The environment affected and environmental impacts</i>	59
<i>Areas of concern</i>	60
<i>Cutting practices</i>	60
<i>Publicly available information</i>	61
<i>Bump-up criteria</i>	62
<i>Compliance and monitoring</i>	63
<i>Commitment to environmental protection</i>	64
<i>Ministry of Citizenship and Culture</i>	65
<i>Ministry of Tourism and Recreation</i>	66
<i>Federal Department of the Environment (Environment Canada)</i>	67
<i>Federal Department of Indian and Northern Affairs</i>	70
<i>Ontario Forest Industries Association</i>	71
<i>Floyd Laughren, MLA</i>	74
<i>The Red Lake Chamber of Commerce</i>	75
<i>Summary of reactions</i>	75
<i>The 1987 Document: Contents</i>	77
<i>The 1987 Document: Reactions</i>	80
<i>Ministry of the Environment</i>	80
<i>Areas of concern</i>	81
<i>Values maps</i>	81
<i>Remedial measures</i>	82
<i>Clear cutting</i>	82
<i>Regeneration and protection forests</i>	82
<i>Reserves and buffer areas</i>	83
<i>Water quality</i>	84
<i>The environment affected</i>	85
<i>Ministry of Transportation and Communications</i>	86
<i>Ministry of Health</i>	86
<i>Ontario Native Affairs Directorate</i>	87

	xi
Ministry of Citizenship and Culture	87
Parks Canada	88
<i>The Government Review</i>	89
Chapter 3: The Larger Context	91
<i>Major developments in forest planning and management 1976-1988</i>	
<i>Land use planning</i>	91
<i>Forest management agreements</i>	96
<i>The exemption orders</i>	99
<i>The Baskerville report</i>	105
Chapter 4: Analysis	111
<i>Basic problems with the current approach</i>	
<i>Timber management versus forest management</i>	112
<i>The traditional focus on timber</i>	113
<i>Defining the undertaking, its purposes and alternatives</i>	114
<i>The forest management option</i>	116
<i>Integration in "areas of concern"</i>	118
<i>Use of the class assessment approach</i>	122
<i>The MNR's rationale for using the class assessment approach</i>	123
<i>Generic assessment</i>	125
<i>Basic problems with the class assessment option</i>	126
<i>Integrating timber management into forest management</i>	126
<i>Limiting discretion and providing for individual assessments</i>	128
<i>Details about impacts and clarity about decision-making</i>	133
<i>The need for details</i>	134
<i>Serving timber and non-timber purposes</i>	136
<i>Guidelines and technical manuals</i>	138
<i>Barriers to effective public involvement</i>	143

Chapter 5: Options and Solutions	147
<i>What should we do now?</i>	
<i>Applying environmental assessment to forest management</i>	150
<i>The basic principles</i>	150
<i>What environmental assessment of forest management should do</i>	152
<i>MNR's approach in the <u>Timber Management Class Environmental Assessment: an evaluation</u></i>	154
<i>What was and is needed</i>	157
<i>An unconventional class assessment process for the forest management case</i>	159
<i>What to do now: response options</i>	164
<i>Option 1: Accept the timber management class assessment approach as proposed</i>	164
<i>Option 2: Accept the timber management class assessment approach conditionally</i>	165
<i>Option 2a: Accept with conditions to improve the current approach</i>	166
<i>Option 2b: Accept conditionally as interim approach only and require development of a more satisfactory environmental assessment of forest management</i>	168
<i>Option 3: Reject the timber management class assessment approach</i>	172
<i>Summary, conclusions, recommendations</i>	173
Appendix : The Exemption Orders	179

Chapter 1

The Challenge

Application of environmental assessment requirements to forest management

Introduction

Forest conflicts have emerged as common global problems in the declining years of the twentieth century. Almost all of the world's forests are increasingly subject to opposing pressures for exploitation and protection, for allocation to one purpose or another, now or later, to meet immediate needs or to serve generations to come. Few of these conflicts are easily resolvable. Indeed, many jurisdictions are mired in debates about the proper process for decision making about the current and future management of forested land.

One of these jurisdictions is Ontario. The province's inventoried forest lands cover about 61.5 million hectares, mostly under public ownership as crown lands. They are economically as well as ecologically and culturally crucial to the province's wellbeing. Throughout much of the province, but especially in northern Ontario, many industries and communities depend on the forests. Forests and their constituent resources directly and indirectly sustain all wood products operations, many commercial tourism businesses, the economic and cultural traditions of native people, a host of other activities including hunting and trapping, wilderness recreation, and aesthetic and spiritual enjoyment. They are also part of the great web of biophysical relations upon which all life relies.

In recent years, the province has seen disputes about the fate of its forests grow more numerous and vehement. These conflicts have typically centred

on specific areas and actions, especially road proposals, park plans and logging projects. But they have also reflected general dissatisfactions and fears spurred by the approaching exhaustion of the original forests and the evident inadequacies of past and present efforts to regenerate and manage the succeeding forests. Moreover, these conflicts have coincided with increasing environmental awareness and concern, declining public trust in the assurances of government and corporate officials, and rising public expectations for participation in decision making.

From a broad environmental perspective, the problems of forest management fall in two categories. The first set of problems centres on the difficulties inherent in reconciling a multiplicity of more or less incompatible uses and perceived purposes for the forests, and on needs to establish more widely accepted means of allocating and protecting the forests for a broad range of users and uses. The second set of concerns centres on the challenge of sustainability - the need to design policies and practices to govern specific extractive uses of the forest, especially logging, in a way that ensures maintenance of forest values in perpetuity.

Over the past decade, the Ontario government has responded to these concerns, and to their expression in specific forest disputes, with a succession of royal commissions, task forces and special inquiries, an extended district and regional land use planning exercise, various changes of policy, and shifts in responsibilities for forest planning and maintenance.¹ Since 1976, the Ontario Ministry of Natural Resources (MNR), the agency responsible for administration of crown forest lands in the province, has also been struggling with how to apply environmental assessment to forest management. This latter effort, which entered the public hearing stage in May 1988, is the focus of current attention among the contesting parties in forest decision making, and the subject of this report.

Application of environmental assessment requirements to forest management planning is not unique to Ontario. Other jurisdictions, most

¹ See chapter 3.

notably the United States, have also imposed such requirements. But the matter is being approached in a unique way here, through a version of what Ontario calls "class environmental assessment". It remains to be seen whether MNR's use of this approach will be successful. As will be discussed below, some serious problems have been left to be resolved in the hearings or subsequently, not the least of which is that the submitted assessment document, produced after twelve years of deliberations, was judged unsatisfactory by government reviewers and virtually all other interests except for the timber industries.

Both because of these problems, and despite them, Ontario's effort to address forest management through environmental assessment is worthy of careful attention. Ontario's environmental assessment law is designed not simply to encourage accurate identification of the environmental impacts of proposed undertakings, but to force proponents to carry out their planning in a way that effectively integrates broad environmental considerations into the identification and evaluation of options for action. The immediate issue in the case of forest management, then, is whether MNR's efforts culminating in the proposed *Class Environmental Assessment for Timber Management* represent a satisfactory response to its environmental assessment obligations and to the challenges of forest management planning. Accordingly, this report aims to assist the Ontario process by reviewing the record and character of the efforts to develop the class assessment document, clarifying the outstanding issues and identifying practical means of responding to them. In so doing we hope also to reveal what lessons can be learned from the Ontario forestry case to assist application of environmental assessment requirements in other jurisdictions and in other complex and controversial policy areas.¹

¹ Needs for assessing the potential environmental effects of broad policy and program initiatives are now receiving attention in many jurisdictions, and a variety of proposals for appropriate mechanisms are being developed. See, for example, Canadian Environmental Advisory Council, *Preparing for the 1990s: Environmental Assessment, an Integral Part of Decision Making* (Ottawa/Hull: Minister of Supply and Services Canada, 1988), esp. pp. 15-16, 56-57.

Forest management in Ontario

Forest management issues

In Ontario, productive forest land occupies nearly 40 million hectares, of which 84 percent is Crown land administered by the MNR.¹ This forested land has been particularly important as a resource base for the timber industry producing pulp and paper, lumber and other wood products. Most of the logging of crown forests in the province is carried out under lease, licence or contract by private sector operators, including multinational corporations. Ontario's forests support 41 timber dependent communities, 20 major sawmills and 34 pulp and paper mills.² Although the timber industry was ranked fourth provincially in terms of exports to the US in 1986, it is the mainstay of the northern Ontario economy.³

In addition to the timber industry, Ontario's forests have long served other important purposes and interests including hunting, trapping, fishing and other food gathering by native people and by non-native Ontarians and visitors. Recently there has been a substantial increase in forest land demand for non-consumptive recreation and appreciation purposes, and in recognition of the broader ecological values of the forests for maintenance of environmental quality.

In part because Ontario's vast forest land base has been a mainstay of the provincial economy since the time of the first settlers, it has changed greatly over the years. The massive disturbances of logging and settlement or abandonment to natural regeneration, combined with the effects of natural and human-caused wildfires in the boreal and Great Lakes-St. Lawrence forests, have complicated the patchwork of forest types and ages throughout the province. While regeneration in cut-over areas has often produced harvestable trees, the overall net result of human action in Ontario's forests

¹ Ministry of Natural Resources, *The Forest Resources of Ontario, 1986* (Toronto: MNR, 1986).

² J.H. Smyth and K.L. Campbell, 1987. *Selected Forestry Statistics, Ontario: 1987* Information Report O-X-387 (Sault Ste. Marie, Ontario: Canadian Forestry Service, 1987).

³ Ibid.

has been progressive modification and depletion of the commercially valuable timberlands. Eventually, the pressure of industrial demands led to more active regulation of the annual harvest, and adoption of much more stringent measures to protect the forests from fire and diseases in order to save them for logging. However, the initiatives to improve forest management have been widely recognised as inadequate. Because of the general weakness of information on the forests and the effects of silvicultural practices, no one has been able to set out definitively the state of the forests in Ontario. But it is generally held that, until quite recently and despite considerable public attention, regeneration efforts have not been applied seriously at a scale large enough to start tackling the many decades of neglect.¹ Moreover, regeneration and stand-tending inadequacies are only part of the larger set of forest management problems, which also include premature harvesting of the regenerated forest and limited attention to non-timber considerations.

Since the Second World War there have been several major inquiries into the long-term future of Ontario's forests. The first was the Kennedy Commission in 1947.² It was followed by a variety of internal reviews in the 1950s and 60s and the more ambitious Armson Report in 1976.³ In the late 1970's and early 80's the Royal Commission on the Environment North of 50 investigated a broad range of resource management issues, including forestry.⁴ Most recently, in 1986, Gordon Baskerville carried out a special "audit" of forest management in Ontario.⁵

A common theme in all of these reports has been that Ontario's forests must be managed much more wisely and effectively if serious depletion of

¹ Jamie Swift, *Cut and Run* (Toronto: Between the Lines, 1983), and Donald McKay, *Heritage Lost* (Toronto: Macmillan of Canada, 1985).

² Ontario, *Report of the Ontario Royal Commission on Forestry* (Toronto: King's Printer, 1947).

³ K. A. Armson, *Forest Management in Ontario, 1976* (Toronto: MNR, 1976).

⁴ Ontario Royal Commission on the Northern Environment, J.E.J. Fahlgren, commissioner, *Final Report and Recommendations* (Toronto: Ministry of the Attorney General, June 1985).

⁵ Gordon Baskerville, *An Audit of Management of the Crown Forests of Ontario* (Toronto: MNR, 1986).

forest resources is to be avoided. Waste of wood due to timber highgrading was first identified as a serious problem by the Kennedy Commission in 1947.¹ Concerns about the lack of regeneration, inadequate planting successes, and logging practices that damaged site quality were also reiterated consistently in the successive reports. These persistent criticisms have gradually undermined the myth of the inexhaustible forest and have led to growing worries that the existing harvest levels will not be sustainable for many more years and that other forest uses and values will be increasingly threatened. Indeed there are now fears that, despite recent attention to forest regeneration efforts, forest depletion by a variety of human and naturally induced stresses may have reached a point that will make a substantial drop in annual timber harvests inevitable.²

In addition to the depletion of the forest as a commercial timber resource base, the last few decades have also brought an intensification of competing demands on the land base. This has been, at least in part, a product of an expanding population pursuing alternative, often non-consumptive uses of the forest. Parks, wilderness areas, rights of way, tourism and industrial developments, private land acquisitions and urban expansions have all placed claims on forested land. For timber industry interests this has meant further reduction of the wood fibre resource base that will be available for exploitation in the short and long term.³

With these growing pressures on the forests, the Ministry of Natural Resources has found itself faced with a wide array of increasingly intractable land use conflicts. Some of these have been local or regional, others are more provincial in nature. All together they have raised questions about what

¹ Ontario, *Report of the Ontario Royal Commission on Forestry* (Toronto: King's Printer, 1947).

² While this is a widespread concern, some commentators, including Baskerville, note that because of the inadequacy of the existing forest information base it is impossible to produce a credible analysis of the nature and extent of the pending difficulties. Also, the fear is not necessarily that there will be an absolute deficiency of trees but rather a deficiency of mature, commercially desirable trees within practical transportation range of existing mills.

³ Not all dedications of forested areas to non-timber uses are an actual problem for the timber industry. The seriousness of the loss depends as much on the type and age structure as on the absolute area of the forest not assigned to timber production.

operating and management philosophy should prevail throughout the province. While MNR has undertaken several important initiatives to improve its stewardship of Ontario's forests, they seem to have been outpaced by the rise of depletion and land use conflict concerns, which now predominate among the challenges facing the Ministry. These challenges have drawn attention to the importance of better forest planning and management.

Principles of forest management planning

The planning of forest management on crown lands, or for that matter forest planning in the public interest anywhere, has deceptively simple purposes. It is meant to recognise the capabilities of the forests for meeting a variety of demands, to clarify short and long term objectives, and to identify and select management options that are reasonably likely to ensure sustainability, serve the competing objectives, and be practically implementable. Unfortunately, serving these purposes effectively, and with efficiency and fairness to all interests, present and future, is extremely difficult.

There are three main, interrelated problems. The first is that successful forest management planning requires detailed and dynamic understanding of specific forest ecosystems, and how they respond to silvicultural practices and other human activities. In addition, successful planning requires detailed knowledge about the practical capabilities of existing forest management techniques, and realistic predictions of the likely availability of financial support and expertise. Without such information it is impossible to determine what activities might be supported sustainably in individual forested areas.

These basic information needs cannot be met easily, or completely. Forest ecosystems are complex and variable, and there are many theoretical and practical constraints on the necessary research. Moreover, having detailed information about forest capabilities and limitations is not always politically

attractive. When conflicts over competing demands command political attention, it is often more convenient to rely on ill-informed optimism, instead of making tougher decisions based on knowledge of, and respect for, the limitations of what the forests can accommodate sustainably over the longer term. Many of our present forest management problems are the legacy of past tendencies to overestimate the ability of the forests to withstand abuse, and past overconfidence in the practical ability of managers to sustain or recreate a healthy forest. Design of a proper approach of forest management planning must therefore recognise both the inevitable limitations of forest capability knowledge, and the central importance of strict requirements to ensure collection of reliable, specific information about what the forests can and cannot support, and what managers can and cannot be expected to accomplish with the techniques and resources available to them.

The second problem arises from the character of the rising demands on the forests. Successful planning requires sensitive appreciation of the importance of the range of current and expected demands on the forests, and an understanding of which objectives are unavoidably in conflict and which can be pursued together or successively. This typically, and to some extent inevitably, entails preparation of general strategies addressing provincial and regional objectives and describing the extent to which the forests are expected to support non-consumptive activities (e.g. skiing and hiking, canoeing and backpacking, nature photography and wildlife viewing) and consumptive activities (e.g. logging, trapping, hunting and fishing).

The danger here is that preparation of overall strategies in a "top-down" manner may mean at best limited attention to the actual capabilities of the forests that are expected to meet the various demands. Indeed the centralised setting of objectives prior to careful analysis of forest capabilities will almost inevitably offend the goals of sustainability and conflict minimisation.¹ At the same time, an understanding of the extent and nature of demands on the

¹ The "objectives first" approach apparently reflects an assumption that we are able to dominate nature sufficiently to meet any objectives, regardless of what nature may be equipped to supply.

forests cannot be built of local information alone. It requires appreciation of broad public values as well as historical use patterns, industrial needs and aspirations, and anticipated future demands for wood products, recreational opportunities and other things the forests can provide. Proper forest management planning must, therefore, begin with the best achievable base of specific information on forest capabilities, and centre on preparation of detailed management plans which lay out the methods for meeting objectives in particular areas, but these specific plans must also reflect a larger understanding of the purposes to be served.

The third basic problem is that forest management planning is not a simple matter for the application of technical expertise. The decision making, at the provincial, regional and management unit levels, inevitably involves matters of opinion and preference, and a variety of more or less competing interests are typically at stake. Consequently, successful forest planning must be undertaken through a clear, open, rigorous and fair process. It should be able to anticipate and avoid conflicts, but when that fails it must be able to address and resolve the conflicts with minimum offence to the competing interests and maximum contribution to the value and wellbeing of the forest.

Effective response to these problems depends to some extent on individual responsibility. But even this will be frustrated if the appropriate institutional arrangements are not in place. Our focus in this report is therefore on the design of the forest management planning process.

The main products of forest management planning, and the main operational tools for forest stewardship, are detailed management plans governing how specific forest lands will be protected, exploited and regenerated. To be effective, each plan must incorporate several fundamental elements:

- measurable and attainable objectives;

- an analysis of impediments to achieving these objectives, including impediments arising from the nature of the resources and from the institutional and political structures governing them;
- explicit means of overcoming these impediments;
- a schedule of activities for implementation of the plan;
- measures to determine the effectiveness of these actions in moving towards the desired objectives;
- a means of evaluating actual progress relative to desired progress;
- provisions for systematic periodic reviews in which deviations from planned goals can be corrected by altering the objectives, the plans, the activity schedules or all of these factors.¹

The preparation of specific plans for individual management units is not all there is to forest management planning, however. Inevitably, it also involves the determination of objectives, which are to some extent regional and provincial as well as local concerns, as well as decisions on resource allocations (e.g. funds for research, planning and management activities) that depend on regional and provincial priorities as well as local needs. As we have suggested above, the substance of these decisions, and how they are made, can be both crucial and problematic. One central challenge in the design of a proper forest management planning process is therefore to arrange appropriate linkages between regional and provincial decision making and the information collection and planning centred at the local, management unit level.

Finally, it is important to draw a clear distinction between forest management and timber management. Timber management focuses on logging - on growing, providing access to and harvesting trees for use by the wood products industry. The major timber management activities are preparing inventories of the growing stock and analysing mill requirements; planning road layouts, logging schedules, cutting practices and locations; and allocating the available supplies to meet current and predicted demands. The planning is influenced most heavily by the species available, the prevailing

¹ This list is based on Baskerville, *An Audit*, pp. 7-8.

tenure commitments and the end products desired by the mills. If sustained yield timber management is being practiced, planning will also include regeneration schedules for the logged areas, stand tending, road maintenance and timber protection measures.

True forest management is considerably more comprehensive. It routinely integrates additional purposes and data into the planning, to permit consideration of environmentally sensitive areas and areas of essential habitat; ecological, recreational and aesthetic values; environmental quality goals; and other commercial activities such as tourism, trapping and subsistence food gathering. Timber management can be adjusted to allow for consideration of non-timber purposes as constraints on the main priority. But there is a considerable institutional as well as philosophical difference between this approach - which recognises "other purposes" as secondary, afterthought constraints - and forest management, which begins with recognition of a multiplicity of purposes and serves all with equal respect.

Forest management institutions and procedures must be capable of defining forest use options and their potential impacts well enough to allow identification of approaches that would produce a minimum level of environmental disturbance and ensure long term maintenance of the forest's ability to serve a multiplicity of purposes. And because some purposes are incompatible and the resource base is limited, forest management planning processes must be especially well equipped to resolve land use conflicts.

The current forest management planning process

In Ontario, the narrower timber management focus has prevailed. The original mandate of the Ministry of Natural Resources, in its earlier ministerial incarnations, was chiefly to serve and regulate the use of crown forests by the timber industry and the Ministry retains this institutional bias. Today, however, MNR's responsibilities extend well beyond timber. It is also charged with looking after fish and wildlife resources, parks, wilderness areas

and outdoor recreation. Many of these activities utilise exactly the same land base, and they are often incompatible on the same land at the same time.

The Ministry's overall set of decision-making guidelines and practices do recognise the multiplicity of demands on the crown forests. As will be discussed further below, MNR devoted considerable effort during the late 1970s and early 80s to a land use planning exercise devoted largely to consideration of competing land use objectives. Nevertheless, the Ministry's timber management planning process remains its most important means of determining what will happen in the crown forests.

Timber Management Planning

The Ministry of Natural Resources has done timber management planning for many years, in a variety of ways.¹ The approaches have evolved in response to changes in the nature of land tenure agreements between the government and the timber industry, financial arrangements and divisions of responsibility for such matters as access road construction and forest replanting. The current process, which forms the basis for the process set out in the Ministry's proposed *Class Environmental Assessment for Timber Management*, is described in the 1986 *Timber Management Planning Manual for Crown Lands in Ontario*. It centres on the production of timber management plans for each of the 114 forest management units in the province.²

These management units are areas of crown forest subject to timber cutting by private companies operating under the conditions of forest management agreements, leases (company management units), or contracts (crown management units). Under forest management agreements, which are the products of negotiations between MNR and individual timber companies, the

¹ Earlier processes are described in, for example, MNR, *Manual of Forest Management Plan Requirements for the Province of Ontario* (Toronto: MNR, 1977), and K.A. Armson, F. C. Robinson and J.E. Osborn, *Forest Management Manual for the Province of Ontario* (Toronto: MNR, 1980).

² MNR, *Timber Management Planning Manual for Crown Lands in Ontario* (Toronto: Queen's Printer, 1986).

companies assume responsibility for the bulk of timber planning and management, subject to MNR approval. Under the leases governing company management units, the company does some of the planning and management but MNR assumes responsibility for silviculture as well as overall approval. Finally, in crown management units, MNR prepares the management plans and may undertake the actual timber management operations itself or arrange for the work to be done by private operators under contract or short term licences.

Forest management agreements are now the predominant arrangement, covering over 60 percent of the crown forest subject to timber cutting licences.¹ This means that well over half of the timber management planning affecting crown forests is carried out not by MNR but by the timber industry, although MNR retains responsibility for supervision and approval.

The timber management plans are intended to guide all timber operations, including provision of road access, timber harvesting, replanting and tending, in these management units. Each plan covers twenty years, tentatively identifying operating areas by five year intervals, and providing "operating level" detail for the first five year period. The plans are updated every five years so that there will always be a twenty year plan with five years of detailed planning information in effect for each management unit. Annual work schedules are also prepared to show where, when and how operations will take place in the forthcoming year.

The stated objective of the Ministry of Natural Resources' timber management programme for Crown land forests is "to provide for an optimum continuous contribution to the economy by forest-based industries consistent with sound environmental practices and to provide for other uses of the forest."² The Ministry's *Timber Management Planning Manual* further defines the purpose of planning as an effort "to organise the activities of

¹ MNR, *Statistics, 1987* (Toronto: Queen's Printer, 1987).

² MNR, *Timber Management Planning Manual*, p.1.

harvest, renewal, and maintenance of the forest to ensure the availability of forest products from an area consistent with this objective."¹

To achieve this objective, timber management planning for each management unit takes place in six distinct steps, although in theory at least, provision is made for continuous feedback and amendment of decisions, as needed. The six steps are

- preplanning,
- objective establishment,
- strategy development,
- determination of management operations,
- plan production and submission, and
- plan review.²

In the preplanning stage, background information on the forest resources of the management unit is gathered, other ministries are notified of the forthcoming planning effort, the planning team is assembled, and terms of reference and a planning schedule are prepared, following guidelines in the *Timber Management Planning Manual*.

The second stage, where the planning objectives are established, is perhaps the most crucial. Timber production objectives are the central concern. Other forest objectives, such as protection of the environment and provision for other uses of the forest, are "qualitative" and considered only as possible constraints on how the timber production objectives are to be met. The *Timber Management Planning Manual* described the status of the various objectives as follows:

While the production objective can be quantitatively stated, the remainder of the forest management program objective can only be defined in qualitative terms. The objectives that all operations be carried out using sound environmental practices and that other uses of

¹ Ibid.

² Ibid., p.3.

the forest resources be provided for are oriented to the process of meeting the production objective and generally define limits on the methods which may be employed to achieve that objective.¹

Just how the timber production objective for each management unit is determined and applied is not entirely clear from available public information. The common starting point is the provincial timber harvest target from the Ministry of Natural Resources' 1972 timber production policy. This target has more recently been divided among the Ministry's 47 administrative districts. The resulting allocations are now set out in the District Land Use Guidelines as targets for volume of annual wood production to be met by a specified year in each district. (The important roles played by the provincial policy and the district guidelines documents in timber management planning will be discussed below.) According to the *Timber Management Planning Manual*, planning at the management unit level must begin with the determination of what the management unit must contribute to ensure the relevant district target is met.² However, the *Manual* also requires development of and adherence to "management strategies" respecting various general and local considerations (including, for example, desires to achieve "sustained-yield management," to satisfy "current industrial requirements," and to facilitate earlier harvest of "overmature timber"),³ which would inevitably affect immediate production targets. A further complication is that the objectives or targets are set out quantitatively as wood production volume (in cubic metres), but the actual timber management planning focuses on management and regulation by area (hectares); as a result, the relationship between the target determination and subsequent planning and management may be tenuous.⁴

¹ Ibid., p.5.

² Ibid., p.59.

³ MNR, *Timber Management Planning Manual*, pp.7, 60

⁴ Indeed, Gordon Baskerville has commented (personal communication, August 10, 1989) that because the planning manual deals with area regulation rather than target volumes, "it is possible to create a timber management plan under the rules without ever comparing the actual volume needs with forecast volume availability."

Once the production objectives are defined at the District level, more specific strategies and operational plans for meeting them are developed. During the process of formulating the objectives and strategies, the team preparing each timber management plan is supposed to determine and evaluate any factors that might constrain, and require adjustments to, efforts to meet the relevant timber production objective. Such factors include the biological capability of the land, the species and age class structure of the forest, topography, distance to the mills, and environmental concerns.

The strategies address silvicultural objectives, how many years must be allowed between harvests (called the rotation or cutting cycle), and how much area can be logged each year (called the maximum allowable depletion). The objective, insofar as "sustained-yield management" is pursued, is to set the depletion figures to establish and maintain a reasonably constant harvest of wood fibre over time, allowing for the expected regeneration of new forests, losses due to fires, insects, diseases and land alienations for other purposes, and assuming that markets will continue to exist for wood fibre. Refinement of the general strategies involves identification of operating areas for the 20 years covered by the plan and detailed planning of road access, logging methods (clearcuts, etc.), regeneration and new forest tending programmes for the first five years of the planning period. This work also includes identification of "areas of concern" in which there are other recognised land uses or values that should be considered in the planning of timber management operations.

A draft timber management plan for the management unit is prepared, reviewed by the planning team, revised as necessary, and finally submitted for more senior Ministry of Natural Resources approval. The process provides for public notice and comment at four points - at the commencement of the planning exercise, after the preliminary proposal and draft plan stages, and after the final plan has been approved but before implementation begins. Under the proposed *Class Environmental Assessment for Timber Management*, dissatisfied parties may petition MNR and the Minister of the Environment to "bump up" the case to the more demanding

planning and review requirements of individual assessment under the *Environmental Assessment Act*:

This planning process is now operational throughout Ontario, though it is subject to alteration in response to the results of current deliberations on the proposed class assessment.

In summary, the forest management process in Ontario focuses on deciding where timber can be logged and regrown, and in theory at least the central purpose is to meet provincially-established wood production targets. Constraints arising from non-timber uses and values are to be identified and adjustments to the operational plans are to be made where MNR judges such adjustments appropriate. But timber production purposes still predominate. Not surprisingly, this characteristic of the process has been a focus of controversy, especially among representatives of non-timber interests. This has in turn encouraged attention to the means by which timber objectives have been determined in the province. As noted above, the two main steps in the setting of timber production targets have been the adoption of the 1972 production policy and the lengthy land use planning exercise that culminated in the publication of land use guidelines for each of MNR's administrative districts.

The timber production policy

In 1972, the Ontario Cabinet gave "approval in principle" to a policy that "would allow for the production and maintenance of a resource base which would support an industrial cut of 25.8 million cubic metres of timber per year by the year 2020."¹ Achievement of this target would mean a nearly fifty percent increase in logging from the 1970-71 level of about 17.6 million cubic metres. If harvests at the higher level were to be sustained, there would also have to be a substantial increase in regeneration effort and success, since

¹ Ministry of Natural Resources, *Long Term Forestry Planning in Ontario* (Toronto: MNR, 1985), p.6.

regeneration in 1970-71 lagged well behind harvests at the 17.6 million cubic metres per year rate.¹

It is not entirely clear how the 25.8 million cubic metres target came to be selected. Cabinet had been given five options from which to choose. These options ranged from "orderly liquidation" of the remaining commercial timber, through somewhat increased regeneration efforts to permit continued cutting at the then current 17.6 million cubic metres yearly rate, to very intensive timber management to achieve a sustained annual harvest of over 45 million cubic metres.² The more ambitious options involved sharply higher government expenditures on silviculture. Cabinet seems to have chosen what appeared to be a moderate path - higher than the 1970-71 harvest level but less than what the options paper suggested would be needed to meet projected demands in 2020.³

Significantly, the production policy exercise centred on the identification and pursuit of economic opportunities as revealed through predictions of industrial demand for timber and timber products in Ontario and the rest of the world.⁴ It did not include any realistic assessment of the actual or potential capacity of the forest to provide timber sustainably at the proposed rates. The 1972 policy options document did include a section on environmental forestry - the non-timber "social, recreational and environmental" values of forest lands⁵ - but there is no evidence that such considerations had any effect on development of the production policy options. No option involving reduction of lands devoted to timber production was presented. This may have been because the authors of the options document believed the forests of Ontario were not yet being exploited

¹ Natural regeneration plus artificial regeneration resulting from continued silviculture expenditures at the 1970-71 rate was projected to permit an annual harvest of only about 11.3 million cubic metres (4 million cunits). See Ministry of Natural Resources, *Forest Production Policy Options for Ontario* (Toronto: MNR, April 1972), pp. 37-38 and 57-60.

² *Ibid.*, esp. pp. 37-39.

³ The latter was option four - substantially increased silvicultural effort to achieve a sustainable harvest of 34 million cubic metres annually. *Ibid.*, p.39.

⁴ MNR, *Forest Production Policy Options*, esp. pp. 15-46.

⁵ MNR, *Forest Production Policy Options*, pp. 8-15.

at nearly the maximum sustainable rate. The options document lists as an "assumption" the view that the "present level of cutting is only about one half of that the forest could sustain in perpetuity."¹ This assumption appears to disregard natural depletions of the commercial timber resource due to fires, insects and disease,² and to expect that all silvicultural activities undertaken before and after 1972 would be successful, leading to the production of wood fibre of the right species, quality, and quantity, and all in a time frame shorter than the currently approved rotation time. While the Ministry of Natural Resources has traditionally recognised the forest rotation period in Ontario to be "typically 80 to 100 years, or longer,"³ the production policy presumed trees from the 1972 planting programme would be mature and ready for harvest in less than 50 years.⁴

After Cabinet approved the 25.8 million cubic metres per year timber production objective for 2020, the Ministry of Natural Resources prepared and has since maintained an "implementation schedule" which sets out for each of the Ministry's regions how much regeneration work must be undertaken to meet the target by 2020.⁵ These requirements are in turn translated down to the district and management unit level. The production policy targets focus on annual volume requirements by a certain year, while annual harvest decision making for each management unit focuses on the area to be logged. Nevertheless, the production policy affects timber management decision making, especially on the area to be harvested annually, the area in need of regeneration, and overall, the area of productive forest land devoted to timber management purposes.

Critics of the production policy and its top-down implementation have argued that because of the original failure to consider the actual biological

¹ Ibid., p. 35.

² There is no discussion of these factors in the *Options* document.

³ Ministry of Natural Resources (MNR), *Class Environmental Assessment for Timber Management on Crown Lands in Ontario* (Toronto: MNR, June 1987), p. 98.

⁴ F.J. Anderson, "Ontario Reforestation Policy: Benefits and Costs," *Canadian Public Policy* 5:3 (1979), pp. 336-347.

⁵ MNR, *Timber Management Class Environmental Assessment*, p. 100.

capabilities of the forest and the realistic possibilities for regeneration, pursuit of the policy targets has encouraged acceptance of unsustainably high harvest rates and regrettable threats to other forest values.¹ In his 1986 audit of forest management in Ontario, Baskerville reviewed the problem of a production policy constructed without a reasonable understanding of forest dynamics or an adequate analysis of likely wood supply. He concluded,

There is an urgent need for a realistic analysis of what the Crown forest can produce. This analysis must start from the Management Unit and aggregate upwards. The existing targets that were distributed downwards are clearly inconsistent with the Management Unit capabilities and/or markets in at least those instances examined.²

In response, the Ministry of Natural Resources committed itself to producing a new production policy by October 1988.³ However, the deadline was not met and work on the new policy was still in progress at the end of 1989.

Land use planning

Following adoption of the production policy in 1972, the Ministry of Natural Resources commenced a decade-long planning effort to address issues arising from the Ministry's overlapping and sometimes conflicting crown land management responsibilities. In addition to timber management, these responsibilities included promoting and regulating aggregate extraction and mining, providing for recreation and environmental preservation through parks and other protected areas, managing fish and wildlife resources and serving hunting, fishing and trapping interests, and enhancing other outdoor recreation opportunities.⁴ The Strategic Land Use Planning (SLUP) exercise involved translating provincial objectives for meeting these various responsibilities into targets for each of the Ministry's 47 administrative

¹ See, for example, Jamie Swift, *Cut and Run* (Toronto: Between the Lines, 1983); and Ontario Royal Commission on the Northern Environment, J.E.J. Fahlgren, commissioner, *Final Report and Recommendations* (Toronto: Ministry of the Attorney General, 1985).

² Baskerville, *An Audit*, p. 64.

³ MNR, *Timber Management Class Environmental Assessment*, appendix vii, "Summary of MNR's Action Plan (October 1986)," p.2.

⁴ Responsibility for mining was moved to the new Ministry for Northern Development and Mines in 1985.

districts. It then considered ways of dealing with conflicting land use objectives and was expected to conclude with the adoption of formal plans showing how land allocation conflicts would be settled in each district.

As will be discussed in greater detail in chapter three, the anticipated plans were in the end downgraded to less authoritative guidelines. However, the SLUP exercise and the resulting district land use guidelines remain the Ministry's major step toward more integrated consideration of the many different demands on crown forests. It was, arguably, not a large step. In forested areas where commercial logging could be carried out, timber management concerns generally prevailed. In the Ministry's words, the land use planning efforts in these areas still centred on an attempt to assess "the forest land base in relation to its capability and desirability to satisfy industrial fibre requirements in the context of total land use requirements."¹

The priority given to timber production objectives was of particular concern to non-timber interests who feared that the shortfalls between industrial demands and remaining timber reserves would be addressed by compromising or sacrificing non-timber goals. District and regional information on the capacity of the crown forests to meet the established timber production targets confirmed that timber demands could be expected to exceed the available supply within the twenty-year planning period. Both the Northeastern and Northwestern Regional Strategic Land Use Plans predicted real or potential shortages of wood supply relative to the predicted industrial demands by the year 2000.² However, neither regional plan made it clear how the regions and the districts faced with timber shortages would deal with their responsibility to meet timber production targets, which originated in the 1972 production policy and had been assigned to be regions from the provincial level. There was no indication that the timber production targets would be lowered. Nor was there clarification of how

¹ MNR, *Long Term Forestry Planning in Ontario*, p.7.

² MNR, *Northeastern Ontario Strategic Land Use Plan* (Toronto: MNR, 1982), p. 21; and MNR, *Northwestern Ontario Strategic Land Use Plan* (Toronto: MNR, 1982), p.23.

efforts to meet established timber production targets would affect the interests of other forest users or uses.

The SLUP exercise did succeed in identifying areas of land use conflict and in increasing public awareness of the associated management problems. It improved the information base on some crown resources and resource demands. And it led eventually to some firm land allocation decisions.¹ But in the end, SLUP did not provide the vehicle for reconciling the many different and competing land uses and it did not produce clear, long term plans defining where and when particular activities could be pursued. Most importantly, it did not overcome problems arising from the priority given to meeting apparently unrealistic timber production targets.

If the production targets are too high or barely achievable on the existing forest land base, attention to any other, incompatible uses will merely exacerbate an already tight supply situation. If there are anticipated shortfalls, efforts to meet existing production targets will entail adoption of at least one of the following strategies:

- (i) increase the forest land base available for timber production;
- (ii) increase the expected yield from the available land base;
- (iii) encourage expansion of logging and timber management on private lands;
- (iv) encourage industrial substitution of hardwoods for conifer requirements.²

Some of these options offer increases in timber supplies only in the long term after major technological changes or success in regenerating a commercially attractive forest. Other options, e.g. reliance on private lands, have limited applicability. For the short term (measured in decades when the forest rotation period is 80 to 100 years, or more), allowing more complete logging of

¹ The major allocations arose from commitments made in 1983 by the Minister of Natural Resources to protect 155 identified areas as parks of various kinds to "complete" the provincial parks system.

² See MNR, *Northwestern Ontario Strategic Land Use Plan*, p. 22.

more areas is the only possibility, if existing production targets are not to be compromised. At the least, the incentive to consider or include other uses of the land base is immediately diminished by the overriding need to meet assigned timber production targets.

These problems remain. The main process for dealing with them is now the timber management planning process that was described above and is the subject of the proposed *Class Environmental Assessment for Timber Management*. If the preparation of timber management plans proceeds according to the steps outlined in the planning manual,¹ this process will involve recalculating the annual harvest and adjusting industrial wood commitments to respect not only the existing wood fibre supply (standing timber reserves) but also the biological capability of the land base and the needs of other forest land users and uses.² Whether or not this process should be expected to deliver both sustainable timber production and integrated forest management in the service of many purposes, is the central question facing participants in the present deliberations on the proposed *Class Environmental Assessment for Timber Management*.

It may seem odd that after a land use planning exercise devoted to integrated consideration of competing demands failed to reach firm conclusions, hopes for properly integrated forest planning now focus on a

¹ MNR *Timber Management Planning Manual for Crown Lands in Ontario* (Toronto: Queen's Printer, 1986).

² The actual effects may be expected to depend heavily on attitudes as well as information. Inevitably, the data base for estimating the likely success of regeneration work, for example, will be incomplete. Interpretations will therefore reflect the depth of inclinations to favour optimistic instead of pessimistic predictions. Thus the process could lead to reduction of production policy target levels to more reliably achievable levels or to heavier reliance on intensive management to fill gaps in supply. If the traditional optimism prevails, one likely result would be greater dependence on historically uncertain levels of funding for forest regeneration, and greater eventual pressures to compromise other forest uses and values. More pessimistic views would lead in the opposite direction, perhaps at the expense of short term timber harvest interests.

In this context it is especially important to consider decision-making process issues - for example, how information is to be produced and shared, what evaluation criteria are to be applied, which interests are to be given influential roles in the decision making; and how monitoring studies of the successes and failures of regeneration and other management efforts are to be used to modify short and long term goals.

process intended to serve timber management - the most problematic single demand on forested lands. It may also seem odd that the acceptability of the process is being examined and judged under environmental assessment legislation. This unlikely approach is, however, the one that is being pursued in Ontario. Appreciation of its strengths, and weaknesses, demands an understanding not only of forest management issues and processes in the province, but also of the purposes and characteristics of Ontario's environmental assessment requirements.

Environmental assessment in Ontario

The purposes of environmental assessment

Environmental assessment was invented in response to public pressures arising from concerns about the negative effects of undertakings that had evidently been designed, approved and implemented without serious regard for their potential biophysical and socio-economic impacts.

In attempting to protect the public good, environmental assessment processes are meant to force decision makers to go beyond mere regulatory requirements. Environmental regulations have traditionally come in packages dealing only with certain industries or products (e.g. pesticides) or only with particular threats to the biophysical environment or human health (e.g. damage to fish habitat or pollution of air). They have usually centred on the application of specified criteria or standards, and the goal has been to ensure regulated undertakings are environmentally "acceptable". In contrast, environmental assessment is meant for broad application to any undertaking with potentially negative biophysical or socio-economic effects, and is intended to ensure better planning of these undertakings. Effective environmental assessment requirements push proponents to incorporate environmental along with economic and technical factors in project

conception and design.¹ Accordingly, the expected results are not merely projects that meet the minimum standards for environmental acceptability, but projects that are, relative to other options, most in accord with broad public interests. In essence, then, environmental assessment requirements are aimed at establishing a broader and better informed approach to the planning as well as design of undertakings.

Adoption of this approach to planning has important direct benefits, perhaps even net benefits, for project proponents. But costs are involved and changes to established practices and interests are required. Most proponents have at least initially resisted subjection to assessment requirements, and have tended to appreciate the benefits of assessment only through imposed experience. The lesson has been that environmental assessment must be obligatory if it is to be effective. This obligatory process must ensure rigorous testing of proponents' claims, independent decision making, and monitoring of compliance with commitments and approval conditions.

Taken together, the basic requirements for effective environmental assessment can be translated into principles of design for appropriate processes. The five main principles are the following:

- the process must be enshrined in law, and compliance with its requirements and products must be legally enforceable;
- the process must apply clearly and automatically to all proponents of projects that may pose environmentally significant effects, so that all such proponents incorporate environmental considerations from the very beginning of project deliberations -- proponents who judge application of the process to be inappropriate may seek exemption, but must consider environmental factors at least to the extent necessary to prepare an persuasive exemption request;

¹ The need for such a revision of conventional planning has been underlined recently in the report of the United Nations' Commission on Environment and Development, chaired by Gro Harlem Brundtland, *Our Common Future* (Oxford/ New York: Oxford University Press, 1987). The conclusions of the Commission have been lauded and supported by many governments, including those of Canada and Ontario.

- proponents subject to the process must be required to demonstrate that they have examined alternative means of satisfying the project objectives and meeting the public interest, in light of environmental as well as financial and technical considerations;
- environmental considerations must be defined broadly, and realistically, to include socio-economic as well as bio-physical effects and their interrelations; and
- the process must ensure early and effective public involvement to allow for incorporation of public views and to ensure independent scrutiny.¹

It is safe to assume that there will always be some resistance to environmental assessment requirements and that there will never be enough resources to permit fully informed evaluation of all environmentally questionable options and proposals. An emphasis on efficiency is therefore also necessary. The design and implementation of effective assessment procedures must avoid imposing unnecessary or inappropriate costs and delays and they must ensure attention is focused on the cases, information, issues and decisions that are of greatest significance.

Ontario's environmental assessment process

Ontario's *Environmental Assessment Act*, which was passed in 1975 and came into force in 1976, was pioneering legislation. Although it followed, in time and general approach, the initial assessment requirements of the United States' *National Environmental Policy Act*, Ontario's much more detailed law set an international standard. The Ontario process embodies, if only in part, each of the five principles discussed above. Moreover, both the law and its

¹ These principles and the arguments for them are set out in somewhat greater detail in Robert B. Gibson, "Lessons of a legislated process: twelve years of experience with Ontario's *Environmental Assessment Act*," a paper presented at the Annual Meeting of the International Association for Impact Assessment, Brisbane, Australia, July 5-9, 1988.

implementation include useful features that were unprecedented and are still uncommon.¹

Ontario's *Environmental Assessment Act* has also been a focus for controversy, dispute and criticism. A detailed review of the first decade of experience under the *Act* revealed a multitude of openings for improvement and offered 120 recommendations for changes.² The same review also confirmed, however, that the *Act* is fundamentally sound:

The *Environmental Assessment Act* was intended to ensure that proposed plans and projects in Ontario were developed and evaluated publicly in the light of clearly stated purposes, adequate consideration of alternatives, and careful evaluation of potential impacts on the social, economic, cultural, and biophysical environment. The findings detailed in this report confirm that these key elements of Ontario's process are sound; indeed, they are the central strengths of Ontario's approach to environmental assessment.³

These strengths reflect the four central characteristics of the *Act* :

- it has a legislative base providing for public involvement and enforceable decisions;
- it requires proponents to defend the purpose and rationale for their undertakings and to show they have considered alternative ways of achieving the identified purposes;
- it defines the "environment" broadly, requiring assessment of social, economic and cultural as well as biophysical impacts; and
- it applies automatically to all (public sector) undertakings unless they are specifically exempted, thus encouraging proponents to consider environmental factors from the beginning of their planning work.

¹ One of these innovations is Ontario's use of "class assessments". See below.

² See Robert B. Gibson and Beth Savan, *Environmental Assessment in Ontario* (Toronto: Canadian Environmental Law Research Foundation, 1986). The main recommendations centred on extending and rationalizing application of the *Act*, improving impact research and evaluation, enhancing decision-making efficiency, providing for fairer and more effective representation of interests, and ensuring compliance with approval conditions.

³ *Ibid.*, p.iii.

In essence, the *Act* requires every "proponent" of an "undertaking" subject to the legislation to prepare an "environmental assessment" document showing that the proposal is the product of environmentally sensitive planning. The proponent must submit the document and the proposed undertaking to a formal, public approval process.¹ "Undertakings" include any "enterprise or activity" or any "proposal, plan or program in respect of an enterprise or activity".²

The environmental assessment document must set out the purpose and rationale of the proposed activity. It must describe the undertaking and alternatives to it (both alternative ways of serving the identified purpose, and alternative methods of proceeding with the preferred general option) and it must show that the "environment" to be affected, the potential effects, and the means of mitigating negative effects have been examined and evaluated in the process of selecting among the alternatives.³ In other words, the proponent is required to demonstrate in the environmental assessment document that it has considered environmental factors seriously and carefully in its planning.

After the environmental assessment document has been submitted to the Minister of the Environment it is subjected first to interdepartmental government review and then to public review.⁴ If significant concerns remain, the document and the proposed undertaking may be the subject of a quasi-judicial hearing before the Environmental Assessment Board.⁵ In the end the Board and/or the Minister with Cabinet approval determine whether the assessment is acceptable and the undertaking worthy of approval, in need of modification, or to be rejected.⁶ The Board makes the final decisions in

¹ Province of Ontario, 1975, *Environmental Assessment Act*, Revised Statutes of Ontario 1980, ch. 140, ss.5-17.

² *Ibid.*, s.1[o].

³ *Ibid.*, s.5.

⁴ *Ibid.*, s.7.

⁵ *Ibid.*, s.12.

⁶ *Ibid.*, s.14.

cases referred to it for hearing, unless the Cabinet intervenes within 28 days to change or rescind the decision.¹

The process applies automatically to proponents of public sector undertakings. Provincial ministries and agencies that have not been exempted from the requirements of the *Act* may not proceed with proposed projects until environmental assessment has been done and approvals granted.² Since 1980, municipal governments have also been subject to automatic coverage.³

The Minister and Cabinet may, "in the public interest," issue orders or make regulations exempting individual undertakings or proponents, or classes of undertakings or proponents, from all or some of the *Act's* provisions.⁴ Initial exemptions from the requirements of the *Act* included both full exemption of some ministries and undertakings and temporary exemption of certain on-going activities to allow the proponent ministries to determine how they would meet their assessment obligations and to prepare appropriate environmental assessment documents.

The *Act* also gives Cabinet authority to make regulations designating private sector activities as undertakings subject to the *Act*.⁵ Indeed, the *Act* anticipates that Cabinet will proclaim general application of assessment requirements to "major commercial or business enterprises" of the private sector.⁶ However, the legislators set no date for general extension to the private sector and individual designations have been exceedingly rare. Although the present government has taken an initial step toward greater use of designation provisions by declaring that private sector proponents of large scale incinerators and landfills will be subject to assessment

1 Ibid., p.23.

2 Ibid., s.5.

3 *Ontario Regulation 468/80*, 1980, amending *Ontario Regulation 836/76*, now incorporated in Revised Regulations of Ontario, 1980, *Regulation 293*.

4 *Environmental Assessment Act*, ss.29, 34 and 40[f].

5 Ibid., s.40[e].

6 Ibid., s.3[b].

requirements, there are no known plans for broad application of the *Act* to the private sector. Thus in practice, except in waste disposal cases, only public sector proponents are subject to the more rigorous environmental planning and approval requirements of the *Act*. A predictable result of this has been confusion, difficulty and apparent efforts to avoid assessment requirements in the grey boundary area between public and private undertakings.¹

This is a potential issue in the present case. Logging and related activities in crown forest lands are generally undertaken by private sector companies. These companies and their undertakings are subject to the provisions of the *Act* only if specifically designated. Consequently efforts to apply the environmental assessment requirements to forest and timber management activities have centred on the Ministry of Natural Resources' preparation of plans governing the activities of private sector operators in the crown forests.

The provisions for exempting public sector proponents and undertakings, and for deciding which, if any, private sector undertakings to designate, give the government virtually unfettered discretion to limit application of the *Act*. Evident abuses of the exemptions provisions and the government's general unwillingness to designate the private sector have been a primary focus for criticism of the *Act's* implementation.²

Several other aspects of the *Act* and its implementation have drawn criticism. Among the areas of controversy most relevant to the case at hand are the following:

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- ¹ See, for example, the Detour Lake mine and infrastructure case as described by the Royal Commission on the Northern Environment in *The Road to Detour Lake: an Example of the Environmental Assessment Process in Ontario* (Toronto: RCNE, 1981); and the Scarborough waterslide case as described in Environmental Assessment Advisory Committee, "Report to the Minister on Scarborough Waterslide Park - Request for Designation (Referral No. 20)," 27 May, 1986.
 - ² In response to these criticisms, the Minister of the Environment established an Environmental Assessment Advisory Committee in 1983. The committee monitors exemption and designation decision making but provides specific advice only on individual cases referred to it by the Minister. In practice there have been few referrals and the committee itself has argued for reform of the process. Environmental Assessment Advisory Committee (EAAC), *4th Annual Report 1986-87* (Toronto: EAAC, 1987).

- Proponents are allowed a largely free hand in defining the purposes of their undertakings and therefore in determining the nature of possible alternatives and the overall scope of environmental assessments. When proponents take a short term perspective and see narrowly-scoped inquiries as more efficient, they may define the purposes and alternatives in a way that avoids serious considerations of options other than the preferred undertaking.
- The usual scope of assessments focusing on specific undertakings is seldom broad enough to include adequate consideration of cumulative impacts - the combined effects of the proposed undertaking along with other past, present and reasonably anticipated future activities in the same environment. This is an especially serious problem in cases where the impacts of each individual undertaking appear to be modest or insignificant, but the overall, combined effects may be environmentally disastrous.
- Assessments focusing on specific undertakings often also raise questions concerning underlying policy positions, plans, regulatory procedures, standards and guidelines. Consideration of these matters may be crucial in the evaluation of purposes and needs, alternatives, and potential effects, but assessments centred on individual projects have not provided an ideal forum for public deliberations on widely applied policies, plans or regulations.
- While the *Act* requires public notice and opportunity for comment and participation when environmental assessment documents and government reviews are completed, and when hearings are held, the *Act* does not ensure public involvement in the crucial earlier stages. The Ministry of the Environment's decision making on exemptions and designations, and the proponent's work preparing the environmental assessment document, may proceed with little or no chance for public participation.¹

¹ The Ministry's Environmental Assessment Branch has, however, consistently encouraged proponents to consult with relevant government agencies and with the public during the preparation of environmental assessment documents.

- The *Act* provides several openings for the exercise of ministerial and Cabinet discretion. The major openings are in decisions on whether or not to apply the *Act* (to grant or reject exemption and designation requests), on whether or not to require a hearing, and on whether to accept, reject or vary the decisions of the Environmental Assessment Board. Use of the discretionary powers for exemption and designation has long been the main subject of public criticism in this area. But the Minister of the Environment's discretionary authority concerning hearings has also begun to receive attention. This has been spurred by controversy surrounding the Minister's May 1988 decision not to require a hearing on the Red Squirrel logging road assessment, even though both the assessment and the road proposals had attracted serious criticism and the Minister had received an "unprecedented" number of public requests for a hearing on the case.¹
- Once assessed proposals have been approved, proponent compliance with approval commitments and conditions is rarely monitored, and assessment predictions are seldom checked against actual effects.² As a result, lessons from experience are not learned, and the efficiency as well as effectiveness of assessment work suffers.³
- The process as currently implemented may well provide net benefits. But it also imposes unnecessary costs and delays, wasting the time and other resources of proponents, reviewers and public participants.⁴ The resulting frustrations have encouraged temptations to advocate "streamlining" the process through elimination of some of its strengths (e.g. the requirements for consideration of alternatives and non-biophysical effects). At risk is the crucial distinction between the

¹ See Craig McInnes, "Rejection of log-road hearing 'black day' for environment," *Toronto Globe and Mail*, May 18, 1988, p.A12.

² Gibson and Savan, *Environmental Assessment in Ontario* (Toronto: CELRF, 1986), chapter 8.

³ See Gordon E. Beanlands and Peter N. Duinker, *An Ecological Framework for Environmental Impact Assessment in Canada* (Halifax: Institute for Resource and Environmental Studies, Dalhousie University, 1983).

⁴ See Gibson and Savan, *Environmental Assessment in Ontario*, especially chapter 6.

desirably demanding character of the process and the avoidable burden of undue cost and delay.¹

- In an attempt to streamline assessment requirements for certain groups of undertakings, Ontario has developed a "class assessment" version of the standard process. Although this approach has worked reasonably well in its initial application to relatively modest undertakings, its legal foundation is questionable² and the desirable range of its application is unclear.

It is apparent from this list that there are numerous openings for improving Ontario's process, including requirements for major changes in application and implementation. However, despite these difficulties, imposition of the *Act* has clearly been beneficial. In the public sector where the *Act* has applied, the most supportive proponents are those with most experience under the *Act*; proposals that were not publicly defensible have been abandoned early; and consideration of initially unconventional alternatives (e.g. conservation of energy instead of additional power generation, recycling programs instead of landfills) has been encouraged. Moreover, it is apparent that the salutary effects of the *Act* on public sector project planning over the past twelve years reflect the extent to which the *Act* embodies the basic requirements for effective assessment (legal base and

¹ In Ontario, the main openings for improving efficiencies without compromising effectiveness are in ensuring that assessment attention is focused on the cases and issues that are of greatest significance. The CELRF report (Gibson and Savan) suggests that the environmental assessment process could be both strengthened and expedited through more judicious development of assessment document content, followed by more focused and thorough review, and long term evaluation procedures. Specific actions to achieve this would include steps to encourage early determination of the proper boundaries and foci for assessment work (for example, by requiring proponents to submit an initial assessment document which would outline the project's purpose, the range of alternatives to be evaluated, and the significant policy, planning, standard setting and other related issues raised by the proposal); by expanding the content requirements in the *Act* to include detailed reporting on presubmission consultation, predicted impacts, and monitoring commitments; and by merging the public and government reviews.

These reforms would streamline the assessment process by concentrating efforts on matters of greatest importance, by reducing the number of review stages, thus abbreviating the period required for project approval, and by using monitoring data on actual impacts to improve and expedite future impact predictions.

² The *Act* does not describe or clearly authorize such a process.

enforceability; comprehensive, early and clear application; consideration of alternatives; broad definition of "environment"; and effective public participation).¹

In summary, Ontario has one of the original legislated processes for environmental assessment, and this process is fundamentally well designed. But, environmental assessment in the province remains a new and imperfect tool. Many of the continuing weaknesses are now reasonably well recognised and the Ministry of the Environment has initiated an Environmental Assessment Program Improvement Project (EAPIP) to examine and recommend appropriate solutions. Among the concerns receiving attention from EAPIP are the central issues raised by the efforts to apply environmental assessment requirements to the Ministry of Natural Resources' forest management activities - how to define a proper role for class assessment and how to deal with complex and controversial policy areas.²

Class environmental assessment

Class assessment is an important but legally debatable version of the full environmental assessment process set out in the *Environmental Assessment Act*. Developed in a largely *ad hoc* manner in the years immediately following passage of the *Act*, it provides for limited evaluation of undertakings in the difficult grey area between proposals that clearly warrant full assessment and activities that are clearly do not.

Generally, class assessment in Ontario has involved preparation of an environmental assessment document covering a category of relatively small scale, frequently recurring projects. The Ministry of the Environment, in its *General Guidelines for the Preparation of Environmental Assessments*, describes class environmental assessment as a way of dealing

¹ This is the main overall conclusion of the detailed study reported in Gibson and Savan, *Environmental Assessment in Ontario*.

² Ministry of the Environment, "Environmental Assessment Program Improvement Project: An Introduction to the Project," April 1988.

...with projects which have important characteristics in common. Such projects are relatively minor in scale, recur frequently, and have a generally predictable range of effects which, though significant enough to require environmental assessment, are likely to cause relatively minor effects in most cases. Examples are: electric transformer stations and substations, highway widenings, moderate sized extensions to sewage treatment plants and communication towers.¹

Class assessment documents include a generic discussion that addresses the standard information requirements for individual assessments (purpose, rationale, alternatives, etc.), but they also describe a framework and streamlined process for environmentally sensitive planning and approval of individual projects within the class. This streamlined class assessment process is to be followed by the proponent for all future projects in the class.

No class assessment process is outlined in the *Environmental Assessment Act*. The content and form of class assessments have, therefore, been defined by administrative experimentation and the class assessment processes now in use differ in important ways.² They do, however, follow a standard overall pattern. The proponent considering a project subject to class assessment is to take into account the generic issues raised in the class assessment document and to follow a defined series of planning steps for anticipating, assessing, and avoiding or mitigating negative environmental impacts. At certain points, corresponding to major steps in project planning (e.g. identification and consideration of the alternatives, selection of the preferred option, and detailed design) the proponent is required to notify and seek comments from possibly affected agencies and the public.

Responsibility for using the streamlined process properly is left mostly in the hands of the proponents. But in addition to public notice and information requirements, all class assessments contain provisions allowing

¹ Ministry of the Environment, *General Guidelines for the Preparation of Environmental Assessments*, 2nd edition (Toronto: MOE, Environmental Approvals Branch, January 1981), p. 17.

² See Gibson and Savan, *Environmental Assessment in Ontario*, p.83ff.

any party to ask the Minister of the Environment to "bump up" a disputed project to full individual assessment. The granting of a bump-up request is discretionary. The number of bump-up requests has increased rapidly in the last two years as more class assessments have been implemented and as more citizens have become aware of bump-up provisions. But so far, no bump-up request has been granted.¹ If this pattern of rejections continues despite the rising numbers of requests, the exercise of ministerial discretion on bump-ups may stir significant public controversy.

To date, however, use of the class assessment approach has been reasonably well received. While some problem areas have been identified, these have been judged to be amenable to fairly easy correction through amendments to the *Act*. The main recommended amendments would establish a legal foundation for the class approach, set generic minimum requirements for class processes, and impose appropriate limitations on ministerial discretion in responding to bump up requests.²

A more difficult set of challenges is posed by the case examined in this report - the Ontario Ministry of Natural Resources' proposed use of the class approach to meet its responsibilities for assessment of forest management activities.³ For a number of reasons this would clearly be an exceptional use of the class assessment option. But exceptional does not necessarily mean inappropriate. Applying environmental assessment requirements to forest management is a considerable challenge and it is probable that no simple, conventional approach would work satisfactorily.

¹ Between April 1, 1986 and March 31, 1987, the Minister received only one bump-up request. But in the next year, eight requests reached the Minister, and in the first nine months of the 1988-9 reporting year, 16 were received.

² See Gibson and Savan, *Environmental Assessment in Ontario*, pp. 81-104.

³ Ministry of Natural Resources (MNR), *Class Environmental Assessment for Timber Management on Crown Lands in Ontario* (Toronto: MNR, June 1987).

Application of environmental assessment to forest management

Forest management is an atypical but important problem for environmental assessment for two main, interrelated reasons. It comprises an enormous range of large and small activities with cumulative as well as individual environmental significance, and it is essentially an area of broad public policy controversy and concern.

The first problem is rooted in the immediate subject matter. Forest management is not a single, environmentally significant undertaking, or even a clearly defined set of similar, small-scale, frequently recurring projects planned and undertaken by a single proponent or group of proponents. Forest activities involve a large variety of very different and sometimes conflicting private and public sector operations by large and small private sector interests as well as by the Ministry of Natural Resources. The list includes clearly major undertakings (for example, providing road access to, and cutting, very large forested areas, and subsequent replanting and treatment, including pesticide spraying) that may, given local and regional variations in ecology, have important, widely varying and not routinely predictable effects. And even where these activities considered individually are expected to have only modest effects, their joint or cumulative impacts may be great.

The second difficulty is that forest management is a major, complex and controversial area of public policy. While the most visible forest controversies have typically focused on specific proposals for access roads, pesticide spraying programs, wilderness dedications, etc., these cases have inevitably exposed more fundamental policy issues. In their efforts to identify causes and solutions the contesting parties consistently find it necessary to address the assumptions, priorities and procedures that determine the current approach to forest decision making. Moreover, the frequency of these conflicts and rising concerns about the sustainability of current practices has led to broader public attention being focused on basic policy concerns - how to allocate and manage crown forests to serve a variety

of more or less conflicting purposes, and how to establish a regime that will protect the interests of future generations. In this context the application of environmental assessment to forest management is naturally approached by many interested parties as a vehicle for public deliberations and decision making on an important area of public policy.

In addition to meeting these special challenges of cumulative effects and policy issues, the application of environmental assessment to forest management must be able to meet the usual demands on environmental assessment processes. It must ensure appropriate collection and analysis of information about the forests' and their capacity to meet the demands being placed on them. It must ensure properly informed and sensitive attention to environmental protection and damage mitigation in specific planning decisions and during on-site implementation. And it must set out requirements and procedures that are as clear, simple, efficient and fair as are feasible in the circumstances.

These standard assessment issues are, however, difficult to approach directly or immediately in the forest management case. Ideally, for on-going activities such as forest management, the kind of planning adopted to satisfy assessment requirements would begin with specified goals and a dynamic understanding of the environment to be affected (or the resource to be used and protected). It would then proceed to examining the specific effects of particular management options, forest by forest. But forest management goals (or at least the proper relations among apparently competing goals - locally, regionally and provincially) remain in dispute, and the required understanding of the forests has not been achieved, despite long-standing concerns about information deficiencies.¹ Thus, the initial role environmental assessment in this case may have to be chiefly at the policy level - to provide a planning and decision-making process that determines how to resolve the present conflicts over goals and management options,

¹ The two problems are related, since the goal conflicts are exacerbated by uncertainties about the capabilities of the forests to sustain the various potentially-competing activities and about the effectiveness of existing techniques for avoiding or mitigating damages.

given the quality of present information, and sets out means of ensuring that the information deficiencies are corrected over time so that more technically sound assessment of impacts and options can be done in the future.

Neither of Ontario's two main conventional approaches to environmental assessment - detailed assessment for individual undertakings and class assessment for small-scale recurring projects - seems on the surface at least to be particularly well designed to meet the extraordinary demands in this case. Consideration of cumulative effects and examination of underlying policy issues are not new problems for environmental assessment in Ontario, and some attention to both has been accomplished in (or forced by) certain individual assessment proceedings. But an approach to assessment of forest management that simply focuses on (the most significant) individual forest activities is unlikely to have an adequate scope for consideration of larger cumulative effects or policy issues. The conventional class assessment approach seems equally inappropriate. Certainly the activities in the timber management "class" are not small scale and environmentally modest. They do not meet the established criteria for use of the class process.

Environmental assessment in Ontario is, however, a relatively young and still evolving process. The now-conventional class assessment approach had to be developed to meet requirements not clearly anticipated by those who drafted the legislation. The forest management case presents a similar challenge. The Ministry of Natural Resources has responded by proposing an unconventional application of the class assessment approach that centres on timber management plans, and (perhaps despite the Ministry's intentions) has opened the larger subject of forest management policy to public examination and debate. Whether this approach is appropriate and adequate for the forest management case and whether it offers promise for application in other situations are the central questions to be considered in the following chapters.

Chapter 2

The Response

Five attempts by the Ministry of Natural Resources to apply the class assessment process to forest management

When the provisions of the *Environmental Assessment Act* came into effect in 1976, the provincial Cabinet chose to issue full or temporary exemptions covering some or all activities of certain government ministries and agencies. Most of the full exemptions were granted to avoid application of the *Act* to environmentally inconsequential activities. The temporary exemptions were issued to ministries and agencies that were engaged in environmentally significant activities worthy of assessment but that needed some time to comply with the provisions of the *Act*. In complicated cases the temporary exemptions allowed for deliberations on how meet the new assessment requirements, as well as for preparation and approval of appropriate environmental assessment documents.

Forest management undertakings certainly represented a complicated case, and one of the temporary exemptions granted in 1976 covered the "management by the Ministry of Natural Resources of Crown land presently included within forest management units."¹ The exemption was to expire on July 1, 1978, but MNR quickly found it would need more time. The Ministry requested an extension, and in late June 1976, Cabinet issued exemption order MNR-11/1, extending the temporary exemption for an additional 18 months, to the end of 1979.

¹ This wording appears at the beginning of all the forest management exemption orders granted to the Ministry of Natural Resources (MNR-11/1 to MNR-11/9). Beginning with exemption order MNR 11-5, the scope was broadened slightly to include "associated tree nurseries." See Appendix 1.

MNR-11/1 was to be the first of nine extensions to the initial temporary exemption. The last exemption, MNR-11/9, issued in January 1985, included the provision that if an environmental assessment document were submitted to the Ministry of Environment before the end of 1985, the exemption would remain in force until such time as the document was approved.¹ MNR did succeed in completing and submitting an environmental assessment document in December 1985, and although the Ministry subsequently withdrew this document for revision and resubmission, the exemption still holds.

As time passed, the successive exemption orders were increasingly turned into regulatory instruments governing certain forest management activities. Beginning with MNR-11/3, the exemption orders contained terms and conditions requiring MNR to follow specific procedures including public notification during the preparation of forest management plans and concerning plans for primary forest access roads and pesticide spraying programmes.²

During the years covered by the exemption extensions, MNR was engaged in an extensive land use planning exercise and revisions to its forest and timber management practices as well as discussions with the Ministry of the Environment (and apparently with the timber industry as well) on how to meet the requirements of the *Environmental Assessment Act*. There is little public information about the substance of the conflicts that arose during these deliberations, and for the first eight years, there was no attempt to seek public comment on how to carry out environmental assessment of forest management. Two drafts of a forest management environmental assessment document were prepared (in 1977 and 1980), considered and rejected before the first public version, entitled *Class Environmental Assessment for Forest Management on Crown Lands in Ontario*, was released for comment in 1983.

¹ "Order made under the *Environmental Assessment Act* - Exemption - Ministry of Natural Resources - MNR-11/9," *Ontario Gazette*, January 26, 1985.

² This is discussed in more detail in Chapter 3. Complete details of the exemption orders are given in Appendix 1.

Table 1:

The Nine Exemption Order Extensions

MNR-11/1. June 1977 until December 31, 1979.
 MNR-11/2. January 1980 until December 31, 1980.

Five month period without exemption.

MNR-11/3. May 1981 until March 31, 1982
 MNR-11/4. April 1982 until December 31, 1982
 MNR-11/5. January 1983 until June 30, 1983
 MNR-11/6. July 1983 until December 31, 1983
 MNR-11/7. January 1984 until June 30, 1984
 MNR-11/8. July 1984 until December 31, 1984
 MNR-11/9. January 1985 until December 31, 1985, or open-
 ended if certain conditions were met (still in
 effect)

After receiving comments from government agencies, the timber industry and other interests, MNR revised the 1983 draft, changed the title to reflect its determination to focus on timber management rather than forest management, and in 1985 formally submitted a *Class Environmental Assessment for Timber Management on Crown Lands in Ontario*. This document, too, ran into trouble. Critical comments received during the government review stage of the approval process led MNR to withdraw the document for further revisions. The fifth, most recent and perhaps final version was submitted in June 1987. It has been subjected to formal government review, released for public consideration and is now the subject of hearings before the Environmental Assessment Board.

Table 2:

The Five Versions of MNR's Forest/Timber Management Class Environmental Assessment

1977	1st version (draft)... limited distribution for review.
1980	2nd version (draft)... limited distribution for review.
1983	3rd version (draft)... 1st draft for public review.
1985	4th version ... submitted for approval.
1987	5th version ... amendment of the 4th resubmitted for approval.

The following discussion considers each of the five attempts by MNR to produce an environmental assessment document that would meet its obligations under the *Environmental Assessment Act*.

The 1977 Draft: Contents

MNR's first attempt to address the new environmental assessment requirements was a draft documented entitled *Class Environmental Assessment of Forest Management on Crown Lands in Ontario*,¹ which was circulated for comment within the Ministry in 1977. The draft was not distributed to other government agencies or released for public comment. In this document, the undertaking subject to assessment was defined as "...the forest management by the Ministry of Natural Resources of Crown Lands within management units."² The purpose of the undertaking, derived from the objective of the Division of Forests within the Ministry of Natural Resources, was

¹ Ministry of Natural Resources, *Class Environmental Assessment of Forest Management on Crown Lands in Ontario* (Toronto: MNR, 1977), hereafter called *Class EA*, 1977.

² *Ibid.*, C.1.1.

To provide for an optimum continuous contribution to the economy by the forest based industries consistent with sound environmental practices; and to provide for other uses of the forest.¹

The Ministry of Natural Resources listed two alternatives to the undertaking: uncontrolled clearcut logging and partial cut high-grade logging. The alternative methods of carrying out the undertaking were defined as the clearcut silvicultural system, the shelterwood silvicultural system, the selection silvicultural system, and afforestation. The bulk of the document consisted of several hundred tables and lists of variables, matrices and impacts. Areas of environmental concern were discussed and "new environmental quality guidelines" were developed, based on findings from a forest management pilot project.

The 1977 Draft: Reactions

There is no public record of the extent or nature of the internal Ministry reactions to this first draft class assessment for forest management. However, it is clear that the expressed concerns were significant enough to prompt a rewriting of the document.

The 1980 Draft: Contents

Three years after the first document had been circulated for comment, a second draft was completed. It too was called *Class Environmental Assessment of Forest Management on Crown Lands in Ontario*,² but it was considerably shorter, had far less tabulated detail, and more descriptive text.

¹ Ibid., C.1.2.

² Ministry of Natural Resources, *Class Environmental Assessment for Forest Management on Crown Lands in Ontario* (Toronto: Ministry of Natural Resources, 1980), hereafter called *Class EA, 1980*.

In Part 1, the undertaking, its purpose, the alternatives to it, and alternative methods of carrying it out, were all described. The undertaking was "forest management on Crown Lands in Ontario," and forest management was defined to encompass access roads, harvest operations, silvicultural operations and silvicultural support. The definition specifically excluded programme administration, preparing the forest resource inventory and subsequent data collection, wood measurement, and forest extension services.¹ The purpose of the undertaking was "to use and to manage the forest on Crown Lands for the continuous social and economic benefit of the people of Ontario."²

In part 2, an "assessment methodology" was outlined. A set of matrices indicated the potential environmental impacts for each of the four component activities of the undertaking - access roads, harvesting, silviculture operations and silvicultural support activities,³ and MNR stated that the impacts identified would be evaluated "by consensus based on the knowledge and experience of the assessment team."⁴

Finally, part 3 outlined seven new environmental policy guidelines, which would "assist the mitigation of ... concerns."⁵

Overall, the 1980 draft emphasized the potential impacts and mitigation measures to be considered in timber management activities. It defined the purpose of the undertaking broadly, apparently to encompass all forest uses, without specific reference to timber interests. But the document nevertheless focused predominantly on logging and associated road building and silviculture. While there were frequent references to other forest users/uses and impacts, the 1980 draft did not explain how consideration of

1 Ibid., p.3.

2 Ibid., p.7.

3 Ibid., pp.63-66.

4 Ibid., p.58.

5 Ibid., p.73.

these interests and concerns would be integrated into the timber planning and management process.

The 1980 Draft: Reactions

There is no public record of comments on the 1980 draft. However, it was apparently reviewed by staff in MNR and the Ministry of the Environment and by selected industry representatives. The main concerns expressed were:

- the class environmental assessment approach was not appropriate for forest management,
- due to the absence of a well laid out planning process there was no way of seeing how forest management would be carried out to comply with the Act, and
- forest management objectives were predetermined, and no mechanism was shown by which these objectives might be modified.¹

The 1983 Public Draft: Contents

MNR's third draft, completed in 1983, was the first version released for public consideration and comment. Like the previous drafts, the 1983 document was called *Class Environmental Assessment for Forest Management on Crown Lands in Ontario*. But "forest management" was now defined narrowly as "sustained yield timber production" and the focus on timber was recognised explicitly in the statement of purposes. Unlike the 1980 draft, which had sought benefits for the people of Ontario from forest use and management generally, the 1983 document limited "forest management" purposes to those of timber management:

¹ Correspondence from Ministry of the Environment, Environmental Planning Unit, Environmental Approvals Branch, to Environmental Approvals Branch, Northwestern Region. January - February 1981.

- (i) to provide continuous, predictable wood supply sources, quantities and qualities, and
- (ii) to improve forest productivity through sound silvicultural practices, and thereby optimize returns on forest management investments.¹

Some secondary objectives, including outdoor recreation and wildlife management were identified. These were to be achieved as a result of forest management, but were specifically categorized outside the purpose of the undertaking.

To deal with interests potentially in conflict with timber purposes, the 1983 draft outlined a procedure for identifying and deciding what to do in "areas of concern" within timber management units. The "areas of concern" could be treated as

- reserves in which no timber cutting would be allowed;
- areas in which normal timber operations could proceed;
- modified management areas where timber operations would be subject to specified conditions and limitations; or
- larger areas divided into separate zones for reserves, normal operations and/or modified management.

Guidelines for modified management areas were to be developed separately.

The 1983 document was divided into three parts. Part 1, "Development of the Undertaking" defined sustained yield timber management and described its purpose, rationale and alternatives. Alternative methods of carrying out sustained yield timber management were also described, and the potential environmental effects of these alternative methods were outlined.

¹ Ministry of Natural Resources, *Class Environmental Assessment for Forest Management on Crown Lands in Ontario* (Toronto: Ministry of Natural Resources, September 1983), hereafter called *Class EA, 1983*, p.15.

Part 2, "The Forest Management Planning Process" explained the general context for forest planning by the MNR, outlined the proposed process for preparing timber management plans, and set out a phase-in schedule. According to the document, the products of the proposed process would be a twenty year timber management plan and a five year operating plan for each forest management unit. These plans would be prepared through a process incorporating environmental considerations and opportunity for public comment. The document also outlined provisions for allowing "bump-up" of especially controversial plans to full environmental assessment.

Part 3 of the document, "Forest Management Implementation Guidelines and Procedures" described manuals being prepared or already available for use as reference materials to guide planning and subsequent operations. These guidelines and handbooks covered, or were to cover, silvicultural practices; aerial spraying; prescribed burning; construction, maintenance and use of resource access roads; construction and mitigation techniques for other MNR projects; and guides for habitat protection and management of moose, deer, bald eagles, heronries and osprey. Finally, in four appendices, MNR provided details of the proposed planning procedures for roads and modified management areas, and phase-in schedules for the five and twenty year management plans.

The 1983 draft was used for consultations with possible intervenors (including industry, municipalities, other government ministries and agencies, public interest groups and individuals) in anticipation of redrafting and formally submitting the document for environmental assessment review and hearings.

The 1983 Public Draft: Reactions

During the period September 1983 to January 1985, MNR solicited and compiled comments on the 1983 draft as a part of its "pre-submission

consultations."¹ By the end of this pre-submission consultation process, forty-one briefs had been received.² The main issues and concerns raised can be grouped and summarised in nine broad categories:

- scope of the undertaking;
- environmental effects;
- public involvement;
- manuals and guidelines;
- modified management areas;
- bump-up;
- pesticides;
- monitoring; and
- the class environmental assessment approach.

Scope of the undertaking

Some commentators argued that the limited scope of the class environmental assessment draft did not cover the range of forest-related responsibilities within MNR's resource management mandate, that it conflicted with other government programmes, and that it was insufficient to fulfill the requirements of the *Environmental Assessment Act*.

The Canadian Environmental Law Association, for example, was unwilling to accept the extremely narrow focus of the undertaking on timber harvesting purposes as the central concern of forest management, and the superficial treatment of other resource values within MNR 's mandate.³

¹ Full details of the comments are contained in two documents following the 1983 draft class environmental assessment: "Pre-submission Consultation Issues," (38 pages) and "Summary of Issues" (59 pages). The latter is dated January 1985.

² Notes for presentation by MNR staff to the Minister and Deputy Minister of Natural Resources on August 27, 1985, and to the Minister and Deputy Minister of Environment on August 28, 1985, p.2.

³ Letter from Canadian Environmental Law Association, on behalf of the Federation of Ontario Naturalists, to R. Monzon, MNR, December 22, 1983.

Environmental effects

The lack of detail about the environment to be affected, and the anticipated environmental effects of implementing the timber management undertaking, concerned several commentators, who found that the document provided insufficient information on these matters and no clear assurance that the information would be provided in the five and twenty year management plans resulting from the proposed process. The authors of the Ministry of the Environment brief suggested that detailed information should be included in the class environmental assessment document and more specific documentation provided in a public "Environmental Report" accompanying each forest management unit plan prepared under the class environmental assessment process.¹

Public involvement

The proposed process for public involvement in the preparation of forest management plans received mixed reviews. Industry commentators generally felt the document offered too much opportunity for public participation; the environmental groups felt it was a good step toward better decision making; and the government agencies requested more opportunity to participate in the planning process prior to public review. The Ministry of Environment representatives observed that the 1983 document failed to demonstrate how MNR would "evaluate and respond to input and comments from the public and Government agencies at an early stage" of planning, even though MNR was already required to do this under the conditions of the then prevailing exemption order, MNR-11/6.²

¹ B. Ward, Supervisor, Operational Services Section, MOE, to R. Monzon, Policy and Planning Secretariat, MNR, February 22, 1984, p.2.

² In a commentary included as an attachment (labelled A#1) to the February 22, 1984, letter from B. Ward, MOE, to R. Monzon, MNR, reviewers in MOE's Northwestern Regional Office stated (at pp.21-2), "The draft Environmental Assessment does not comply with condition No. 2 of MNR exemption Order 11/6. Although the document develops a procedure to solicit

Manuals and guidelines

The draft class assessment document referred to manuals and guidelines that would provide details about procedures for carrying out specific timber operations (e.g. road building) and for avoiding or mitigating damages to other forest uses or values (e.g. wildlife), but these manuals and guidelines were not included with the document. Several commentators argued that without the manuals and guidelines and a commitment to adhere to them, the class environmental assessment document would be valueless.

The absence of manuals and guidelines created "grave concern" for the Ontario Forest Industries Association (OFIA), which contended :

... these guidelines and procedures are equally as important as the methodology in the draft document and must receive close scrutiny by OFIA. It is mandatory for OFIA and MNR to work together in the finalisation of the guidelines and procedures prior to the finalisation of the class environmental assessment process.¹

Subsequently, OFIA proposed that it be granted approval powers covering the manuals and guidelines:

All draft (as well as future) guidelines, procedures and directives must be reviewed and accepted by the OFIA before being issued to OMNR field staff.²

input, it lacks the procedure to evaluate and respond to input and comments from the public and government agencies." (The attachment includes a caveat stating that the material does not form part of the MOE position on the class environmental assessment.) MNR exemption order 11/6 is reproduced in Appendix 1.

¹ Ontario Forest Industries Association (OFIA), "Preliminary Comments," November 10, 1983 (27 pages), p.3.

² Ibid., p.19.

Modified management areas

The concept of having "modified management areas" in which objectives other than timber production would be considered, was of great concern to the forest industry, which wanted the extent of such areas kept to a minimum. The concerns of industry and other reviewers were increased by uncertainties about how "modified" management would be carried out, since the document did not specify what modified management could involve or how plans for such management practices would be developed. Moreover, reviewers representing non-timber interests felt that management practices might need to be modified on a broader scale, rather than solely in the selected "modified management" areas.

Bump-up

The Ontario Professional Foresters Association (OPFA) and the OFIA were alarmed by the bump-up proposals, which would allow for full environmental assessments of controversial plans or plan components. Both groups feared that the bump-up provision might lead to frivolous requests and unnecessary delays and costs. They argued that there should be specific criteria for determining when a bump-up would be appropriate, and that the onus to establish the need for bump-up should rest upon the challenger.¹

Public interest group commentators agreed that MNR should set out clear criteria for evaluating bump-up requests. But they also argued for recognition of a broader range of activities that could be subject to a bump-up. In addition, commentators from the Ministry of the Environment and several public interest reviewers expressed concern about plans to proceed with operations while bump-up requests were being considered.

¹ Ibid., p.22; and Ontario Professional Foresters Association (OPFA), "Review of the Class Environmental Assessment of Forest Management on Crown Lands in Ontario," February 1984 (9 pages), p.8.

Pesticides

Both government and public commentators felt that MNR needed to provide more detail on decision making concerning the use of pesticides, due to the potential for long-term environmental effects. The commentators argued that these details should include a better outline of government agency responsibilities and the methods to be used in applying all pesticides.

Monitoring

Several commentators noted the absence of formal procedures for monitoring compliance with the approved plans or for evaluating the actual effects of implementing the undertaking. They argued that MNR should set out clearly defined and quantified goals and objectives, and commit itself to specific efforts to monitor compliance and effects.

The class environmental assessment approach

Several groups questioned whether the class environmental assessment approach was suitable for assessment of such a complex subject, and argued that its use in this case did not fulfill the requirements of the *Environmental Assessment Act*.

In a lengthy attachment to the Ministry of the Environment brief, commentators in the Ministry's northwestern regional office identified a number of deficiencies in MNR document and concluded:

Based on all the shortcomings previously described, the Ministry of the Environment, Northwestern Region, does not feel that the draft EA document constitutes an Environmental Assessment.

Entire sections will have to be written or rewritten in order for this document to conform to Section 5.-(3)(c) of the *Environmental*

Assessment Act. The major focus should be on the environment affected, the effects on the environment, and mitigating and monitoring measures.¹

In contrast to commentators who found the document lacking in rigour and specific requirements, the OFIA argued that the process described would impose excessive burdens on managers and operators. The group claimed the proposed process would be "debilitating in terms of additional expense to both MNR and the forest industry, and unworkable in terms of practical implementation."² The OFIA also found parts of the draft to be "overly naive as well as dangerously simplistic."³

The OPFA thought that MNR officials were

...to be complimented on the quality and comprehensiveness of the draft; and in their successful endeavour to modify the existing forest management planning process to meet the *Environmental Assessment Act* requirements.⁴

However, like the industry association, the professional foresters stated that MNR had ignored the cost implications of environmental assessment. They also felt that they could only support the secondary objectives of forest management (wildlife management, recreation, etc.) when these did not conflict with sustained yield timber production, which was in their view the primary purpose of forest management.⁵

The 1985 Document: Contents

As a result of the critical pre-submission comments on the 1983 draft, the Ministry of Natural Resources revised the document again. The fourth

¹ See B. Ward to R. Monzon, February 22, 1984, Attachment A#1, pp.21-22.

² OFIA, "Preliminary Comments," p.1.

³ Ibid., p.2.

⁴ OPFA, "Review," p.1.

⁵ Ibid., p.3.

version was the first to be presented as a finished document. In December 1985 it was formally submitted to the Minister of the Environment for review and approval under the *Environmental Assessment Act*.¹

The most obvious change was in the title, which now read *Class Environmental Assessment for Timber Management on Crown Lands in Ontario*.² The retitling reflected MNR's response to criticism of the narrow definition and treatment of forest management in the 1983 version. The undertaking was now explicitly defined as "timber management"³, the purpose of which was "to provide a continuous and predictable supply of wood for Ontario's forest products industry."⁴ Timber management itself was loosely defined as a "sequence of related activities," consisting of four main elements:

- (i) provision of access to harvestable timber;
- (ii) harvest of the timber for transport to wood-processing facilities;
- (iii) renewal of that timber resource, which involves:
 - a) preparing the site for regeneration;
 - b) regenerating the timber by natural or artificial means;
- (iv) maintenance of the timber resource, which involves:
 - a) tending operations to ensure successful growth of the new forest;
 - b) protection of the timber resource from insects and disease.⁵

In response to criticisms about the handling of non-timber objectives in the 1983 draft, MNR simply eliminated discussion of secondary objectives.

Some of the changes from the 1983 draft reflected field experience. MNR had begun to apply the process outlined in the 1983 version and in light of the

¹ Letter from V. Kerrio, Minister of Natural Resources to J. Bradley, Minister of the Environment, December 23, 1985.

² Ministry of Natural Resources, *Class Environmental for Timber Management on Crown Lands in Ontario* (Toronto: MNR, December 1985), hereafter referred to as *Class EA*, 1985.

³ *Ibid.*, p.1.

⁴ *Ibid.*

⁵ *Ibid.*, Part 1, p.8.

results decided to revise the planning process so that the main product now became one "Timber Management Plan" encompassing a twenty-year time frame with five years of detailed information for each forest management unit.

The 1985 Document: Reactions

The 1985 submission was not formally distributed for public comment; however, copies were made available upon request to interested parties. Following the review process set out in the *Environmental Assessment Act*, the Ministry of the Environment first circulated the document for comment to all government agencies that might have an interest. Ordinarily, the government reviewers' comments would have been assembled by the Environmental Assessment Branch and released along with the class assessment document for formal public review. But because many of the government commentators expressed grave reservations about the document, the Ministry of Natural Resources chose to withdraw it for revision before the public review stage was reached.

As a result, most of the documented reactions to the 1985 document are from the official reviewers in Ontario government ministries and from selected federal agencies. However, the case file also includes comments received from the OFIA, from Floyd Laughren, MLA, the New Democratic Party's natural resources critic, and from the Red Lake Chamber of Commerce.

Ontario Ministry of the Environment

The Ministry of the Environment provided the most extensive and detailed set of comments. These comments centred on eight main issues:

- the relationship between timber management planning under the class environmental assessment, and broader land use planning and sectoral target setting for timber production,
- detailed examination of the environment to be affected and the potential impacts,
- the handling of "areas of concern",
- the acceptability of certain cutting practices,
- publicly available information,
- bump-up criteria and procedures,
- provisions for compliance monitoring, and
- overall commitment to environmental protection and the overall adequacy of the class environmental assessment document.¹

The Class EA, land use planning and production policy

In the late 1970's the Ministry of Natural Resources undertook a province-wide land use planning exercise (discussed in greater detail in chapter three). The chief, eventual products were District Land Use Guidelines, which noted important features, resource uses and users, and relevant MNR production targets for various activities.² However, the Ministry of the Environment

¹ The MOE comments were provided in several sets of notes from ministry reviewers, including in particular, three sets of notes from P. Joseph, Operational Services, MOE, to K. Morgan, Environmental Assessment Branch, MOE. The first set, dated October 14, 1986, consists of 22 pages of comments plus 4 pages titled "Attachment B: Response to EA Branch Questions". It is reproduced in the formal government review document, Province of Ontario, *Review of the Class Environmental Assessment for Timber Management on Crown Lands in Ontario* (Toronto: MOE, EA Branch, 1987), hereafter *Government Review*, pp.126-159. The second set, dated June 20, 1986, includes a 6 page memorandum plus "Attachment A" (18 pages) and "Attachment B" (3 pages). The final notes in the P. Joseph to K. Morgan series consist of 4 pages dated April 30, 1986.

Also important are a letter from I. Wygodny, Land Use Operational Services, MOE, to K. Morgan, MOE, May 23, 1986 (2 pages), and a letter from W.R. Balfour, Director, Environmental Approvals and Land Use Planning Branch, MOE, to C.E. McIntyre, Executive Director, Approvals and Engineering, MOE, dated October 14, 1986 (4 pages), plus attachment #1 (2 pages).

These letters and notes form a key nucleus of comments identifying problems with the December 1985 document and appear to be the main basis of the subsequent amendments.

² As noted in chapter one, the determination of the timber production targets was guided by the provincial production policy. This matter was not discussed in the 1985 document. The significance of the production policy is examined in more detail in chapter four.

reviewers criticized the land use guidelines and production targets, and the manner in which the proposed class environmental assessment would use them. In particular, the MOE reviewers felt that the use of a multi-disciplinary team, appointed by MNR to assemble the timber management plan, would be unduly constrained by pressure to meet the targets, especially those for timber production, already established in the District Land Use Guidelines:

Since targets for the District have already been set through the District Land Use Guidelines, a conflict of interest situation may well arise, whereby the integrated resource management policy could be swept aside or subjugated in an attempt by foresters to meet the production targets.

Since the responsibility of the multi-disciplinary team to other participants and interested parties in the planning process is not clearly defined, the credibility of this system could come into question.¹

The environment affected and environmental impacts

The proposed process outlined the need for information about the environment likely to be affected but MOE reviewers were not confident that the proposed source for this information was satisfactory:

The assembly of background information relies quite heavily on the MNR District Land Use Guidelines. ...[But] the Guidelines do not go into sufficient detail to properly describe the environment affected in the individual management units.²

Only when the undertaking is examined in detail on a site specific basis can potential impacts be estimated....³

[A] generic description [of the potential environmental effects] is not sufficient to properly address environmental concerns in the area where timber management operations are actually taking place.

¹ P. Joseph to K. Morgan, June 20, 1986, Attachment "A". p.5.

² P. Joseph to K. Morgan, October 14, 1986, Attachment "A", p.7 [in *Government Review*, p.141].

³ P. Joseph to K. Morgan, June 20, 1986, p.2.

Although we are asking for a commitment in the class environmental assessment to have this information provided in an Environmental Report submitted to MOE, the class environmental assessment document should at least specify minimum requirements associated with mitigation and monitoring.¹

Areas of concern

The concept of detailed planning for "areas of concern" only, and not for the other areas, was not acceptable to MOE:

MOE staff feel that environmental effects for all normal timber management practices should be addressed.²

Normal Timber Management activities also have significant environmental effects. Therefore, we do not follow the rationale for restricting the detailing of environmental effects to "areas of concern" only. Predictions should be made about these effects in the TMP [timber management plans] and where necessary, mitigation measures detailed.³

The MOE reviewer also criticized MNR for vagueness about areas of concern⁴ and about who would be responsible for identifying them, the MNR or the public:

Although it is of course appropriate to provide for input from interested parties, it is essentially the proponent's responsibility to identify areas of concern.⁵

Cutting practices

¹ Ibid., Attachment "A", p.3.

² P. Joseph to K. Morgan, October 14, 1986, Attachment "A", p.2 [in *Government Review*, p.136].

³ Ibid., p.2 [in *Government Review*, p.129].

⁴ P. Joseph stated, "...the level of detail and what constitutes an area of concern are not clearly stated in the Class EA." Ibid., p.8 [in *Government Review*, p.142].

⁵ Ibid., Attachment "A", p.8 [in *Government Review*; p.142].

Several specific forestry practices attracted comment from the MOE. Particular concerns were expressed about logging of shoreline and non-regenerable areas:

...it is important that the shoreline ecotone be protected, through an established buffer area, so that cutting will not be done up to the water's edge.¹

Cutting should not be allowed in far northern areas where regeneration is not possible.²

Publicly available information

MOE noted that a standard feature of planning for any project carried out under an approved class environmental assessment, is reporting to other ministries and interested parties "to ensure any concerns are resolved prior to implementation or if necessary to allow for a bump-up request."³ But for this to be effective, MOE observed, reviewers would need sufficiently detailed information to permit evaluation of potential impacts:

The level of detail on the environment affected, environmental effects, remedial measures and monitoring in a class environmental assessment can only be general in nature. Accordingly, specific details for these four areas need to be provided in a distinct formal part of the Timber Management Plans and Supplementary Documentation. This could take the form of an Environmental Report to be sent to the appropriate MOE Regional (Offices) for review (and the EA Branch for the public record), during the planning stage for Timber Management activities.⁴

One of the major shortcomings of this class environmental assessment is that there is no requirement for an Environmental Report to be submitted to MOE.⁵

¹ P. Joseph to K. Morgan, June 20, 1986, Attachment "A", p.13.

² P. Joseph to K. Morgan, October 14, 1986, Attachment "A", p.18 [*Government Review*, p.152].

³ Ibid., letter, p.5 [*Government Review*, p.130].

⁴ Ibid.

⁵ Ibid., Attachment "A", p.12 [*Government Review*, p.146].

Additionally, MOE expressed concern about the uncertain status of documentation on how the central issues of timber management planning were addressed during the preparation of timber management plans under the class environmental assessment. MNR proposed to provide "supplementary documentation" on public consultations and concerns; on the planning and evaluation of forest access road options and locations; and on harvest, renewal and maintenance alternatives, including public concerns and decision-making needs regarding modified operations or reserves to protect specific areas of concern.¹ The MOE reviewer observed,

Although the [*Timber Management*] *Planning Manual* sets out requirements for Supplementary Documentation, on page 109 of the Manual it states that Supplementary Documentation does not form part of the Plan, versus the Appendices which do. What then is the legal status regarding adherence to data contained in the Supplementary Documentation? As the Supplementary Documentation and not the Appendices deal with environmental concerns, we feel that it is essential that such information be a part of the plan, be submitted for review and comments to the MOE Regional Offices, (and also be a part of the Public Record under the *Environmental Assessment Act*).²

Bump-up criteria

In addition to adequate information, the MOE reviewer argued, potentially affected parties would need sufficient time to identify problems and seek solutions, and where where solutions proved elusive, to request a bump-up to full environmental assessment:

Timing is critical to ensure an effective bump-up mechanism. Unfortunately the public participation process described in the class environmental assessment does not appear to be structured as an interactive process. MNR should be required to respond quickly and in detail to all parties expressing concerns regarding the effects of a Timber Management Plan. The response should clearly state whether/how

¹ Details of the procedures for supplementary documentation are found in MNR's Timber Management Planning Manual, p. 110.

² P. Joseph to K. Morgan, October 14, 1986, Attachment A, p.13. *Government Review*, p.147.]

these concerns can be adequately addressed and the provision for bump-up if these concerns cannot be resolved.¹

Compliance and monitoring

The question of monitoring MNR compliance with the *Environmental Assessment Act* and other pertinent legislation, and of monitoring the actual environmental effects caused by implementation of timber management plans, was raised at a number of points in the MOE review:

...there is no mechanism to ensure compliance with the MOE mandate at the implementation stage.²

...MNR is the proponent, and is responsible for ensuring that all parties involved in activities under the approved class environmental assessment do so in compliance with the *Environmental Assessment Act*.³

The class environmental assessment should include a detailed section of precisely what kinds of environmental monitoring MNR is prepared to conduct and outline a documentary/ distribution procedure so that an assessment can be made as to its adequacy to ultimately ensure environmental protection.⁴

...it is uncertain what is to be monitored and when it will be required. There is no rationale given for the proposed sampling system which focuses on areas of concern.⁵

...there is a lack of detail on the specific aspects which the monitoring system will consider.⁶

¹ Ibid., Attachment "A", p.14 [*Government Review*, p.148].

² P. Joseph to K. Morgan, April 30, 1986, p.3.

³ P. Joseph to K. Morgan, October 14, 1986. Attachment "A", p.1 [*Government Review*, p.135].

⁴ P. Joseph to K. Morgan, June 20, 1986, p.5.

⁵ P. Joseph to K. Morgan, April 30, 1986, p.4.

⁶ Ibid., p.2.

As normal practices can cause adverse effects on the environment, we do not feel it is appropriate to limit monitoring to a random basis and only to areas of concern.¹

Commitment to environmental protection.

MOE reviewers had some concerns that the process being proposed was so flexible that it might not be enforceable at all:

The need for flexibility is evident, however, our major concern rests with the lack of commitment in the class environmental assessment and the amount of discretion which ultimately rests with the unit foresters or licencees...²

...there is no formal requirement to follow practices and procedures set out in the reference manuals for the implementation stage of activities to ensure that MOE's environmental mandate will be safeguarded...³

MOE was particularly concerned that the timber planning process set out in the proposed class environmental assessment did not meet the spirit of environmental assessment:

The current level of detail with respect to environmental effects and mitigative measures is very general. Having identified some potential impacts, the class environmental assessment does not subsequently describe how they could be avoided, minimized or mitigated. Part I is almost devoid of specific data from which a technical evaluation can be made.⁴

The planning process is clearly set out in the Class EA but a gap occurs due to a lack of commitment to specific practices and procedures while the plan is being implemented. Thus, the Class EA lacks a fundamental link between the planning process and the implementation of individual components of Timber Management activities. MOE does

¹ Ibid., p.3.

² Ibid., p.2.

³ Ibid.

⁴ P. Joseph to K. Morgan, June 20, 1986, Attachment "B", p.1.

not have the assurance that the natural environment will be protected.¹

Ministry of Citizenship and Culture

Reviewers in the Ministry of Citizenship and Culture (MCC) found the document to be an improvement over the 1983 draft² but were concerned about the loose definition of the relationship between MNR and the industry. They did not believe the narrow definition of the environment affected met the requirements of the *Environmental Assessment Act*:³ and they were dissatisfied with MNR's vagueness about how non-timber values would be protected. MNR had allowed for consideration of non-timber values in two kinds of lands - "exclusions" or areas such as private land, federal reserves and provincial parks that were not available for timber management operations, and "areas of concern" within the timber management lands. But the MCC reviewers found this categorization insufficient:

How and by whom are exclusions identified, agreed upon, legally delineated and monitored? What is the relationship between exclusions (presumably already defined) and reserves identified in "areas of concern?"⁴

On matters central to the MCC's responsibilities, the reviewers expressed concern that heritage resources had not been sufficiently covered in the District Land Use Guidelines and were still not dealt with in the class environmental assessment document, despite the mention of multi-disciplinary "environmental monitoring."⁵

¹ P. Joseph to K. Morgan, October 14, 1986, p.2. [*Government Review*, p.127].

² Draft of letter from MCC to MOE, April 23, 1986 (4 pages).

³ Ibid., p.2.

⁴ Ibid., p.2-3.

⁵ Ibid., p.3. The concern about heritage resources and particularly about archaeological values was reiterated by the Ontario Archaeological Society. See letter from the Ontario Archaeological Society (Inc.) to Brian Ward, Environmental Assessment Branch, MOE, April 28, 1987.

Ministry of Tourism and Recreation

The Ministry of Tourism and Recreation (MTR) "generally accepted" the document, but reported several specific concerns. Like the MOE reviewers, those from MTR criticized the vagueness of commitments to operational procedures for avoiding or mitigating negative impacts. In particular, the MTR reviewers noted that MNR had not indicated how it would make use of the various operational guidelines produced for or under the class environmental assessment:

It is not clear what the precedence of the various manuals, plans and guidelines is. The Class EA should state how the various manuals, plans and guidelines will be integrated.¹

The MTR reviewers also emphasized the potential negative impacts on tourism and the tourist industry from timber operations, especially the practice of clear cutting:

Since the size, type and location of a harvest may affect visibility for up to twenty years, "temporary loss of ... appeal" [page 9 of the submission] is somewhat misleading. Harvesting may have a significant impact on tourism activity.²

and the construction of access roads:

Social, Economic and Cultural Effects - As presently worded this section [Part I, p.57-59] gives the impression that although tourism values will be affected by access roads, the positive benefits outweigh the negative ones. This is not necessarily true. Access roads may result in the destruction of existing operations in some cases.³

This latter worry was reiterated in a subsequent letter in which MTR underlined the importance of controlling access to previously inaccessible

¹ Letter from Ruth Cornish, Director Strategic Policy Branch, Ministry of Tourism and Recreation (MTR), to Kay Morgan, Environmental Assessment Branch, MOE, April 17, 1986, p.3. of attachment [*Government Review*, p.193].

² Ibid., p.1 [*Government Review*, p.191].

³ Ibid.

areas in order to protect the existing tourism industry, and "opportunities for future potential investment."¹

Federal Department of the Environment (Environment Canada)

Environment Canada's Regional Screening and Coordinating Committee, set up to examine proposals subject to the federal Environmental Assessment and Review Process, reviewed MNR 's 1985 document.² The committee, which included representatives from federal wildlife, forestry and parks agencies, focused chiefly on potential impacts on matters of federal environmental responsibility.

Representatives from the Canadian Wildlife Service were particularly concerned about the adequacy of data gathering for prediction of environmental effects, especially effects on environmental values and resources outside MNR 's mandate.

...the extent to which adverse environmental impacts can be avoided or minimized will depend on the extent and quality of the background information obtained....³

...there is no clear indication as to what environmental issues will be considered other than those related to MNR programs. ...Although some references to wildlife are generic and could be taken to include migratory bird concerns, there is little if any indication that data will be collected and utilised for identification of wildlife concerns other than for fish, game, and provincially protected species.⁴

¹ Letter from Ruth Cornish, Director Strategic Policy Branch, MTR, to Kay Morgan, Environmental Assessment Branch, MOE, September 29, 1986, p.2 [*Government Review*, p.195].

² Letter from Gary D. Huntley, Chief, Planning, Evaluation and Research Services, Great Lakes Forestry Centre, to Kay Morgan, Environmental Assessment Branch, MOE, April 25, 1986 [*Government Review*, p.205].

³ *Ibid.*, p.1 [*Government Review*, p.205].

⁴ *Ibid.*, pp.1-2 [*Government Review*, pp.205-6].

In fact, the Canadian Wildlife Service commentators observed that the design of the proposed process for preparation and review of timber management plans implied that MNR saw no need for active collection of data from other agencies. They saw in the document,

... the perspective that input from other government ministries or agencies is identical to contributions "by external participants in the planning process, in response to the initial public notice" (page 95 lines 35-36). Implicit in this perspective are two problems. First, it would be preferable for other government agencies such as ourselves ... to be viewed as cooperating participants to be consulted in development of a data base, rather than as external participants who may choose to respond to a public notice. Second, there seems to be a failure to recognise the full responsibility of the proponent, MNR, and its District planning team in assembling information relevant to making planning decisions within the framework of the class environmental assessment. Specifically, the proponent should actively consult known sources of data ... not simply post public notices and transfer the responsibility of coming forward to these sources.¹

A second major concern of Environment Canada commentators was the absence of specific guidelines for avoiding and mitigating negative effects from the timber operations, and the vagueness of MNR's commitments to ensure the guidelines would be followed when they were in place:

While the potential environmental hazards, inherent in the implementation of forest management practices in the Province, have been thoroughly described, mitigating practices have not been addressed. It is presumed that these practices will be addressed in the guidelines and manuals being prepared as companions to the class environmental assessment. It should be stated in the class environmental assessment that these guideline documents will be used, rather than "may use" or "provide helpful direction" or provide "guidance". Where possible, these documents should give a clear set of minimum and maximum guidelines pertaining to various forestry practices. It should be anticipated by a reviewer of a specific project that forestry activities, on a specific site, would be conducted in a reasonably standard manner, as outlined in the guidelines for that activity.²

¹ Ibid.

² Ibid., pp.3-4 [*Government Review*, pp.207-208].

Canadian Forestry Service (CFS) reviewers offered similar comments. They thought that there should be a second opportunity for public review of timber management plans, following the MNR's preparation of a "Final Draft for Approval", rather than merely an opportunity for inspection. They felt this would help the MNR to "...more carefully consider non-MNR concerns."¹ CFS representatives noted that preparation of data bases that would support reliable predictions would require a commitment by MNR to provide enough resources to the various branch groups to collect sufficient data. They also noted that the 1985 document did not describe how the "...potential environmental hazards, inherent in the implementation of forest management practices..." would be mitigated. Assuming that this information would be contained in the existing and promised manuals and guidelines, the CFS reviewers recommended addition of a clear statement in the class environmental assessment document that these "will" rather than "may be" used.

The CFS reviewers questioned whether or not recommendation 5.21 from the Royal Commission on the Northern Environment had been "addressed and resolved". The recommendation states:

That undertakings in which particular cutting methods are proposed for use in the boreal forest be subject to assessment under the *Environmental Assessment Act* and that class assessments of such cutting methods not be permitted until an information base on the environmental effects of cutting methods in representative boreal forest areas has been generated from actual environmental assessments.²

Finally, Parks Canada reviewers focused on the potential effects of timber operations at the boundaries of federal parks. They found the concept of "Areas of Concern" too restrictive to ensure that timber operations on park boundaries would not result in uncontrolled cross-boundary impacts.³

¹ Ibid., p.3 [*Government Review*, p.207].

² Ibid., p.4. [*Government Review*, p.208].

³ Ibid., p.3 [*Government Review*, p.207].

Federal Department of Indian Affairs and Northern Development

The federal Department of Indian Affairs and Northern Development (DIAND) was particularly critical of the MNR for failing to recognise the interests and rights of natives in Ontario. In their comments on the 1985 document, the DIAND reviewers observed that the class assessment document did not "adequately address the social, economic, and cultural conditions that influence and affect Indian People, bands and reserves in Ontario"¹ and that MNR had apparently chosen to disregard native treaty rights:

The undertaking itself, Timber Management on Crown Lands, does not take into consideration or address the aboriginal rights provisions of the Constitution Act of 1982 or the Province's native affairs corporate policy.²

The DIAND commentators saw no indication in the class environmental assessment of how native people's rights would be respected in timber management planning.³

In an earlier letter to MNR officials, DIAND representatives had stated,

...the Indian people in Canada have a unique legal and cultural relationship with each province and federal government. This document [the class environmental assessment] does not specifically recognise or acknowledge this unique relationship or the provincial commitment to undertake the following principles concerning the Indian people in Ontario.

¹ Letter from Gary Wouters, Regional Director General, Ontario Region, DIAND, to Kay Morgan, Environmental Assessment Branch, MOE, September 29, 1986, pp.1-2 [*Government Review*, pp.220-1].

² *Ibid.*, p.2 [*Government Review*, p.221]. The Ontario government's corporate policy on native affairs is outlined in a five page letter from Ian Scott, Minister Responsible for Native Affairs, to all Ministers, dated December 9, 1985 [*Government Review*, pp.233-5].

³ *Ibid.*, p.3 [*Government Review*, p.222].

- Support the constitutional entrenchment of rights for aboriginal people.
- Support the objective of increasing the degree of self determination and self reliance of native people.
- Support the protection of native cultures.
- Support the development of plans, policies and programs respecting native people in consultation with native communities.

...these principles...must be addressed and incorporated in...a policy document like the class environmental assessment for Timber Management.¹

In addition to suggesting that all "potentially impacted Indian Bands" should be automatically kept informed about timber management planning covering areas of native interest, DIAND noted the need for information in the appropriate native language, for material presented in a manner which could be readily understood by people unfamiliar with the process, especially the bump-up procedures, and for manuals which would "...assist resource managers and planners in addressing the needs and concerns of Indian Bands affected by timber management."²

DIAND concluded that "...the EA [does] not address DIAND's policies nor the Province's policies respecting Indian people" and that, "the undertaking is not satisfactory to DIAND Ontario Region...".³

The Ontario Forest Industries Association

The OFIA clearly saw the revised document as sufficient, and in a letter sent in February 1986 to the premier and all relevant ministers, OFIA president

¹ Letter from E.G. Morton, Director, Reserves and Trusts, Ontario Region, DIAND, to Gordon Rodgers, Policy and Planning Secretariat, MNR, May 21, 1986 [*Government Review*, pp. 224-6].

² Ibid., p.3 [*Government Review*, p.226].

³ See Attachment #2 with the letter from Gary Wouters to Kay Morgan, September 29, 1986, which is a list of responses to the questions outlined in an earlier letter from Kay Morgan to class environmental assessment reviewers, dated January 27, 1986 [*Government Review*, p.227].

I.D. Bird "urged" that the document be supported.¹ The OFIA approved of MNR being the sole proponent of the undertaking although they saw themselves, collectively, as the "principal client" in the undertaking, and insisted that "close industry-MNR liaison" should prevail in the development of any guidelines.²

Industry representatives expressed a conviction that their activities did not warrant detailed environmental assessment. In an earlier joint brief submitted to Natural Resources Minister Vince Kerrio in August 1985, the OFIA and the Ontario Lumber Manufacturers Association had stated:

In general, these [forestry] operations are remote from human habitation, and low in environmental impact. Such operations do not warrant the same degree of scrutiny as would be necessary for projects having the potential for major environmental problems....³

In his February 1986 letter to Cabinet ministers, Mr. Bird reiterated the point:

To our knowledge there have been no documented cases of forestry operations (harvest or renewal) causing significant environmental damage in Ontario.⁴

For this reason, the industry commentators held that use of MNR's planning process was sufficient and that industry-government relations established through this planning should not be undermined by disruptive application of the environmental assessment process. The major concern of the industry representatives was that over the period since the beginning of efforts to apply environmental assessment requirements to forest activities,

¹ Letter from OFIA President I.D. Bird, to all Cabinet ministers and Premier David Peterson, dated February 10, 1986. Copies of the letter sent to the Minister of Natural Resources and the Minister of the Environment were accompanied by a covering letter (same date) suggesting that the OFIA "...would be pleased to consider any other support measures which you care to recommend." The OFIA followed up its letter campaign in a meeting with the Minister of the Environment. See letter from W.F. Fell, OFIA, to D. Guscott, MOE, dated April 3, 1986.

² Letter from OFIA to Cabinet ministers, February 10, 1986, p.2.

³ Joint submission to V. Kerrio, from I.D. Bird, OFIA, and J.M. Atkinson, Ontario Lumber Manufacturer's Association, (OLMA) dated August 27, 1985, p.1.

⁴ Letter from OFIA to Cabinet ministers, February 10, 1986.

the environment ministry, which was responsible for environmental assessment, had shown little inclination to accept the industry's views and perspectives. In their August 1985 letter to Mr. Kerrio, the industry representatives stated,

Since the passing of the *Environmental Assessment Act* (1975)....the two ministries (MNR and MOE) with forestry input, have attempted to develop an Environmental Assessment Manual to permit implementation of the Act. Despite considerable effort, little progress has been achieved. The major impediments have been and remain:

- the unfamiliarity of the MOE staff with forestry practices,
- the inflexible insistence of the MOE staff on environmental perfection,
- the inability of the MNR staff to adequately communicate to the MOE the potential economic impact of their proposals upon the industry,
- the failure to give sufficient consideration to the practical alternatives proposed by the industry.¹

The forest industry respectfully urges the Minister to meet with the Minister of the Environment to convey the point of view expressed by the industry in this brief and to seek a further extension of the exemption to permit resolution of industry concerns. The industry will be pleased to support and assist the Minister of Natural Resources in his representation.²

These comments indicate that the forest industry had been consulted, if not more closely involved, in deliberations on the application of environmental assessment to forest and timber management since 1976, but that relations with the Ministry of the Environment remained strained. Indeed, at least one industry representative expressed concern that environmental assessment requirements might undermine the industry's relatively successful relationship with the MNR:

Much progress has been made especially in the last few years in forest management. Professional foresters and technicians from both

¹ OFIA and OLMA to V. Kerrio, MNR, August 27, 1985, p.2.

² Ibid., p.4.

industry and MNR have made great strides. The environmental assessment process has already introduced major levels of uncertainty into forest management. If we are making progress in this management it will be most unfortunate to have the EA process undo what has been accomplished.¹

Floyd Laughren, MLA

Although the 1985 document was withdrawn prior to formal public review, a few public individuals and representatives of non-timber interests did submit comments.² Many of the concerns common to these parties were raised by Floyd Laughren, MPP, in a letter to Environment Minister James Bradley.

Mr. Laughren, the Ontario New Democratic Party's natural resources critic, reiterated many criticisms expressed by commentators on earlier drafts of the class environmental assessment. Because the document addressed timber management rather than the broader range of forest management purposes and issues, Mr. Laughren found that its scope was "far too limited":

Nowhere does the document explicitly state that the purpose of forest management also includes minimising environmental damage, wildlife management, maintaining recreational facilities, etc.

...The definition [of the purpose] has been progressively narrowed until only the needs of the industry remain as goals of forest management.³

Mr. Laughren also criticized MNR for failing to discuss production policy, and in particular, the wood fibre production targets that determine how

¹ Noted in the minutes, prepared by K.A. Armson, of a meeting between the Canadian Pulp and Paper Association, the Ontario Forest Industries Association, and Ministers Kerrio, Fontaine, O'Neil and Bradley, May 27th, 1986, p.3. The remark is attributed to John Houghton, President of the Ontario Paper Company.

² At the time it was thought that the 1985 submission would be referred for hearing by the Environmental Assessment Board and it seems likely that many potential intervenors refrained from submitting comments until they had read the *Government Review* and could judge more accurately what arguments would be most appropriate in presentations to the Board.

³ Letter from Floyd Laughren, MPP. to the Honourable J. Bradley, MOE, April 2, 1986.

much timber cutting activity is needed, and for failing to include the implementation manuals and guidelines that determine how the undertaking will be implemented and therefore the extent of environmental impacts. He advocated full environmental assessment for each individual application of chemical insecticides, recommended that MOE have the document reviewed by an independent professional forester, and argued for "adequate" intervenor funding to allow for effective public participation in the review process.¹

The Red Lake Chamber of Commerce

Other than Mr. Laughren's comments, the only public submission in the MOE's files is a letter from the Red Lake Chamber of Commerce to the environment minister. Like Laughren, the Chamber challenged the narrow definition of the undertaking and the implication that the forest is important only as a source of raw material for the timber industry. The Chamber wrote,

We suggest to you [Minister of the Environment] that there is more than one industry that requires wood e.g. tourism...²

Summary of reactions

The comments of the reviewers divide easily into those of the timber industry and those of the government agencies and public critics. While the latter comments vary somewhat, they are in general accord and can be summarised in the following eight statements of criticism:

- the narrow definition of the undertaking in the document discourages integrated attention to all forest values and uses, and fails to address underlying decision making (e.g. timber production policy);

¹ Ibid., p.2.

² Letter from the Red Lake Chamber of Commerce to the Minister of the Environment, May 27, 1986.

- the level of descriptive detail about the environment to be affected and the potential impacts is inadequate in the class environmental assessment document, and there is insufficient commitment to, and process provisions for, providing these details in the timber management plans;
- the public involvement components of the process for timber management planning are unlikely to provide effective means of ensuring that non-timber values are given due consideration;
- federal and Ontario provincial policies regarding native Indian peoples are ignored;
- specific operational procedures for avoiding and mitigating impacts are not provided and there is little or no demonstrated commitment by the MNR to ensure integrated and effective application of the procedures in the promised manuals and guidelines;
- the monitoring process is inadequate;
- the class assessment refers to manuals and guidelines, but since they are not included in the document, or yet available in some cases, it is not clear how the plans will be translated into actual practice; and
- there is no mechanism to ensure compliance with the manuals and guidelines.

In December 1986, in response to comments by government and other reviewers, MNR withdrew the 1985 document to make extensive amendments. The exact nature of the planned changes was kept secret on the grounds that the government agencies should review the amendments first, prior to public review.¹ Eighteen months later, MNR resubmitted an amended version for MOE approval.

¹ See letters from the MNR lawyers, Houser, Henry, Loudon and Syron to B. Ward, MOE, September 18, 1986 and I. Wygodny, MOE, December 23, 1986.

The 1987 Document: Contents

The 1987 version, the fifth attempt, was submitted in June 1987. MNR retained the "timber management" title of the 1985 document,¹ and the purpose of the undertaking also remained "to provide a continuous and predictable supply of wood for Ontario's forest products industry."² However, MNR emphasized that it had made important amendments, endorsed by the Environmental Assessment Branch, to address concerns expressed by government reviewers and to incorporate lessons from experience in applying the process over the preceding 18 months, as well as to provide better explanation of certain matters and to correct errors or update information.³

The changes included some response to most of the eight major criticisms leveled at the 1985 version (see above). While the scope of the assessment was not altered (the document still addressed timber management, not forest management), the relevance of some additional factors was noted. Recognition of native land claims and aboriginal rights,⁴ a brief discussion of heritage resources and archaeological values,⁵ and a reference to the timber production policy,⁶ broadened the range of planning considerations somewhat. However, the focus on timber values and timber management was not altered and the amended process was clearly not intended as a vehicle for integrated forest management.

The description of the environment to be affected was expanded slightly with the addition of 12 lines of text. MNR maintained the position that the

¹ Ministry of Natural Resources, *Class Environmental Assessment for Timber Management on Crown Lands in Ontario* (Toronto: MNR, December, December 1985, amended June 1987), hereafter called *Class EA, 1987*.

² *Class EA, 1987*, Part 1, p.8.

³ Letter of transmittal from Minister V. Kerrio, MNR, to Minister J. Bradley, MOE, July 6, 1987 attached to the amended version.

⁴ *Class EA, 1987*, Part 1, p.7.

⁵ *Ibid.*, pp. 68, 85.

⁶ *Ibid.*, Part 2, p.99.

detailed description of the environment to be affected belonged in the individual timber management plans on the grounds that class environmental assessment is not intended to provide the detailed plans, but merely to establish the process of producing the plans.¹ Under the proposed process, only "areas of concern" would receive careful attention and perhaps better practices. Outside these areas, MNR proposed no changes to the current approach to planning for timber production.

The amended document included some clarification of, or improvements to, procedures for identifying environmental values that could be affected by planned timber operations. In particular, MNR agreed to produce a "values map" for each management unit, on which all land uses, resource features and values would be mapped.² Individual inventories and data bases were also mentioned.³ There was, however, little additional detail on how identification of values would lead to the assessment of potential impacts and the adjustment of plans, except perhaps with regard to "areas of concern". A more detailed outline of how planning was to be done and what was to be included in the final plans, was provided in the *Timber Management Planning Manual*, released in 1986. However, this manual does little to clarify how the information is to be obtained or used. Its authors refer to the environment affected and environmental effects as "constraints on Forest Operations".⁴

To assist in identification of "areas of concern," MNR agreed to work jointly with the MOE in developing

... a mutually acceptable list of "areas of concern" with the following principles in mind:

¹ Ibid., Part 1, p.52.

² Ibid., Part 2, p.114. See also letter from L. Douglas, Director, Policy and Planning Secretariat, MNR, to W. Balfour, Director, Environment Approvals and Land Use Planning Branch, MOE, July 23, 1987, Item 2.

³ *Class EA, 1987, Part 2, p.112.*

⁴ MNR, *Timber Management Planning Manual for Crown Lands in Ontario, 1986, p.8.*

- A basic premise of any EA is to focus on identifiable values/features and the significant impacts which the undertaking could have on them.
- Values/features to be considered are those where cause-effect relationships are established, or at least commonly accepted by the scientific community.
- MOE's "list" should be specific and recognise significance of impacts.¹

The public involvement process was essentially unchanged. The amended document contains a rewritten discussion of the monitoring process, which now describes mechanisms for compliance monitoring and effects/effectiveness monitoring.² Various reports and audits are to be assembled. However, the MNR made no explicit commitment that all of these reports and audits would be publicly available, and no explicit statement of how the MOE or MNR will review and act upon the information collected. The results of the proposed monitoring studies would be presented when the class environmental assessment came up for renewal, five years after approval,³ but compliance monitoring, which is still an MNR responsibility, was not outlined in much more detail.

Finally, MNR did little to clarify the link between the planning process and the actual practice on the ground. The amended document describes an elaborate procedure by which future timber management plans are to be produced. However, the manuals and guidelines which outline how specific concerns and practices will be handled in the preparation and implementation of the timber management plans, and which will therefore guide how timber operations are carried out in the forest, were not incorporated as parts of the class environmental assessment, even though their use is now mandatory. In some cases these manuals have not yet been written.

¹ Letter from Larry Douglas, MNR, to W. Balfour, MOE, July 23, 1987, Item 1.

² *Class EA, 1987*, Part 3, pp. 192-200.

³ *Ibid.*, p.200.

The 1987 Document: Reactions

Since the release of the fifth version in June 1987, the submission has undergone formal review by government agencies,¹ been released for period of public review, and been referred to the Environmental Assessment Board for public hearings. During the government review several agencies submitted detailed responses to the 1987 document. The most comprehensive set of comments came from the Ministry of the Environment. Many agencies contacted expressed only minor concerns and had no further interest in the process, or no additional comments to make.²

Ministry of the Environment

Comments from the MOE focused on the collection and consideration of detailed information necessary to implement the "areas of concern" concept, the specific details of environmental effects and the remedial measures needed to mitigate these effects, the need for a stronger water quality monitoring programme, and the need for the MOE regional offices to receive all relevant information. The MOE reviewers noted improvements but still had several outstanding concerns and listed fourteen additional requirements which they felt should be addressed in the class environmental assessment document.³

¹ Letter from Wes Green, Environmental Assessment Branch, MOE, to Ontario and federal government agencies, July 15, 1987 [*Government Review*, p.103].

² For example, the Ontario Provincial Police [*Government Review*, p.189], Office of the Fire Marshall in the Ministry of the Solicitor General [*Government Review*, p.187], the Realty Group in the Ministry of Government Services [*Government Review*, p.173], Office of Local Planning Policy in the Ministry of Municipal Affairs [*Government Review*, p.182], the Ministry of Tourism and Recreation [*Government Review*, p.196], the Ministry of Northern Development and Mines [*Government Review*, p.184], the Ministry of Correctional Services, the Ministry of Treasury and Economics [*Government Review*, p.202], and Ontario Hydro [*Government Review*, p.239].

³ Letter from P. Joseph, Manager, Operational Services Section, MOE, to Wes Green, Environmental Assessment Branch, MOE, October 23, 1987, 7 pages, plus Attachment A, 4 pages [*Government Review*, pp.160-170].

Areas of concern

The MOE reviewers judged the handling of "areas of concern" to be especially crucial if non-timber values were to be recognised in the planning process. They also reported that efforts to assist MNR in clarifying how areas of concern would be identified had not yet led to a final solution:

Although the Class EA mentions that an MNR policy will identify "areas of concern", MOE and MNR are still working on a joint list. Consensus with MNR on the 'areas of concern' list, with some means of quantifying scale or significance, is a key factor for implementation of the timber management planning process, in that the requirement for comprehensive planning, documentation and possibly monitoring is triggered by the list.¹

Values maps

The reviewers recognised that the concept of displaying areas of concern on a "values map" had been added in the 1987 document, but they were not satisfied that this would ensure proper identification and protection of areas of concern in the absence of relevant guidelines and inventory data:

Page 114, line 1 refers to "minimum inventory information" for fisheries and moose habitat, tourism values, other resource features, land uses and values, but the Class EA provides no further direction on what these minimum requirements are. We expect the three mandatory MNR guidelines (re. moose, fisheries and tourism) and others produced to provide this information, but the Class EA as well needs to define the minimum inventory information required to ensure that there will be sufficient data available to specifically identify and adequately address MOE "areas of concern" for each timber management plan.²

The Class EA should identify areas where new information is required along with existing reference documents and provide direction and structure by including a description of their intent.³

¹ Ibid., p.1 [*Government Review*, p.160].

² Ibid., p.2 [*Government Review*, p.161].

³ Ibid.

Remedial measures

For the "areas of concern" identified in each timber management plan, the MOE requested that "site-specific details" be provided about the anticipated environmental effects, and that the class environmental assessment process demonstrate how the links between the effects and remedial measures would be forged:

It is noted that remedial measures are occasionally identified in sections of the silvicultural guidelines which discuss operational techniques, but these guidelines concentrate on timber harvesting, and in most cases provide recommendations rather than requirements. ...[A] certain degree of specific direction must be provided for implementation techniques. ¹

Clear cutting

The clear cutting technique is the main method of logging in Ontario and is therefore a crucial element in determining the "environmental effects" attributable to logging operations. Given this, the MOE reviewers believed the MNR's document should provide considerable detail on clear-cutting effects and mitigation options:

The information and level of detail on the clear cut silvicultural system should be significantly expanded, as it is the most commonly used harvest system in northern Ontario (85%), and there are 4 different methods involved, with differing environmental effects. Each method of clear cutting should be handled as a separate entity in the Class EA (i.e. each is an alternative method of carrying out the undertaking) or in the silvicultural guidelines, with the silvicultural guidelines providing precise details on mitigative measures.²

Regeneration and protection forests

¹ Ibid.

² Ibid., p.3 [Government Review, p.162].

More generally, the MOE commentators were concerned that the provisions of the proposed class environmental assessment would not prevent logging of sites where satisfactory regeneration was unlikely:

...[B]ased on MOE field observations and such reports as that of the Royal Commission on the Northern Environment ...it appears that some areas, particularly in the Boreal Forest Region, are being cut that virtually cannot be renewed (e.g. areas of bald bedrock). The R.C.N.E. report indicated approximately 33% of areas cut were not satisfactorily regenerated. Although it is our understanding that areas that cannot be regenerated will be deemed "protection forest" (i.e. no harvesting) under the Class EA planning process, information should nevertheless be included in the Class EA or in referenced guidelines to describe the nature of sites where past efforts have failed, identify the associated environmental effects (e.g. soil erosion or degradation), outline how/if environmental effects can be reduced and in general indicate how the effects of non-regenerated areas will be handled.¹

The MOE reviewers found the 1987 document unacceptably vague about the identification of "protection forest" lands, and about what activities would be permitted on these lands.

Page 111 at the top indicates that activities cannot normally be carried out on "protection forest" lands without incurring deleterious environmental effects, but there may be operations on them (line 15). We understand from MNR's draft guidelines entitled "Normal Operating Areas" that these occasional operations can only involve access roads, and this should be stated in the Class EA. As well, it is essential that the timber management plan clearly identify the "protection" forest lands from the "production" forest lands.²

Reserves and buffer areas

On the matter of logging in "reserves" and buffer zones around sensitive areas, the MOE reviewers found policy inconsistencies as well as general vagueness about the goals and objectives now appearing in the class environmental assessment submission:

¹ Ibid.

² Ibid., p.4 [*Government Review*, p.163].

This policy referenced in the Class EA is to have the list of "areas of concern" [being jointly developed by MNR and MOE] appended to it. The intent of the policy is to enable increased harvesting by going into areas previously identified as "reserves", while protecting other resource values. We request clarification on this point, as the accompanying procedure PPS 2.02.03 indicates "no operations" in a "reserve"... There appears to be an inconsistency with the meaning of "reserve". ... MOE is concerned with the approach whereby harvesting is permitted in a buffer area which has been established to accommodate another value or use. If this is the case, buffer areas should be clearly identified as such on the "areas of concern" map and there should still be provision, where appropriate, for them to become "exclusions".¹

Water quality

Protection of water quality, a major element of the MOE's environmental mandate, received special attention in the 1987 round of comments:

...the Class EA should identify and provide information on this additional effect [net acidification of stream waters due to logging and the adverse biological effects] and remedial measures from both the terrestrial and aquatic perspectives.²

... MOE would like assurance that plans being formulated [for water quality effects] will consider the effects on lower trophic levels (such as stream invertebrates) and include an enhanced water chemistry program.³

Timber management can be considered to be a non-point source of pollution, and as such "Conservation and remedial measures will be required for the control of non-point sources if they are shown to cause or contribute significantly to violations of the Provincial Water Quality Objectives". This means that measures to reduce the impairment of water quality apply to all water bodies and streams, regardless of

1 Ibid.

2 Ibid., p.3 [Government Review, p.162].

3 Ibid., p.4 [Government Review, p.164].

whether MNR has designated them as spawning areas or areas containing valuable sport species.¹

MOE's Water Resources Branch outlined specific water quality policies, relevant to timber management operations, and recommended that that these be incorporated in the class environmental assessment.²

The environment affected

Finally, like the preceding versions of the class environmental assessment, the 1987 version was, in the judgement of the MOE reviewers, deficient in describing the environment affected and the environmental effects to be expected and mitigated.

...the Class EA planning process must supply MOE with a detailed description of the environmental effects of operations on a *site specific basis*.³

It is suggested that the generic description of the environment affected could be expanded to provide more detail. This could assist in understanding and describing generic effects and remedial measures.⁴

The statement in the class environmental assessment that "there are generally predictable ranges of environmental effects for each activity" can apply in a loose sense. The range for water yield, for example, may be anywhere from 30% to 300%, and vary with the site and specific practices. We support the continuation of studies under MNR's monitoring program so that a predictable range of effects can be established. In particular, there is very little known about the effects of timber management in a boreal forest setting. ... MOE feels strongly that a conservative approach for "normal operations" is warranted, because very little information on long term effects is available. It may be advisable to apply the planning process for "areas of concern" to unknown situations. ⁵

¹ Ibid., Attachment 'A', p.2 [Government Review, p.168].

² Letter from Jim Bishop, Water Resources Branch, MOE, to W.R. Balfour, Director, Environmental Approvals and Land Use Planning Branch, MOE, October 16, 1987.

³ P. Joseph, MOE, to W. Green, MOE, October 23, 1987, p.2. [Government Review, p.161].

⁴ Ibid., p.6. [Government Review, p.165].

⁵ Ibid., pp.6-7. [Government Review, pp.165-6].

Overall, the MOE noted that there were still "a number of areas where staff feel basic information, more detail or clarification should be provided."¹

Ministry of Transportation and Communications

Ministry of Transportation and Communications (MTC) reviewers stated that their participation on an "Interministerial Committee" would probably allow for resolution of any outstanding issues. They retained concerns about the "... long-term maintenance of MNR roads and the impacts of resource activities on municipal and Local Roads Board roads"² and were also concerned about the scheduling of timber management plans for review by the public and other agencies. Too many plans at a similar time would weaken the review process due to extreme workloads. The MTC also requested that its officials be informed of all plans automatically rather than being "... part of the general request for comments sent to the public."³

Ministry of Health

The Ministry of Health had no concerns, other than a caution that the local Medical Officer should always be informed where and when pesticide spraying operations were to take place.⁴

¹ Ibid., p.7. [*Government Review*, p.166].

² Letter from David Hobbs, Deputy Minister, Ministry of Transportation and Communications, to R.M. McLeod, Deputy Minister, MOE, September 15, 1987, with attached review by R.C. Hodgins, Manager, Environmental Office, MTC, same date [*Government Review*, p.199-201].

³ Ibid.

⁴ Letter from Barbara Blake, Director, Public Health Branch, Ministry of Health, to Wes Green, Environmental Assessment Branch, MOE, August 21, 1987 [*Government Review*, p.176].

Ontario Native Affairs Directorate

The Ontario Native Affairs Directorate reported that the document still did not pay sufficient attention to the "social, economic and cultural effects of timber harvest operations and timber management [on] ...Native people."¹ The directorate's reviewers stated that the class environmental assessment document could be improved by the addition of a specific statement to ensure that timber operations would not "...impact negatively upon Native people."²

As well, the directorate reiterated its earlier comments that MNR should hold meetings on the reserves during timber management plan preparation and that they should make every effort to ensure that the Native people "...are informed and clearly understand the 'Bump-up' procedure."³

Ministry of Citizenship and Culture

Reviewers for the Ministry of Citizenship and Culture (MCC) stated that they had no objections to the 1987 version because they accepted an internal mechanism for addressing the ministry's concerns:

...[w]e have been assured that ongoing discussions between MNR and MCC will take place to ensure the conservation of those significant heritage resources which are located on Crown Lands.⁴

Expected products of these "ongoing discussions" were to include:

- the development of an effective process of inventory and analysis of data, as appropriate;

¹ Letter from Mark Krasnick, Executive Director, Ontario Native Affairs Directorate, to Wes Green, Environmental Assessment Branch, MOE, September 14, 1987.

² Ibid.

³ Ibid.

⁴ Letter plus 5 page attachment from Robert Montgomery, Director, Heritage Branch, Ministry of Culture and Communications, to Brian Ward, Director, Environmental Assessment Branch, MOE, October 9, 1987.

- the development of a buffering system to protect undiscovered sites, when cost factors or lack of available expertise preclude heritage resource inventory in harvestable areas;¹ and ...
- the production of guidelines for use in identifying areas where Timber Management would most likely impact on heritage sites, predicting environmental effects, developing mitigation measures to reduce those effects and assigning responsibility for each of these steps.

The guidelines will define what would constitute an appropriate buffer zone for use when cost and other factors preclude detailed heritage studies in areas of high potential for archaeological resources. Buffer zones ought to be an effective technique for heritage conservation because studies show that 80% of archaeological sites occur within 200 metres of water.²

In addition to the technical manual and management guidelines, MCC reviewers stated that a means of ensuring effective implementation of heritage protection measures would have to be developed.³

Parks Canada

Parks Canada reviewers repeated their earlier comments concerning the need to protect against trans-boundary problems where timber operations were undertaken near parks.:

Timber Management Plans should ideally consider effects of proposed logging activities on adjacent lands, i.e. Parks. This includes trans-boundary movements of logging-generated impacts such as improved access (via logging roads), potential pesticide/herbicide applications, alterations in habitat/species composition, and the adequacy, in terms of Parks' desirable guidelines, of Provincial guidelines for road streamcrossings of in-flowing streams. Hence, the concern over

1 Ibid., p.1 of attachment.

2 Ibid., p.2 of attachment.

3 Ibid., p.3 of attachment.

whether this is addressed by MNR document via "areas of concern" and "reserves", especially in terms of appropriate buffer zones adjacent to Park Boundaries.¹

The Government Review

Formal review of the June 1987 submission by government agency commentators was coordinated by the MOE's Environmental Assessment Branch. In December 1987, the Branch released its formal report on the government reviewers' findings. In addition to the agency comments discussed above, the published *Government Review* document contained a summary and overall conclusions prepared by the Branch. The central conclusions were not favourable to MNR:

Based on the evaluation of the Class EA for Timber Management on Crown Lands in Ontario, the Environmental Assessment Branch has concluded that while the components of an EA required by the *Environmental Assessment Act* are present/or have been provided for in the planning process contained in the Class EA, the technical quality and level of detail of these components is insufficient to satisfy several of the review agencies. As such, this Class EA does not meet the requirements of section 5(3) of the Act.²

The *Government Review* document was released on December 10, 1987 and public comments were solicited. The Minister of the Environment had, however, already agreed to refer the proposed *Class Environmental Assessment*

¹ Letter from S. Llewellyn, Manager, Program Coordination, Conservation and Protection, Ontario Region, Environment Canada, to Wes Green, Environmental Assessment Branch, MOE, September 30, 1987. p.2/10 [*Government Review*, p.211]. Attached to the letter and comments are copies of correspondence between Parks Canada officials from Pukaskwa National Park, and MNR about the inadequacies of MNR process as it was carried out during an open house held on June 16, 1987, as a part of the White River Forest Management Plan [*Government Review*, pp.213-219]. Parks Canada noted that incorrect map boundaries remained, even though this had been mentioned to MNR in 1983, and that there was insufficient information about secondary and tertiary road development to permit assessment of potential impacts. Although subsequent letters appear to have resolved these issues, the comments indicate that the class environmental assessment procedures were not functioning properly at the field level.

² *Government Review*, pp.93-4.

for Timber Management on Crown Lands in Ontario for hearings before the Environmental Assessment Board.¹ The Board held its first public meeting in preparation for the hearings on January 27, 1988. The deliberations continue.

¹ MOE, "Notice of Completion of Review: Public Comment Now Being Accepted on the Ministry of Natural Resources' Timber Management Class EA," December 10, 1987.

Chapter 3

The Larger Context

*Major developments in forest planning and management
1976 - 1988*

During the ten years since the first draft of the class environmental assessment was produced in 1977, several major changes have taken place in the administration of forest resources in Ontario. Each one has influenced the practical context and contents of the evolving environmental assessment submission.

Land use planning

In the early 1970's, the Ministry of Natural Resources began working on Strategic Land Use Plans that would be used to direct decision making in the management of crown lands and other resources under Ministry jurisdiction. These land use plans, along with associated resource management plans were envisioned as the central elements of a top-down planning process, translating provincial goals and objectives for timber production, fishing and hunting opportunities, mine development, parks and recreational activities, etc. into more specific decisions on land allocation and conflict resolution at the regional and district levels.¹

Eventually, each of the forty-seven districts administered by MNR was to have its own land use plan covering activities in the District over the next twenty years. Each district planning exercise was intended to provide a detailed inventory and review of the following factors: people, natural

¹ Ontario Ministry of Natural Resources, *Guidelines for Land Use Planning*, 1980, p.5.

resources, present uses, developments and projections, existing plans, and problems and issues.¹

The actual work of land use planning using this inventory and review information was largely an internal exercise within MNR. It began with existing resource inventory information and the relevant sectoral targets drawn from provincial goals and objectives and translated down to the regional and district levels. This and other information was then used to identify and analyse the existing and potential land use problems and issues, especially those involving competing MNR objectives (e.g. conflicts between timber production and preservation of candidate wilderness park areas). The next step was consideration of optional approaches to resolving the conflicts. Opportunity for public comment was provided after the planning options had been developed. The anticipated final step was selection of a preferred option or plan for each district, that would direct all land use activities within the purview of MNR.

The strategic land use planning process, and the resulting plans, were clearly expected to be MNR's central means of ensuring integrated consideration of land use objectives and conflicts. Once completed, the district plans were to play a powerful role in directing land use decision making. Accordingly, the initial drafts of the class environmental assessment assumed that district land use plans would provide the context for timber management decisions and would define and direct the integration of timber considerations with other land use values. The authors of the 1980 draft of the class environmental assessment document observed:

Although it is not repeated throughout the process of the undertaking, the professional forester remains cognizant of other uses of the forest as those uses are defined and described in the local district land use plan. These land use plans are being prepared throughout Ontario to define and describe specific uses for specific areas or a combination of uses for specific areas.²

¹ Ibid., p.11.

² Class EA, 1980, p.5.

Because of the anticipated role of land use planning as the decision-making tool by which some integration of competing land uses might be achieved, integration of land use was not built into the process set out in the 1980 draft class environmental assessment. In that document, MNR recognised that there were potentially conflicting and competing priorities in joint uses of forest lands,¹ but the Ministry claimed that these would be resolved in the land use planning process:

The Ministry of Natural Resources shall ensure that where uses of the forest other than timber production are part of the objective of management, as described in the Ministry land use plans, the planning and implementation of forest management activities shall provide for such uses.²

Had the land use planning strategy been implemented successfully - with good inventory information, careful evaluation of existing and potential conflicts among forest activities, and specific conclusions about resolution of land use conflicts - it might have met the environmentally rational planning requirements of the *Environmental Assessment Act*. The resulting plans might then have been tested through review under the *Act* and, upon approval, been at least to some extent usable as clear and authoritative bases for integrated forest management planning. This certainly would have altered the context for review of the proposed *Class Assessment for Timber Management*.

Unfortunately, the land use planning process ran into serious difficulties and the anticipated plans were downgraded to guidelines that could not provide authoritative direction for integrated land use decision making. This was due in part to the limitations of district information and analysis, and the resulting absence of firm bases for specific planning decisions. But there were also political problems. Some potentially affected interest groups outside MNR were worried about the prospect of their activities being restricted by firm planning requirements. Other interests were dissatisfied with MNR's

¹ Ibid., section 3, p.79.

² *Class EA, 1980*, p.80.

planning process, including its approach to identifying and evaluating options, and its handling of public consultations.¹

The Royal Commission on the Northern Environment (RCNE) examined the process and products in detail and concluded that MNR had no legislative mandate for land use planning² and had done an unsatisfactory job of unmandated planning:

...the land use planning process which culminated in the guidelines failed to examine a sufficiently wide range of development alternatives or to evaluate and compare the implications of those alternatives that it did examine in social, economic and natural environmental terms; the process disregarded the principles of good planning recognised in the Ministry's own materials, other planning legislation (i.e. the *Environmental Assessment Act*), or authorities in the planning field.³

The Commission also found that MNR had not adequately considered the status of the planning effort under the *Environmental Assessment Act*, which applies to plans as well as projects. In addition to criticizing MNR's failure to address the implications of planning options "in social, economic and natural environmental terms," the commissioner, J.E.J. Fahlgren, posed the question, "...would the Act then apply to these plans as undertakings" for the purposes of environmental assessment?⁴

Alan Pope, the Minister of Natural Resources at that time, responded that the Strategic Land Use Plans were, in fact, only to be guidelines:

...the rationale for the Land Use Planning Program is simply more efficient and effective land and resource management over the long

¹ See, H. Cook, "Public Consultation and the Ontario Ministry of Natural Resources Land Use Planning Program." in R.C. Scace and J.G. Nelson, eds., *Heritage For Tomorrow*, Proceedings of the Canadian Assembly on National Parks and Protected Areas, Vol. 3, (Waterloo, Ont.: Heritage Resources Centre, 1987), pp. 295-316.

² Royal Commission on the Northern Environment, J.E.J. Fahlgren, Commissioner, *Final Report and Recommendations* (Toronto: Ontario Ministry of the Attorney General, June 1985), p.8-15. Hereafter referred to as RCNE, *Final Report*.

³ *Ibid.*, p.8-10.

⁴ *Ibid.*, p.8-16.

term. The land use plans then are *guidelines* for resource management by MNR and will be implemented under appropriate existing legislation and the approved programs and activities of the Ministry (emphasis added).¹

This move effectively reduced the potentially authoritative plans to mere discretionary guidelines. Controversies about MNR's legislative mandate for land use planning, about the fairness of the planning process and about the acceptability of the results may have meant problems for MNR if it had insisted on treating the district documents as firm commitments. Moreover, the documents released as guidelines were too vague and general to serve as specifically implementable plans, even if they had not been officially downgraded to guidelines. Indeed, Commissioner Fahlgren suggested that reduction of the documents' status from plans to guidelines may not have been a sufficient downgrading:

...the land use plan documents and the assumptions underlying them are so seriously flawed that they must not be implemented. The Minister of Natural Resources has re-inforced this position (although not for the same reasons) by downgrading the status of the documents to that of guidelines that might or might not be adhered to.²

MNR has not accepted the Commission's view on this. While the Ministry is aware that guidelines are discretionary tools, amenable to flexible interpretation and implementation, it still accords the guidelines the central role in some matters, including establishment of the quantitative timber production targets to be met in each district through appropriate timber management planning for each management unit.³

The actual status of the land use guidelines is important because they represent MNR's main effort to carry out integrated and somewhat public planning regarding forest lands. The downgrading from plans to guidelines eliminated the prospect that the plans would be subject to environmental

1 Ibid.

2 Ibid., p.8-10.

3 MNR, *Timber Management Planning Manual for Crown Lands in Ontario* (Toronto: Queen's Printer, 1986), p.5.

assessment under the *Environmental Assessment Act*. At the same time, however, if the land use planning process had produced firm, respected and implementable plans, there would have been some basis for argument that land use conflict issues could be left outside the main focus of the class environmental assessment for timber management. In the absence of such plans, the environmental assessment process is left as the only authoritative means of ensuring broad evaluation and public examination of integrated land use decision making for Ontario's forests.

Treatment of the land use guidelines as quasi-plans allows MNR both flexibility and a reason to argue that integrated planning has been done outside the scope of the timber management assessment. Whether this approach will be found to be satisfactory with respect to *Environmental Assessment Act* requirements has yet to be determined. Mr. Fahlgren, whose Royal Commission was the last to examine northern forestry issues from an explicitly environmental mandate before the current class assessment deliberations, concluded,

...the ambiguous status of the plan documents as a basis for decision making about development continues to leave far too much discretionary power in the hands of politicians and senior bureaucrats, with no more than a minimal level of public accountability.¹

Forest management agreements

For the past four decades, debates on forest management in Ontario have centred on the continuing failure to ensure sustainability. Some of the concerns focus on the failure of government and industry to build an information base that would facilitate management for sustainability. Without sufficiently thorough inventories and analyses of the actual forests, it is impossible to determine just what the forests can sustain, to know just what are their particular and overall capacities for supporting timber harvesting and other activities in perpetuity, given specified management

¹ RCNE, *Final Report*, p.8-10.

practices. But the central concerns that have fuelled forest management controversies have centred on the apparent increase in intractable land use conflicts and on general evidence that current practices are not sustainable.

Attention has focused especially on recognition that timber cutting has consistently exceeded replacement. This, and a broader set of management problems, has been blamed not only on the inadequacy of forest regeneration work but also on the uncertainties about who is responsible for the stewardship of crown forest lands - MNR, which is expected to represent the public land owner, or the timber industry, which cuts the trees and is dependent on their replacement.

As a result of a task force report in 1975, which suggested that the lack of proper regeneration would lead to timber shortages in the 1980's¹ the Ontario government commissioned a report on forest management.² Among the many recommendations, were two which suggested the creation of "Forest Management Licences" and the development of "a means whereby certain licencees may assume responsibility for forest management."³

The government responded by introducing a new tenure form, the forest management agreement (FMA). In December 1979, the Crown Timber Act was amended to give MNR the authority to enter into these agreements and by 1987 there were 29 FMA's in place, covering 67 percent of the crown lands of Ontario under timber licence.⁴ According to the 1980 *Forest Management Manual*,

The objective of a forest management agreement is to provide for a continuous supply of forest products from the lands designated in the agreement for the wood processing plant or plants of a company and to

1 Ontario, *Report of the Timber Revenue Task Force to the Treasurer of Ontario and the Minister of Natural Resources* (Toronto, October 1985), p.26.

2 K. Armson, *Forest Management in Ontario* (Toronto: Ministry of Natural Resources, 1976).

3 Ibid., Recommendations 3.1 (p.27) and 3.2 (p.32).

4 *Class EA, 1987*, p.5.

ensure that the forests on such lands are harvested and regenerated to produce successive crops of timber on a sustained yield basis.¹

These agreements provide the forest industry with long-term tenure; they cover a twenty year term renewable every five years. They also assign forest regeneration responsibilities to the industry. The government, as owner of the crown land, provides funds to the FMA licencees to cover the costs of road building, site preparation, planting, seeding and silviculture support activities, all of which must be done according to predetermined Ministry standards. These terms and conditions are all laid out in the "ground rules" of the agreement, specifying the work to be done, the unit costs for compensation purposes, and the procedures for assessment and evaluation.

Each forest management agreement is a legally binding contract between the Ministry of Natural Resources and the corporate licencee. Changes and amendments to any agreements are negotiated between the two parties. As the various drafts of the class environmental assessment have evolved, the nature of management plans has changed to reflect updates and amendments. The timber management plans now in effect have been prepared under a variety of planning manual requirements.

The scope of each agreement is limited to definition of the operating area, agreement on reimbursement costs, and specification of how operations will be carried out, and under whose jurisdiction. Even though MNR commenced preparation of the class environmental assessment before FMAs were introduced, FMA documents do not specifically mention environmental assessment procedures. They do, however, require that all operations will be carried out in accordance with the statutes and planning procedures prevailing during the course of the agreement.

In management units covered by FMAs, the actual timber management plans are not prepared by MNR but by the industry under the guidance of

¹ K.A. Armson, F.C. Robinson, and J.E. Osborn, *Forest Management Manual for the Province of Ontario*. (Toronto: Ministry of Natural Resources, 1980), p.2.

MNR. A recent agreement signed by Great Lakes Forest Products Limited, for example, states,

...the Company agrees to prepare a management plan in respect of the agreement area in accordance with the Timber Management Planning Manual and to submit it to the Minister for approval.¹

While it is not clear whether this transfer of planning responsibility to the timber industry has effectively reduced sensitivity to other forest interests and values, it has underlined the extent to which the planning is primarily devoted to timber purposes.²

The exemption orders

Since 1975, when the *Environmental Assessment Act* came into effect, exemption orders have allowed MNR to continue with its forest management activities (see chapter two, Table 1). These exemption orders, a succession of roughly one year renewals of an initial temporary exemption, were meant to allow MNR time to prepare an environmental assessment or set of assessments covering its on-going forest activities. As the years passed, however, the exemption orders began themselves to play a role in determining the manner in which forestry operations in Ontario were and are carried out. It can be argued that the exemption orders have also been used (at least implicitly) to indicate how MNR might approach an environmental assessment of forest management.

As each exemption expired and came due for renewal, additional conditions were imposed. Often these conditions required implementation of

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- ¹ This is drawn from Forest Management Agreement No. 502900 held by Great Lakes Forest Products Limited, signed July 17, 1986. See p. 5, clause 6.(1). The term "Timber Management Planning Manual" is defined on page 2 of this FMA document as "...the manual that is approved by the Minister and that specifies the general structure and contents of management documents."
 - ² The weakness of provisions for addressing non-timber values in the preparation of FMAs was criticized by Gordon Baskerville in his *Audit of Management of the Crown Forests*, esp. p. 63.

procedures described in the then current draft class assessment document. The 1981 exemption order MNR-11/3, for example, required MNR to

...undertake measures to implement those guidelines of the class environmental assessment for public participation in respect to Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of herbicides and insecticides for forest management purposes.¹

In addition, MNR was required to

...develop a procedure to solicit, evaluate and respond to input and comments from the public and government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for crown and Company Management Units.²

Under exemption MNR-11/3, MNR was also obliged to carry out its planning of all primary forest access roads in conformity with the provisions of the then draft class environmental assessment for "Access Roads to MNR Facilities" and to notify the public of spraying operations at least 30 days beforehand.

Some exemption order conditions were apparently included in response to public controversies. For example, under exemption order MNR-11/5, MNR was required to provide opportunities for public involvement in the development of Forest Management Agreements.³ This condition was apparently meant to address public concerns about the closeness of relations between MNR and the forest industry, and the effects of these relations on the timber allocation process.

¹ See MNR-11/3, *Ontario Gazette*, April 2, 1981.

² *Ibid.*

³ The authority of this requirement was changed beginning with exemption order MNR-11/9. Where the previous order had set out an obligation ("will undertake") as a condition of the exemption, the new version expressed the point as an observation ("is undertaking") in the rationale for the exemption. It is unclear whether or not an enforceable requirement remains. Even under the initial version, however, enforcement of this condition was not energetic even though MNR had shown little willingness to encourage public participation in the creation of FMAs, as required under the exemption order conditions.

Such concerns had been stirred earlier by the controversial decisions on the allocation of the "Reed Tract" in northwestern Ontario, which led to the establishment of the Royal Commission on the Northern Environment. The Commission's deliberations continued through much of the period covered by the exemption orders. In its final report the Commission strongly recommended that the Reed tract allocation should be repudiated until other conditions were met.¹

Questions have been raised about the practical effectiveness of the exemption conditions which responded to specific concerns by requiring public involvement opportunities, and other adjustments to prevailing MNR procedures. The conditions have tended to be vague and there is some evidence that MNR's compliance has been unenthusiastic. However, there has been no systematic attempt to monitor compliance with exemption conditions.

Even if MNR's compliance with the exemption conditions has been incomplete, the exemption orders have affected MNR procedures. Indeed, for over twelve years the orders have set out how MNR must act to comply with the *Environmental Assessment Act*. In so doing they have helped to define and establish the approach MNR is taking to environmental assessment of forest, or at least timber, management.

Perhaps because it reflects piecemeal and incremental steps incorporated in response to conditions imposed in a more or less *ad hoc* manner through the exemption orders, MNR's approach to its environmental assessment obligations is now typified by the fragmentation of forestry operations into distinct chunks of activity, such as road building and timber management.

This characteristic became particularly evident with MNR-11/5 (1983), which followed and reflected the newly approved *Class Environmental Assessment for Access Roads to MNR Facilities*. Application of the facilities access roads procedures to timber access roads encouraged MNR to suppose that the

¹ RCNE, *Final Report*, p.5-11.

problem of how to assess the roads (one of the major causes of environmental disturbance due to logging operations) had been dealt with. But the access roads review procedures do not encourage examination of the broader and more basic questions raised by timber access roads - especially the questions surrounding the purposes for which the roads are being built, and the eventual effects of serving these purposes.

The main implications of this approach were revealed in the recent and continuing controversy over the extension of the Red Squirrel logging road in the disputed Temagami wilderness.¹ MNR restricted the scope of the Red Squirrel Road Environmental Assessment to considerations directly related to provision of road access to timber. The stated purpose of the undertaking was "...to provide access to the timber resources ... for timber management purposes"² and according to the 1985 and 1987 versions of the *Class EA* the definition of "timber management" specifically includes harvesting, renewal, and maintenance, as well as roads.³ Nevertheless, the Ministry insisted that in the Red Squirrel case, "other timber management operations such as harvesting and forest renewal are not part of the undertaking,"⁴ even though the road was intended to facilitate logging and the acceptability of logging the forest made accessible by the road was the major focus of public controversy.

¹ Ministry of Natural Resources, *An Environmental Assessment for Primary Access Roads in the Latchford Crown Forest Management Unit - Red Squirrel Extension/ Pinetorch Corridor* (Toronto: MNR, June 1987).

² *Ibid.*, p.3.

³ In the *Class EA, 1987*, submission, pp.135 and 152, the reader is referred to MNR's "Resource Access Roads Policy and Implementation Strategies and Guidelines," 1985. This manual contains Procedure PS 4.02.01 (FM-AR), issued January 2, 1985, which notes that exemption MNR-11/9 is in force and applies to "All roads constructed for forest management purposes on crown Lands in Forest Management Units." Specifically, this policy states:
All Primary Access Roads on Crown Management Units (i.e. those roads which provide the principal access to the forest which will be managed during the period of the Forest Management Plan) which are proposed in Forest Management Plans and Operations Plans currently under preparation, but not yet approved, *must* be planned in accordance with the procedures outlined in the approved Class Environmental Assessment for Access to MNR Facilities.

⁴ *Ibid.*, p.2.

Despite this apparent inconsistency, opponents of the proposed activities failed to persuade MNR to assess access road construction as only the first part of a larger timber management undertaking. MNR's Red Squirrel road assessment considered only the potential impacts of the road itself. The effects of logging the newly accessible forest lands were not addressed. Government reviewers of the Red Squirrel document did not object to this approach,¹ and although the opponents of the approach protested vigorously, the provincial Cabinet decided to deny requests for an Environmental Assessment Board hearing on the Red Squirrel Road environmental assessment.

MNR's determination to adopt a narrowly-scoped or fragmentary approach to assessment, even in the high profile Red Squirrel case, suggests that it considers the approach appropriate for most applications. The government's acceptance of MNR's environmental assessment and the denial of a hearing in this case suggest that there is not yet much government commitment to integrated assessment.

An overall assessment of the effects of the exemption orders is probably premature. For over a dozen years, however, the conditions of the successive exemption orders have been the vehicle for imposing environmental assessment requirements on MNR's forest management activities. Certainly the conditions have encouraged or forced MNR to take certain steps - for example, revision of the timber management planning process, public notification of pesticide applications, and improved planning of access roads - that place more emphasis on environmental considerations and public scrutiny in accord with the spirit of the *Environmental Assessment Act*. But it is also clear that the design and imposition of these conditions has been done without public debate and apparently without much careful deliberation about the influence of the conditions on the evolution of MNR's response to its environmental assessment responsibilities.

¹ Province of Ontario, *Review of the Environmental Assessment For Primary Access Roads in the Latchford Crown Forest Management Unit - Red Squirrel Road Extension/Pinetorch Corridor* (Toronto: MOE, EA Branch, 1988)

As a result, the exemption orders are to some extent responsible for the evolution and application of an approach to environmental assessment of forest undertakings which tends to neglect the interrelation of activities and accumulations of effects, and that may not meet the intent of the *Environmental Assessment Act*.

Until the Environmental Assessment Board releases its decision on the current *Class Environmental Assessment for Timber Management* document, it will be impossible to judge the extent to which the most recent exemption order conditions amount to effective approvals for the process MNR is proposing. But it is noteworthy that the latest exemption order (MNR-11/9) required MNR to complete its proposed assessment document and submit it for approval, and to implement certain notification and planning procedures while the official decision making (formal review of the submitted class environmental assessment document, subsequent hearings and final deliberations) continued. Moreover, exemption order MNR-11/9 is open-ended. It remains in force until the class environmental assessment is approved.

The underlying assumption appears to have been that the timber management planning process developed by MNR and accepted on an interim basis through the exemption order, was an appropriate response to environmental assessment requirements and was likely to receive approval from the Environmental Assessment Board. This assumption conflicts with the views of some government and public reviewers, who, as noted in chapter two, have concluded that:

...the technical quality and level of detail of these components [of the latest class environmental assessment submission] is insufficient to satisfy several of the review agencies.¹

¹ See *Government Review*, p.94.

It remains to be seen whether the assumption about the appropriateness of the interim provisions also conflicts with the views of the Environmental Assessment Board, and whether the Board will feel constrained by the tacit approvals through the exemption orders or the increasingly established status of the timber management process.

The Baskerville report

Within the past decade, there have been a number of calls for an independent audit of Ontario's forests and MNR's management of them. In response the Minister of Natural Resources finally announced on October 18, 1985, that Gordon Baskerville, Dean of the Faculty of Forestry at the University of New Brunswick, would undertake this work.

The result, *An Audit of the Crown Forests of Ontario* (or the Baskerville report, as it is conventionally known) was publicly released on September 4, 1986, in Thunder Bay. Reaction to the report was generally favourable, although criticisms were still made about the original terms of reference for the audit, which led Dr. Baskerville to look only at the management practices and not at the actual condition of the forest resource base.¹ The significance of the Baskerville report for the class assessment lies in Dr. Baskerville's evaluation of the way in which MNR carries out its mandate to manage the forest. He concluded,

In general, the structure for managing the Crown Forest is adequate, but it is not effectively used. The management plans contain the right topics, but the plans tend to be constructed by a cookbook approach, rather than with an application of intellect. As a result, the plans tend to be so general as to defy evaluation. MNR review process for management plans concentrates more on the presence and form of items than on the quality with which these are reasoned and on the internal technical consistency of the plan.²

¹ Editorial, "Minding the Trees", *Globe and Mail*, Toronto, September 11, 1986. See also C. McLaren, "Ontario forest management inadequate, new study says," *Globe and Mail*, Toronto, September 5, 1987, p.A10.

² Baskerville, *An Audit*, p. 83.

Among the many problems identified, the unreliability of forecasts for wood volumes, the lack of quantifiable goals and targets for fibre production, the inadequacy of silvicultural treatments, the weakness of efforts to preserve and integrate non-timber values, and the obsession with planning process, received greatest attention. In particular, Dr. Baskerville pointed out,

The statements of objectives in the plans examined reflect a tendency to plan for the sake of planning, rather than to plan for some specific objective with the intent of actually implementing the plan on-the-ground in order to change the temporal and spatial pattern of development in a forest to better suit the industrial and social demands on that forest.¹

In addition, he noted,

In the very worst case the process of approving a management plan is a process of making it administratively acceptable. The process ensures the correct form of the plan, but does not ensure reasonableness of logic in developing the cause-effect relationships that link actions in the forest with desired results.²

The audit examined the strategic land use planning process (SLUP) and the district land use guidelines (DLUGs) as well. While Dr. Baskerville judged the strategic land use planning process to be a good method of translating broad provincial policy to a local level, he was sceptical about use made of the resulting guidelines:

The one disturbing feature of these guides is the apparent belief of the authors that a plan, or a guideline, achieves anything in and of itself. For example, one of these guidelines continually refers to "the plan achieves x% of the target...". Obviously the plan does no such thing, although implementation of the plan might. The difference is crucial because some plans are not implementable...³

1 Ibid., p.11.

2 Ibid., p.67.

3 Ibid., p.70.

Dr. Baskerville considered MNR's *Timber Management Planning Manual* to be comprehensive and well written, but once again, expressed doubts about how the manual would be used. He warned against "blind adherence," which, he argued, "will not achieve socially acceptable answers."¹

On the issue of forest management agreements the audit found MNR had no sound method for taking non-timber values into account. Most companies questioned in the audit saw no legal or moral obligation to consider such aspects, because they believed that MNR bore this responsibility. Yet, as Dr. Baskerville observed:

It is difficult to understand how there can be integration of various elements of resource management when portions of the plan are inserted because "they want them there," and not because there is agreement on how this integration in the plan will achieve some common goal in the forest. If there is no integration in the writing of the plan, how can there be integration in its implementation, and in the results? ...two separate agencies are bearing responsibility for parts of one plan, a situation which invites ambiguity in performance.²

It is not clear why there is ready acceptance of such statements as "environmental quality and integrated resource management objectives can only be stated in qualitative terms" (*Timber Management Planning Manual*, p. 59). ... The state-of-the-art in these matters is well beyond this stage, and an attempt to set attainable objectives would greatly enhance the focus of management programs. The isolation of timber management planning from these other concerns means that other values can only enter the timber decisions, which are the only real control on change in forest structure over time, as constraints. They are not in fact part of a central objective.³

In the context of the class environmental assessment, the Baskerville report is significant because it underlines the lack of, and need for, a coherent process for comprehensive forest management, considering timber uses together with other uses and purposes of the forest. Overall, the Baskerville

¹ Ibid., p.61.

² Ibid., p.63.

³ Ibid., pp.73-4.

report highlights many of the problems that other commentators had identified in the successive class environmental assessment documents - lack of well-defined cause and effect relationships, lack of quantitative and qualitative assessments, lack of integration between different sets of values, and an almost "slavish adherence" to the process of planning rather than to the product.¹ Dr. Baskerville concluded,

The absence of a technically sound approach to integration of timber with non-timber values is a more serious problem that will require considerable change in the system if the desired level of integration is to be achieved. The approach to discussing public opinion about planning issues is open, but it is being used to justify actions (or inactions) rather than to determine what values the public expect from their resource....²

Much of the planning material in this area would be better described as creative writing about the resource than as a realistic attempt to control resource development over time to achieve objectively stated values.³

...the existence of an approved plan has become more important than the creation of a realistic plan that is technically consistent with biological and logistical realities in terms of controlling forest development in the desired manner. The management design procedures have become decision systems, rather than decision support systems. The planning process has thus become far too rigid, indeed the system dictates the outcome, not just the process of planning.⁴

MNR responded to the audit by producing an "action plan" according to which 16 new initiatives were to be implemented.⁵ These included reviews of the Forest Resources Inventory and the Wood Supply Model, a study of the economic condition of Ontario's forest industry, revision of the existing

¹ This is not to say that Dr. Baskerville reached the same conclusions as the environmental assessment reviewers on what should be done to solve these problems.

² Ibid., p.84.

³ Ibid.

⁴ Ibid., p.85.

⁵ Statement to the Ontario Legislature by V. Kerrio, Minister of Natural Resources, October 27, 1987, to which is appended a six page outline entitled "Ministry of Natural Resources' Action Plan on Forest Management." See also *Class EA, 1987*, Appendix VII.

production policy, expansion of forest surveys to assess regeneration and an "examination" into the effects of timber management on non-timber values.

The review of the Forest Resources Inventory was undertaken by a committee headed by Robert Rosehart, president of Lakehead University. The final report, released in June 1988, concluded that the inventory was conceptually sound for planning at a macro scale, but of little use for planning at the level of individual stands of trees.¹ Use of the inventory at the local scale was judged to be a misapplication of the system. Dr. Rosehart suggested that MNR should spend more time and money on its inventory work to correct the flaws, identified by his committee, which in some cases had been known to MNR for over a decade. The committee also noted the need to make MNR's inventory more technologically up to date, particularly in the use of Geographic Information Systems, and suggested that the system must become more usable at the local level, where many of the important on-site decisions are made.

The study of the industry economics, conducted by Woodbridge Reed and Associates, was released in November 1987. The consultants concluded that

...Ontario's forest products industry is outdated, inefficient and underexploited. It has missed opportunities with respect to resource availability, market demand, and technology utilization.²

Woodbridge Reed recommended a new strategy to remedy the problems identified in their report. This would include investment, technology, and market reforms, better integration of product manufacturing locations, and a more efficient utilization of hardwood species.

Revision of the existing production policy, which sets overall harvest targets and plays a major role in determining how much forest is allocated to

¹ MNR, *An Assessment of Ontario's Forest Resources Inventory System and Recommendations For Its Improvement*: (Toronto: MNR, June 1988).

² Woodbridge Reed and Associates, *A Study of Ontario Forest Products Industries* (Toronto: MNR, Forest Resources Group, November 1987), p. 80.

logging annually, is being handled through internal MNR review.¹ According to the 1987 class environmental assessment document, the revisions would be completed in October 1988. However, MNR found this deadline to be "overly optimistic," and decided to adopt an extended, two-stage approach to development of a new timber production policy. The first stage is aimed at preparation of a "macro-level provincial production policy," using "the best available market, resource base and policy intelligence" to set an overall framework with provincial targets. A set of six background papers for the policy development exercise was slated for release in draft form for public and industry comment in April 1989, but is now now expected until 1990. This is to be followed by identification and evaluation of production policy options, including alternative production target levels.² Stage one will end with selection and approval of a preferred production policy option. An additional 12 to 18 months is to be required for stage two, which is to design strategies for meeting the targets set in the new policy. This will involve collection and analysis of information from each management unit. MNR expects the results of the top-down and bottom-up phases will be compatible. Any incompatibilities are to be corrected through the production policy reviews, expected to occur every five years.

Whether or not these responses to the audit will lead to useful changes in MNR's system of management and planning processes is not yet known. However, the contents of the June 1987 version of the class environmental assessment document do not show any substantial changes in response to Dr. Baskerville's comments, and the nature of at least some of the possible changes - particularly those that may arise from reconsideration of the production policy - now seem unlikely to be decided in time for consideration in the Environmental Assessment Board hearings on the proposed class assessment.

1 The following information about the production policy review is drawn from communications with S. Teskey, Corporate Policy Officer, Forest Resources Group, MNR, Toronto, December 15, 1988, June 2, 1989, and T. McHale, Timber Production Policy Coordinator, MNR, Timmins, June 2, and December 21, 1989.

2 MNR has not decided whether to release a draft policy options document for public review. Personal communication, T. McHale, June 2, 1989.

Chapter 4

Analysis

Basic problems with the current approach

After twelve years of deliberation and drafts, the Ministry of Natural Resources still faces widespread dissatisfaction with its efforts to meet the requirements of the *Environmental Assessment Act*. The final, June 1987 document, the *Class Environmental Assessment for Timber Management on Crown Lands in Ontario*, has met heavy criticism from most concerned interests outside the timber industry. It has been judged "unacceptable" in the formal *Government Review* and, despite MNR's steps to respond to some expressed concerns, a lengthy and often hostile testing is expected in the hearings before the Environmental Assessment Board.

Some criticism was inevitable. Application of the environmental assessment requirements to the planning and implementation of forest management activities poses a considerable challenge and no response to this challenge is likely to pass without some controversy. The mere fact that MNR's class assessment documents attracted unfavourable comment is neither surprising nor especially worrisome. What is significant is the character of the concerns expressed.

As has been shown in chapter two above, criticisms of MNR's class environmental assessment document have ranged widely. Many have centred on concerns about specific information deficiencies and procedural inadequacies, or particular timber management practices. But the bulk of expressed dissatisfactions, including many of the more narrowly focused concerns, point to broad and fundamental issues underlying MNR's approach to environmental assessment of forest management, and its place in the

larger context of planning and decision making that affects Crown forests in Ontario.

There appear to be three basic questions:

- can proper assessment of *forest* management activities be accomplished through a process that focuses on *timber* management?
- is use of the class assessment approach appropriate in this case? and
- can the vagueness of the current class environmental assessment document be rectified?

These questions will be considered in detail in this chapter.

Timber management versus forest management

MNR's responsibilities cover a wide range of activities that rely on the forest. The mandate for crown land management, along with other duties assigned by legislation and history, give the Ministry an obligation to serve the interests of outdoor recreation, cottaging, commercial tourism, trapping, hunting and fishing, and conservation of ecological and heritage resources, in addition to the interests of industries producing lumber, pulp and paper and other wood products. Acting effectively in the service of all these interests is no small task. Conflicts between and among the various forest interests have become increasingly common, largely because demands on the forest have been growing while the resource base has been progressively depleted.

In initiating its Strategic Land Use Planning process in the 1970s, MNR recognised the need for integrated consideration of the many demands on Crown lands. As we have seen in chapter three, this had some beneficial results but failed in the end to meet expectations for effective consultation or authoritative results. This has left the application of environmental assessment requirements to forest management as the most obvious, if not the only practically available, vehicle for ensuring careful, public examination of land use decision making for Ontario forests, and for requiring action by

MNR to strengthen the technical rigour and integrated character of forest management planning.

The traditional focus on timber

MNR has not been much inclined to use environmental assessment in the service of integrated, public planning. The Ministry has traditionally seen the crown forests primarily as a resource base for the wood products industries. In its 1972 document on forest production policy options, for example, MNR discussed the importance of environmental as opposed to purely industrial forestry¹ and advocated "multi-purpose use of forest resources and ... new forest policies based on expanded and integrated economic analysis reflecting both the consumptive and non-consumptive values involved."² However, MNR then proceeded to focus exclusively on a proposed intensification of timber management that would permit a doubling of harvest levels by 2020.

The Ministry did not downplay the effort or new resource allocations that would be required. It recognised that Ontario's annual harvest was already much greater than could be sustained with the existing level of silvicultural effort,³ observed that the timber industry was "rapidly approaching the limit of economical harvesting"⁴ and admitted that "in some cases shortages already exist."⁵ It did not, however, mention the possibility that a massive intensification of silvicultural effort might have negative impacts on non-timber values. Despite the statements recognising non-timber values and the need for integrated analyses, MNR provided no indication that impacts on non-timber values had been evaluated during development of the proposal to double the timber harvest.⁶

1 MNR, *Forest Production Policy Options for Ontario* (Toronto: MNR, April 1972), pp.8-9.

2 Ibid., p. 15.

3 Ibid., pp. 37-8.

4 Ibid., pp. 33-4.

5 Ibid., p. 34.

6 Critics have also observed that MNR's statements have been based on broad overview evaluation. The limitations of the information mean that there is no reliable basis for conclusions about the size of gaps between current harvest levels and the sustainable capacity of the forests, or about the extent and nature of silvicultural efforts needed to

This traditional viewing of the forest as a timber resource prevailed throughout the five attempts to meet environmental assessment requirements. Although the first three versions of the class environmental assessment were nominally about "forest management," all versions focused on timber management practices.

In fact, the version that went the furthest towards recognising non-timber objectives was the first draft and the concentration on timber objectives increased over time. The first draft (1977) defined the undertaking broadly enough to encompass all forest values and uses, and adopted a purpose statement that emphasized economic benefits from the "forest based industries" but also mentioned providing for "other uses of the forest."¹ The second draft (1980) adopted a broad statement of purpose ("to use and to manage the forest of Crown Lands for the continuous social and economic benefit of the people of Ontario"), but defined the undertaking narrowly to include only timber management activities.² In the third draft, both the undertaking and the objectives were narrowly defined, although some non-timber values were recognised as secondary objectives.³ Finally, in the last two versions, the timber management focus was confirmed in the title and all references to non-timber interests were eliminated from the definition of the undertaking and the statement of the objectives.⁴

Defining the undertaking, its purposes, and alternatives

Under Ontario's environmental assessment process, the definition of the undertaking and the statement of the purposes to be served are crucial because they delimit the scope of the inquiry. In this case, the decision on

rectify the situation. Gordon Baskerville has noted that, because "there has not been a comprehensive timber supply analysis that recognizes forest dynamics explicitly, ... no one knows what the situation is." (Baskerville, personal communication, August 10, 1989).

1 See *Class EA, 1977*, p.C.1.2.

2 See *Class EA, 1980*, p.7.

3 See *Class EA, 1983*, p.15.

4 *Class EA, 1985*, p.2, p.7, Part 1 p.8, and *Class EA, 1987*, p.8.

whether to address timber management or forest management determines not only what uses of the forest will prevail in management decision making, but also what range of alternatives will be considered, what possible environmental effects will be anticipated and how they will be evaluated.

MNR's decision to adopt a narrow definition of the undertaking and its purposes, reflects the priority traditionally given to timber objectives and is consistent with a Ministry intent on continuing service to what it perceives as its main client - the wood products industry. But the choice of a narrow scope may also be explained as an effort simply to minimise additional work and to comply with the requirements of the *Environmental Assessment Act* without modifying existing strategies and practices.

The treatment of alternatives in the timber management class assessment is also consistent with MNR's apparent desire to narrow the scope of inquiry. The *Act* requires proponents to report on their consideration of two kinds of alternatives: alternative ways of meeting the desired objectives, and alternative methods of carrying out the preferred alternative.¹ MNR responded to the first requirement by identifying four very broad alternatives: timber management (access, harvest, renewal and maintenance), harvesting with no renewal, recycling previously processed wood products, and no harvest from Crown lands. With these options to choose from, the Ministry easily found that timber management was the preferred alternative. To meet the requirement to consider alternative methods of carrying out timber management, MNR chose to focus on specific ways of carrying out timber management activities (providing access, harvesting, regenerating and maintaining the timber resource) in areas subject to individual timber management plans.

By taking this approach, MNR avoided any meaningful analysis of different ways of approaching timber management planning (e.g. timber management planning designed to be thoroughly integrated with planning for other forest uses, or timber management planning emphasising consideration of

¹ *Environmental Assessment Act*, s.5(3).

cumulative effects, or providing for detailed analysis of impacts and mitigation opportunities outside the special "areas of concern"). Such alternative approaches to timber management planning were not presented in the class assessment document, even though they are the main actual alternatives to the timber planning undertaking that MNR has proposed in the class assessment.

The forest management option

Reviewers of the successive versions of MNR's class environmental assessment have consistently objected to the narrow focus on timber management and MNR's approach within this focus, arguing that they are inconsistent with the multiple demands on Ontario's forests and the scope of MNR's crown land management mandate, and insensitive to the actual interrelationships of impacts. The critics have claimed that MNR has avoided serious consideration of non-timber uses of the forest, and ducked the broader questions about environmental quality before and after timber operations. The implication is that the Ministry's attempt to preserve its existing practices conflicts with the spirit and intent of environmental assessment, which is to enhance decision making and planning so that adverse environmental impacts are effectively anticipated, avoided and reduced.

It is arguable that MNR's decision to submit a class assessment for timber management conflicts with its formal legal obligations. The exemption orders under which MNR has proceeded with its forest and timber management activities have anticipated submission of a forest management assessment. The latest exemption order, MNR 11/9, allows for continued exemption from *Environmental Assessment Act* requirements "...(i)f a class environmental assessment for forest management has been submitted by the Minister of Natural Resources before December 31, 1985."¹ MNR met the

¹ Ontario Regulation 2/85, Order made under the *Environmental Assessment Act*, Exemption - Ministry of Natural Resources - MNR-11/9, December 13, 1985, s.8.

deadline but submitted a timber management assessment instead of a forest management assessment.

The implied solution to objections about the narrow focus on timber management would be redefinition of the undertaking to encompass "integrated forest management". This would entail more comprehensive inventories of all aspects of the forest - including flora and fauna, as well as timber stocks - and broader evaluations of existing environmental quality. It would also demand identification and analysis of alternative ways of using and protecting forest values and resources. Within this larger framework covering the interrelationships of forest activities and their effects, procedures for the preparation of timber management plans would be designed to ensure comprehensive and systematic integration with efforts to serve other values.

Ideally, integrated forest management would allow for constant assessment, evaluation and feedback of results in an iterative manner, so that planning and practice would improve continually over time. Truly integrated forest management would foster a broader, more mature outlook and operating philosophy, better knowledge and understanding of environmental effects, and a means of preserving environmental quality.

MNR's response to this option has been, in essence, that such an approach is impractical and unnecessary. The Ministry contends that "a broadened undertaking of 'Crown Land Resources Management' to achieve many purposes cannot be manageably addressed in any environmental assessment."¹ Moreover, the Ministry claims that non-timber values have been considered in the development of District Land Use Guidelines, and are dealt with specifically in timber management planning through the identification and special treatment of "areas of concern" and by application of the Ministry's integrated resource management policy.²

¹ See MNR, "Pre- submission Consultation Issues" (undated, probably 1985), issue no.1, scope of the environmental assessment, item 5.

² *Class EA, 1987*, part 2, esp. pp.100-103, 132-133, 144-152.

This response has not satisfied critics of the timber management focus. The District Land Use Guidelines (discussed in chapter three above) suffer from limited credibility outside MNR and uncertain authority within it. While they may provide some useful direction, they are not sufficiently firm or detailed to provide an adequate means of ensuring that non-timber values are effectively protected in timber management planning. Insofar as the Guidelines are to contribute to consideration of non-timber values it will be through the process for identifying and deciding upon special management needs for "areas of concern."

Integration in "areas of concern"

"Areas of concern" appear to be MNR's chief vehicle for considering non-timber values in timber management planning. This approach was "seriously questioned" by the MOE reviewers and others when it was presented in the 1985 version of the class environmental assessment.¹

The areas of concern approach appears to have eight main limitations:

- While the concept of areas of concern does not necessarily imply that non-timber values in other areas are of no concern whatever to MNR, the class environmental assessment and the Ministry's policy on integration of non-timber values into timber management planning refer to lands other than areas of concern as "normal operating areas" where no limits on regular access, logging, regeneration and maintenance activities are contemplated.² The class assessment document does not present sufficient detail to determine the extent to which routine forestry operations cause degradation of the environment. As a result, there is no basis for knowing whether it is

¹ See letters from P. Joseph, MOE to K. Morgan, MOE, October 14, 1986 [*Government Review*, pp. 126-59], and from W.R. Balfour, MOE to C.E. McIntyre, MOE, October 14, 1986.

² MNR, Policy and Planning Secretariat, "A Policy for the Integration of Other Resource Values in Timber Management" (hereafter "Integrated Resource Management Policy"), November 12, 1985 and "The Planning Process for the Integration of Other Resource Values in Timber Management" (hereafter "Integrated Resource Management Process"), November 12, 1985, esp. p.5.

- environmentally acceptable to dispense with more careful consideration of environmental factors in "normal operating areas".
- The present submission contains a general note on sources of relevant information but does not provide detailed criteria for determining what areas ought to be "of concern". This omission has been a major concern of government reviewers and MNR and the MOE have agreed to develop a "joint list" of areas of concern or at least the features of such areas.¹ But the list is apparently not to be incorporated as a binding commitment within the class environmental assessment document. Rather, it will be an attachment to MNR's "Policy for the Integration of Other Resource Values in Timber Management."²
 - Identification of areas of concern is expected to rely heavily on existing MNR information, although comments from other agencies and interests are also solicited through the consultation provisions of the planning process.³ Where existing MNR information is inadequate, a considerable onus is apparently placed on other interests to establish the need for designating specific areas as worthy of concern.
 - Overall responsibility for identifying areas of concern rest with "the party responsible for the production of the Timber Management Plan."⁴ Where the plan is for a Forest Management Agreement or a Company Management Unit, that "party" is the private sector forest company with logging rights to the area in question, a party which has an understandable vested interest in limiting consideration of non-timber values that might impinge on the wood supply.
 - Even with identified areas of concern, only certain special sub-areas are expected to be treated as reserves in which road building and logging etc., are not allowed. The planning process for areas of concern centres on the determination of how operations can proceed, and provides for decisions to permit normal operations, "modified operations", and operations subject to "specific access provisions." Timber management

¹ Letter from P. Joseph, MOE, to W. Green, MOE, October 23, 1987 [*Government Review*, pp.160-170, esp. p. 160].

² MNR, "Integrated Resource Management Policy."

³ MNR, "Integrated Resource Management Process," p.4.

⁴ Ibid.

planners are not required to ensure that non-timber values prevail. According to the policy, "a decision may be made that timber management operations are to proceed, even though *complete* protection of the other resource values may not occur."¹

- Beyond the general indication that management options for areas of concern include reserve status, access limitations, modified operations and normal operations, MNR has not provided detailed discussions of how these "areas of concern" will be managed. Instead, the Ministry has referred to a set of provincial guidelines documents that "provide information on alternative modified management prescriptions which could be employed to protect particular resource features, land uses or values."² Only three of these guidelines (covering fisheries habitat, moose habitat and tourism values) were in place when the June 1987 version of the class environmental assessment was submitted. The full set did not become available until after the hearings had commenced.
- "Comprehensive planning" is to be undertaken for each individual area of concern separately.³ There is no provision for evaluation of cumulative effects of timber access, harvesting, renewal and maintenance practices on non-timber values over larger areas, beyond the boundaries described in each timber management plan.
- The thrust of MNR's approach to areas of concern is directed as much to increasing areas subject to logging as it is to protecting non-timber values. This is clearly stated in MNR's statement of its intent in implementing its integrated resource management policy:
 - (i) to increase the amount of timber available by providing opportunities for timber management operations in areas previously identified as reserves, and

¹ Ibid., p.6.

² *Class EA, 1987*, p.150. See also pp. 186-9.

³ MNR, "Integrated Resource Management Process", p.5.

- (ii) to protect other resource values (e.g. fisheries, wildlife habitat, tourism values), and to contribute to their management.¹

Overall, the described approach to integrated management through areas of concern does not inspire confidence that the primary devotion to timber values will be effectively tempered even in areas of special concern. The absence of specific criteria and comprehensive operational requirements leaves the largely discretionary decision making authority in the hands of MNR and industry planners, who are subject to powerful incentives to favour timber interests. While the planners' decisions are open to public scrutiny, the public's ultimate ability to insist on more protection for non-timber values rests on the "bump-up" provisions by which concerned parties can request that contentious cases be subjected to full individual environmental assessment requirements. Insofar as "bump-up" is not a plausible option (see below), the planner's discretion is not greatly constrained within the class environmental assessment process.

In summary, MNR has made some efforts in the design of its timber management planning process to encourage consideration of non-timber values. However, these efforts fall well short of providing an integrated approach to forest management. Timber objectives clearly prevail and the limited provisions for recognising other objectives do not provide much assurance for other forest interests (natives, hunters and anglers, tourist operators, parks advocates, etc.). It is not surprising that representatives of each of these interests entered the Environmental Assessment Board

¹ MNR, "Integrated Resource Management Policy," p.1. The background to this statement of intent is provided in the policy's statement of rationale:
In the past, reserves were established (notably along shorelines and travel corridors) to accommodate other resource values such as fisheries, wildlife habitat and scenic views. Within these reserves, normally no timber management operations were permitted. The net effect of this approach was that reserves tied up merchantable timber and did not always provide appropriate solutions for the protection and management of other resource values. In addition, the identification and consideration of other resource values has not always taken place in a consistent and orderly fashion across the province.

hearings with opening statements opposing the class environmental assessment process.

Use of the class assessment approach

Ontario's class assessment version of the environmental assessment process was designed to permit a streamlined approach to assessment of individual undertakings within certain categories of small, frequently-recurring projects with moderate and reasonably predictable environmental impacts. It has been used effectively as a means of dealing with the difficult grey area between undertakings with potentially major impacts that clearly deserve full assessment, and undertakings with obviously insignificant impacts that need not be subject to any formal assessment.¹

Application of the class assessment process to the forest management, or at least timber management, undertakings of MNR is atypical. The activities covered include clearly major undertakings (e.g. providing road access to, and cutting, very large forested areas; and subsequent replanting and treatment, including pesticide spraying) and are likely to have widely varying and not routinely predictable potential effects. Some critics have therefore concluded that use of the class assessment process to cover such activities is inappropriate. But problems are also posed by the main conventional alternatives - carrying out full, but separate individual environmental assessments for each activity or plan, and/or seeking exemptions from assessment for the less significant ones.

As was noted in chapter one, it is not easy to apply environmental assessment requirements to undertakings such as forest management. Four basic characteristics of forest management make it a special challenge for environmental assessment:

¹ See Robert B. Gibson and Beth Savan, *Environmental Assessment in Ontario* (Toronto: Canadian Environmental Law Research Foundation, 1986), chap.4.

- Forest management is not a single undertaking but a multitude of individual activities, carried out through planning and implementation by both public and private sector actors.
- It covers vast areas, including very different ecosystems, and poses serious cumulative as well as site specific effects.
- It involves and affects a variety of more or less competing interests, and has implications of great economic (as well as biophysical, social and cultural) significance, provincially, regionally and locally.
- Finally, it rests on fundamental but inevitably debatable assumptions that are expressed in formal government policies, institutional arrangements and established practices, which are seldom opened up for public comment and review.

It is reasonable to expect that any satisfactory attempt to apply environmental assessment requirements to forest management will have to take these characteristics into account.

MNR's rationale for using the class assessment approach

The class assessment approach to environmental assessment has two main components: a generic analysis of the alternatives, impacts and mitigation options for activities within the given class, and a process for planning and evaluating proposed future activities in the class. In the usual cases, where the class approach has been applied to small scale and environmentally modest kinds of activities, the central component has been the process, and the most attractive feature of the process has been that it sets much faster and less onerous planning and review requirements for individual activities than would apply if the standard requirements of the *Environmental Assessment Act* were to be met.

Streamlining the planning and approval aspect is not mentioned in MNR's formal justification for adopting the class environmental assessment approach, but it is undoubtedly among the major factors that attracted MNR

to class environmental assessment.¹ In its statement of justification, MNR does, however, emphasise the process component of class assessment.

MNR's rationale for using the class environmental assessment approach begins with points related to the standard class criteria - that timber management "involves a common set of activities" in every management unit, that for each activity there are "generally predictable ranges of environmental effects," and that "optional methods of carrying out each activity, and the criteria for choosing the most appropriate method, can be identified."² MNR then proceeds to emphasize the appropriateness of a process-centred approach to the assessment of timber management. The Ministry observes that timber management is a continuous, long-term activity (renewing a logged forest "normally takes at least 80 years") that must be responsive to varying local conditions as well as changes over time. Because of this, MNR argues that timber management planning must be flexible, incremental and specific at the management unit level. But at the same time, some overall planning coherence is needed.

MNR states that the common planning process provided for under the class environmental assessment (and already in use), provides :

...common, predictable and equal opportunity for public consultation,
...flexibility to deal with local conditions and concerns, ...a manageable
process for MNR, companies, and broad-based interest groups,
[and]...adequate protection of the environment.³

The Ministry concludes,

MNR has submitted a class environmental assessment because it is the most appropriate vehicle for defining a common and consistent planning process, and for ensuring that the purpose of the *Environmental Assessment Act* is attained.⁴

1 MNR, *Class EA, 1987*, pp.14-17.

2 Ibid., p.14.

3 Ibid., pp. 15-16.

4 Ibid., p.16

Only after reaching this conclusion, followed by extended discussion of the process aspect of class assessment, does MNR note, in a single sentence, that the class approach also allows for generic consideration of purpose, rationale and alternative matters that apply to timber management throughout the province.¹

Generic assessment

The limited attention given to the generic assessment aspect of class assessment in MNR's justification for using the class approach is consistent with MNR's downplaying of overall forest management issues throughout the class assessment document. As is indicated in the discussion above concerning timber versus forest management, this is one of the weaknesses of MNR's assessment. The Ministry has not seen the class environmental assessment approach as a vehicle for public examination of forest (or even timber) management problems, policies and practices. In fact, some of the contents of the timber management class environmental assessment document - for example, the handling of alternatives - suggests that MNR saw the possibility of class environmental assessment encouraging public review of these matters, and sought to avoid it.²

What is at issue here is not the appropriateness of the class environmental assessment approach itself, but rather how MNR has chosen to use it. The class environmental assessment approach does include a means of addressing the generic issues raised by the implementation of a whole category of activities. Indeed this is one of the central components of class assessment. Moreover, it is arguable that careful attention to generic issues is necessary for any proper response to the *Act's* requirements, especially those for discussion

¹ Ibid., pp. 16-17.

² While MNR's unwillingness to address generic forest and timber management issues in the class environmental assessment may be regrettable and inappropriate given the aims of the *Environmental Assessment Act*, it is not surprising. Few government departments are likely to be attracted by the prospect of their basic assumptions and arrangements being subject to public review and decision, especially when the process is administered by another agency.

of the purpose and rationale for the undertaking, and comparison of the impacts and overall desirability of the undertaking and its alternatives.

If activities in the assessed class are likely to have significant cumulative effects beyond the scope of the process for handling timber management plans, then these cumulative effects ought to be addressed in the class assessment. If Ministerial policies and other central decisions will effectively predetermine harvest levels, regeneration efforts and tending practices in management units, then these too would appear to be crucial subjects for evaluation in the generic part of the class approach. Certainly the class approach *could* be used to provide for comprehensive review of generic issues, including cumulative effects and policies, guidelines and procedures.

Basic problems with the class assessment option

There are, however, at least two weaknesses in MNR's assessment of timber management that do seem difficult to correct under the class environmental assessment approach: the lack of a forest management emphasis and the implausibility of effective bump-up.

Integrating timber management into forest management

At present, the class approach does not integrate timber management planning well into forest management planning. MNR's claim that an integrated forest management planning undertaking "cannot be manageably addressed in any environmental assessment"¹ is demonstrably false. Such assessment is done regularly in the United States under the provisions of the *National Environmental Policy Act*.² Moreover, some initial, if faltering, steps toward an integrated approach have already been taken by MNR in the strategic land use planning exercise that produced the existing district land use guidelines.

¹ See MNR, "Pre-submission Consultation Issues" (undated, probably 1985), issue no.1, scope of the environmental assessment, item 5.

² See Dennis L. Schweitzer, "Forest Service Planning for the National Forests," in *Trends* 24:2 (US Department of the Interior, 1987), pp.7-12.

The deficiencies of these guidelines and the process which led to them, along with the uncertainties of their relationships with timber management plans, do however raise some difficult questions for application of the class environmental assessment process and for the institutional arrangements needed for implementation. For example, should the guidelines be upgraded to plans? Should the district plans/guidelines, or the unit level management plans, or both, be subject to the class environmental assessment process? Should timber management plans be expanded into forest management plans and if so, how would MNR's relationship with the logging industry have to change to accommodate the broader focus? What plans or activities should be excluded from the class and subjected to regular individual environmental assessment?

These are not entirely new questions. They were addressed to some extent by the Royal Commission on the Northern Environment¹ and considered, at least by MOE officials, in the early years of MNR's struggles with its assessment obligations.² While there is little public information on how MNR came to choose the class assessment approach, the Ministry apparently consulted with both MOE and the timber industry throughout the decision making.

In the period immediately following enactment of the *Environmental Assessment Act*, there were "negotiations" between MNR and MOE concerning the approach to be taken for forest management.³ In addition to encouraging a broader, forest management focus, MOE representatives questioned reliance on the class approach, arguing that standard individual environmental assessments would be appropriate at least where significant moves into new areas were involved. The option of designating certain private sector

1 Royal Commission on the Northern Environment, J.E.J. Fahlgren, Commissioner, *Final Report and Recommendations* (Toronto: Ministry of the Attorney General, June 1985).

2 Personal communication, David Young, MOE, June 13, 1988.

3 Ibid.

proposals subject to the *Act* was also raised by MOE.¹ These ideas were not favoured by MNR.

Perhaps a more open debate, more careful analysis and a more positive attitude toward environmental assessment on MNR's part at the outset would have allowed the parties to find a way to meet both forest management and environmental assessment needs through the class assessment approach. But this did not happen, and a thorough evaluation of the issues and options will still have to be done before it will be clear how class assessment might be applied successfully to forest management.

Limiting discretion and providing for individual assessments

The bump-up problem is no less complicated. Provision for bumping specified activities from the streamlined class process to full individual assessment is a standard component of class assessments. It has two purposes. First, it provides for more thorough planning and review of controversial and environmentally significant proposals within the class. Secondly, it helps to ensure generally that proponents of class undertakings meet their obligations and are responsive to the concerns of other interests. Approval of a class assessment amounts to a conditional delegation of assessment decision making to the proponent, and effective bump-up provisions limit the natural inclination of the proponent to disregard unfavourable criticisms. Effectiveness is not guaranteed, however.

Bump-up provisions can be effective only if there is reason to expect that bump-ups will actually occur in appropriate cases, and that the relevant controversies will be addressed in the resulting individual assessment. The mere existence of a bump-up provision will not work as a check on proponent discretion if actual use of the provision is not plausible. And if bumped-up undertakings can be defined in a way that frustrates inquiry into

¹ *Ibid.* The private sector designation option was used in the case of the controversial proposals for logging and related mill development involving the "Reed Tract," a virgin timber area in the West Patricia Region of northwestern Ontario that had been allocated to a pulp and paper company with a reputation as a notorious polluter.

the central controversies, full individual assessments are unlikely to be very useful. Both concerns apply in the case of timber management.

In the 1987 version of the class assessment, MNR states that where "the proposed timber management operations may cause significant public controversy or may be perceived to cause significant adverse environmental impacts ... special planning requirements may be necessary."¹ These would be potential cases for bump-up. A bump-up could cover a proposed timber management plan, or a component of a proposed plan (e.g. an access road or the "operational prescription" for an area of concern), or a major amendment to a plan previously approved.² The bump-up could be requested by an interested party or individual, or voluntarily sought by MNR. However, the Minister of the Environment has the final authority to require or deny a full assessment.

Certainly the Minister of the Environment would have sufficient legal authority to order a bump-up (although in practice any controversial action of this kind would require Cabinet approval). The question is whether any Minister of the Environment would be likely to use this power. In the case of proposed timber management plans, the answer is likely to be no.

There are two reasons for this - one general and one specific to the timber management case. The general situation is that bump-ups are in many ways similar to orders requiring assessment of private sector undertakings. Both require active intervention by the Minister of the Environment, almost always against the wishes of the proponent. In Ontario, the vast majority of public requests for designation of private sector undertakings have been denied and as yet, no bump-up requests have been approved.³ There is no

¹ MNR, *Class EA, 1987*, p. 177.

² *Ibid.*, p. 128.

³ See Gibson and Savan, *Environmental Assessment in Ontario*, chap.3 and 4; MOE, *EA Update*, various numbers; and the annual reports of the Environmental Assessment Advisory Committee. Since class assessments are relatively new, the number of requests has been low until recently. In 1988 the number of bump-up requests rose rapidly to a level that tested the ability of the Environmental Assessment Branch to evaluate the merits of the cases and provide well-supported advice to the minister.

basis for expecting that requests for bump-up of proposed timber management plans will be politically easier to grant than the designation and bump-up requests on other matters that have been consistently rejected in past years.

This generally negative situation is reinforced in the timber management case by the particular difficulties that would arise if a bump-up were granted. Presumably, if MNR were required to carry out an individual assessment of a proposed timber management plan, no timber management activities could take place in the planning area until the assessment had been prepared, submitted, reviewed and approved. Such a process could take years. Special contingency arrangements could perhaps be made and incorporated in the bump-up order, but there would at least need to be a process for negotiations among the interested parties to determine what interim activities would be acceptable.

The 1987 class assessment notes the need for contingency planning in the event of unforeseen changes, such as a successful bump-up request. MNR suggests that in these cases,

...some operations must be permitted to proceed, in order to maintain employment and prevent or minimise adverse social and economic impacts.¹

Contingency plans would specify the contents, period of use, schedule for preparation, review and approval of these interim planning efforts, as well as some provision for public input.

The contents of these contingency plans are to be reviewed and approved by the Environmental Assessment Branch before they are implemented. It is, however, not at all clear why the review and approval would be a function of

While the minister has yet to order a bump-up, there is some evidence that the possibility of a bump-up has encouraged greater responsiveness to public concerns in some cases (e.g. a controversial water line project in Guelph).

¹ MNR, *Class EA, 1987*, p. 182.

the Environmental Assessment Branch, and even less clear that the Branch has a legal mandate which would allow them to undertake such a process.

Given these weaknesses in the defining of how the proposed bump-up process would work, and how bump-ups would be approved, it seems a reasonable interpretation that MNR simply sees no need to anticipate that a timber management plan, in its entirety, would ever reach the bump-up stage.

Not all of these contingency planning considerations necessarily apply to bump-ups covering specific components of a plan (e.g. proposals to build an access road into or through sensitive areas, to use chemical pesticides, or to permit extensive operations in an area of concern). Where bump-up of a component would not interfere greatly with ongoing operations in the planning unit, there would be no special barrier to ordering full assessment. If this non-interference condition is often met in cases of controversy and if we assume, in defiance of the historical record, that the bump-up requests would be granted, the question would then centre on the potential adequacy of the individual environmental assessment.

Here again predictions are difficult. It is conceivable that in many cases the process would work well. But there is a basis for concern arising from a recent experience in the "Red Squirrel" case, a quasi-bump-up concerning a primary access road. The Red Squirrel road conflict centres on MNR's desire to extend the existing Red Squirrel road by 15 kilometres, so that it would join up with the existing Liskeard Lumber road. In addition, the Red Squirrel road extension would act as a starting point for 30 additional kilometres of road in the Pinetorch corridor. In 1984 MNR started to clear the right-of-way for the extension road without any formal approvals. The ensuing uproar led the newly appointed Minister of Natural Resources, Vince Kerrio, to request, in September 1985, a full environmental assessment on the two proposed roads.¹ The final document released in June 1987,² restricted its description

¹ A brief history of the Red Squirrel road issue can be found in *Seasons* 28:2 (Toronto: Federation of Ontario Naturalists, 1988), pp. 14-21.

of the environment affected and environmental effects entirely to the corridors of land surrounding the road proposals. The assessment made no allowance for the environment affected as a result of providing road access, and did not even attempt to describe the environmental effects that provision of road access would lead to. Since the central purpose of the roads is to provide primary access for logging, the environment to be affected and the inevitable environmental effects will clearly extend far beyond the road corridors.

The final Red Squirrel submission was so controversial that the consultants employed by MNR to carry out the assessment, removed their name from the report in protest against MNR's narrow focus and its unwillingness to undertake a realistic assessment.¹

Despite the intense controversy surrounding the Red Squirrel environmental assessment and several hundred requests from the public, the Minister of the Environment announced in June 1988 that there would be no public hearing before the Environmental Assessment Board, and that MNR's submission had been approved.

While the precedent set in the Red Squirrel case may not always be followed in the future, it demonstrates clearly that the discretionary openings in the process, in combination with the prevailing political realities, can frustrate the potential of individual assessment to ensure reasonably comprehensive and rigorous evaluation of forest management options. This problem is not peculiar to timber management or bump-ups, but it is especially important in forest use disputes that typically centre on scope-of-inquiry questions. So long as the problem persists, the value of the bump-up provisions and the acceptability of the class assessment approach will be limited.

² MNR, *An Environmental Assessment for Primary Access Roads in the Latchford Crown Forest Management Unit - Red Squirrel Extension/Pinetorch Corridor* (Toronto: MNR, June 1987).

¹ J. Temple, "Temagami study covers up impact of logging, consultant claims." *Toronto Star*, March 29, 1988, A7.

If the class assessment approach to forest management is to be used, bump-up must be feasible and have effective results. The choice of activities subject to the class process and the timing of plan development must be designed to ensure that bump-up is a realistic option in appropriate cases. Clearly stated criteria for evaluation of bump-up requests must be prepared, and provisions to ensure proper breadth of inquiry in individual assessments must be in place. This has not yet been done. Indeed, some of it has not yet even been attempted, and the little that has been addressed remains so vague that it will be insufficient to fulfill the requirements of environmental assessment.

Details about impacts and clarity about decision-making

The need for detailed assessment information and for clear decision-making criteria and procedures has long been a common theme in deliberations about environmental assessment and forest management in Ontario. It was raised consistently by reviewers commenting on MNR's successive proposals for meeting its environmental assessment obligations for forest management, and was the basis for one of Gordon Baskerville's central criticisms of MNR's forest management efforts. The main complaints have been

- that the Ministry's class assessment documents fail to provide sufficiently detailed information, or even clear commitments to collect and use detailed information, and to make reasonably specific predictions and evaluations of environmental impacts;¹
- that the documents do not set out clear criteria and procedures for decision-making to ensure fair treatment of competing interests and values;² and
- that the Ministry has, in practice, produced plans that are so vague they cannot be evaluated usefully.³

¹ See Chapter 2.

² Ibid.

³ Baskerville noted in his *Audit of Management of the Crown Forests* (Toronto: Queen's Printer for Ontario, August 1986), p.83, "...the plans tend to be so general as to defy evaluation." This tendency to vague, unsupportable statements is not exclusive to MNR's environmental assessment. See P.N. Duinker and G.L. Baskerville "A Systematic

Interrelated product and process problems are evident here. The criticisms regarding the vagueness of the timber management plans have focused on the lack of clear discussion and quantified detail on the environment to be affected and the environmental effects likely to result from the implementation of the undertaking. The immediate difficulty is that MNR's approach to planning has provided insufficiently precise baseline information and effects predictions to allow for useful monitoring or re-evaluation of management practices. As a result the Ministry has relied on discussion of hypothetical effects rather than detailed knowledge of actual effects in its class assessment document, in the guidelines and manuals that provide more detailed directions, and in the development of timber management plans. The consequent vagueness and imprecision in the substance of the assessment, guides and plans contribute to and are likely to be complicated by process uncertainties - for example, the lack of clarity on how "areas of concern" will be identified and managed, the weakness of criteria for bump-up and plans for contingency arrangements in the event of a bump-up, and the largely hidden nature of decision making within MNR following public involvement. Overall, the pervasive vagueness threatens to undermine the value of the proposed timber management planning process and the resulting plans as vehicles for identifying, evaluating and avoiding the negative impacts of timber management undertakings before they are implemented.

The need for details

In general, it is important that any environmental assessment process be carefully designed so that the results (in this case the plans) are usable, before, during, and after implementation of the undertaking. Environmental assessment is designed to ascertain the nature of the environment(s) likely to be affected by the alternative options for action, the type, magnitude and

Approach to Forecasting in Environmental Impact Assessment," *Journal of Environmental Management*, 23 (1986), pp. 271-290; and Gordon E. Beanlands and Peter N. Duinker, *An Ecological Framework for Environmental Impact Assessment in Canada* (Halifax: Institute for Resource and Environment Studies, Dalhousie University, 1983).

significance of environmental effects expected, and how they may be avoided or reduced. The process, no matter how elaborate, is irrelevant if does not reveal how the various alternatives compare and how the most acceptable approach can be undertaken with the least environmental harm. And it cannot do this unless it can determine the details of what the likely and inevitable effects will be.¹

The need for credible, scientifically sound approaches to environmental assessment, not only in the process, but also in the product, has been emphasized in the assessment literature,² and is extremely important in the timber management context. Not only must the process yield specific assessment details, concerning especially the environment affected and environmental effects for a range of alternatives, but it should also assess these with respect to other users and uses of the same environment. Additionally, the assessment should provide a clear evaluation of what the cumulative effects will be.

In isolation, any one activity may not create environmentally "significant" effects. But the sum of all these small environmental effects may be quite large, locally, regionally and even provincially. The issue of cumulative environmental effects is a central aspect of this particular undertaking. Ignorance of what these effects are, their extent in space and time, and the synergistic effects they may create, is bound to undermine prospects for the long-term sustainability of forest activities and values.

Only when there is a well-defined core of knowledge on all these aspects can truly informed decisions be made. A thorough assessment, especially in the forestry context where the results of actions taken today may not be fully known and understood for several decades, is important for questions of sustainability. Traditional forestry theory has always promoted the concept of

¹ The literature on environmental impact assessment is vast and covers almost every conceivable aspect in many different countries. In Canada, the most frequently cited work is probably Beanlands and Duinker, *An Ecological Framework*.

² Ibid. See also Duinker and Baskerville, "A Systematic Approach".

sustained yield timber management, whereby the amount of wood logged in any one year reflects the land's ability to grow, in perpetuity, another crop of a similar volume and quality. This principle has, in many instances, failed in Canada due to relentless logging, lack of regeneration or regeneration of inferior species, inappropriate harvest schedules, and poor understanding of the biological dynamics and capabilities of the forests.¹

The issue of sustainability is central to the environmental assessment of timber operations, and even more so to the broader notion of forest management. Lacking detailed knowledge of the environment affected and the environmental effects resulting from these operations, no one can possibly make useful predictions about what the short-term, long-term or cumulative effects will be. Nor is it feasible or realistic to expect that monitoring of the results will yield useful lessons for the improvement of future assessments and forest practices.

There is no doubt that much of the knowledge needed is not yet available. But this is no excuse for vagueness of commitments to obtain the necessary information for future planning.

Serving timber and non-timber purposes

The overall vagueness of MNR's assessment process and products, noted at length in chapter two, led to the conclusion by MOE's Environmental Assessment Branch that "the technical quality and level of detail ... is insufficient."² In particular, the level of detail in the class assessment process appears to be insufficient to ensure that adequate assessment detail will be available and used in the development of timber management plans. The environment affected, environmental effects, and the longer term

¹ There are several important works documenting the failure of sustained yield management in Canadian forestry. See D. McKay, *Heritage Lost. The Crisis in Canada's Forests* (Toronto: MacMillan, 1985); F.L.C. Reed, *Forest Management in Canada* (Ottawa: Canadian Forestry Service, Report FMR-X-102, 1978); and J. Swift, *Cut and Run* (Toronto: Between the Lines Press, 1983).

² *Government Review*, pp. 93-94.

cumulative effects receive cursory attention. Where they are mentioned, the level of detail is not strong enough qualitatively or quantitatively to allow for testable predictions, monitoring and feedback. The total result of all this vagueness is critical to the assessment at two main points.

The first concern centres on the sustainability of the forest as a resource base for timber harvesting. The provincially determined timber production policy sets a target level of wood to be harvested annually. In effect, this policy is meant to determine all other levels of activity such as road building, logging and regeneration. But since the policy has been set in the absence of any clear understanding of the capabilities of the forests, there is no grounds for confidence that harvesting to meet the policy targets would be sustainable. In this context, the assessment process must ensure that research and planning at the management unit level includes rigorous evaluation of the state of the forests, the effects of current practices and the sustainability of harvest at the current levels. And it must ensure that the better understanding resulting from these efforts is recognised not just in local planning but also in revisions to the production policy.

Determining the sustainability of current rates and modes of forest exploitation for timber purposes should be one of the primary functions of the planning process set out in MNR's assessment. Indeed, given the years taken for preparation of the class assessment document, it would have been reasonable to expect MNR's document to have been able to report on the findings of unit level assessment work and to outline the resulting revisions to the production policy as well as to silvicultural practices. Certainly, planning process described in the class assessment should be designed so that in the future the results of planned actions will be predicted carefully and in detail, monitored during and after the occurrence, and evaluated so that the lessons can be fed back into future planning efforts to allow both for improvements in management unit practices and for revision of the overall production policy in light of experience and capabilities on the ground.

The second main consideration is that the forests of Ontario have many values and uses beyond those of timber management and that the test of sustainability relates to all these values and uses. Both the overall design of the assessment process and the local undertaking of predictive and evaluative efforts must recognise this reality.

If the planning process is to address the sustainability issue properly, considering timber and non-timber values, it will have to recognise current concerns about the cumulative impacts of activities in the forests, and ensure continued, increasingly well-informed responses to the implications of these impacts. Prediction, monitoring and evaluation of environmental effects at the individual timber management unit level must be accompanied by efforts to assess the aggregation of these localised effects at broader, regional and provincial scales. It is the combination of all these smaller localized effects that will be significant for timber production policy review and for planning that ensures the protection and enhancement of other forest interests.

Guidelines and technical manuals

The submitted class environmental assessment document provides very little technical guidance for timber management. Instead, the document outlines a planning and implementation process, leaving the operational specifics to a set of guidelines and manuals.¹ These guidelines and manuals are crucial components of the timber management planning process, and although they were not submitted with the class assessment document, they are crucial components of the class assessment. They describe how timber management planners are expected to carry out various timber management operations; how they are to identify and evaluate the environment to be affected by these activities; and how they are to determine what environmental effects are likely to occur, what can or should be done to avoid or mitigate the damage, and what options are available to deal with past damage. Individually and together, the guidelines and manuals represent the main source of detailed

¹ See *Class EA, 1987*, part three, pp.185-91.

information on the principles and considerations that are to guide the preparation of timber management plans and the design and implementation of particular timber management activities. Consequently, the contents of these guides and the nature of their application will play a major role in determining the success or failure of MNR's planning efforts.

MNR's set of guidelines and manuals for timber management has grown since the class assessment document was submitted. The current set includes guides for silvicultural work in common forest types; preservation of tourism values; mitigation of damage from access road construction; operational prescriptions for aerial spraying, prescribed burning and shoreline timber cutting; and protection of habitat for special species or categories of birds (e.g. hawks and eagles, herons, waterfowl, warblers and cavity nesters) and mammals (e.g. white-tailed deer, caribou, moose and furbearers).¹ At least some of these guides are of high quality, especially in comparison with those available in other Canadian jurisdictions. There are, however, questions and problems concerning both the contents and the role of the manuals and guidelines in the timber management process described in the class assessment.

The two main general questions about the contents of the current set of guidelines and manuals concern the completeness of the overall set and the provisions for identifying and repairing deficiencies in the individual elements.

The completeness issue is central if the guidelines and manuals are to be relied upon as the main source of detailed direction on protection of non-timber values. Only part of the current set was available at the time the class assessment document was submitted and some reviewers expressed concern that their special interests were not covered. Reviewers in the Ministry of Culture and Communications, for example, accepted the proposed class environmental assessment process only on the understanding that an appropriate manual would be developed, with their assistance and approval,

¹ Some are still listed as drafts.

to ensure conservation of significant heritage resources. Detailed public review before the Board is providing a useful opportunity to examine the overall and individual adequacy of the guidelines and manuals, and to identify needs for additions and revisions.¹ There may even be time for MNR to respond with new guidelines covering the problem areas before the hearings conclude. It is, however, unfortunate that the preparation of guidelines and manuals was not from the outset more closely linked with the preparation of the class assessment, and that the Ministry did not adopt a more open, consultative approach so that the submitted assessment document could have included a properly comprehensive set of specific guidelines and manuals.²

The second contents problem concerns how to address more specific deficiencies in the directions given in the individual guidelines and manuals. While the existing prescriptions may be in many ways laudable, they are also no doubt imperfect. This is in part because existing knowledge about forest ecosystems is limited. Better timber management and better forest management in the future will depend on efforts today to improve this knowledge base and the operational guidelines. But if this is to happen, provisions for effective monitoring of effects, and for re-evaluation and revision of the guidelines, must be built into the design and implementation of the guidelines. Effective monitoring relies on good baseline information on the environment to be affected and clear, preferably quantified predictions of the anticipated effects of planned activities. As well it requires means of ensuring that the mitigation guidelines are followed and that the actual effects of operating under the guidelines are reported accurately.

¹ MNR noted in the class assessment document that it would continually re-assess needs for additional guidelines and that it was "open to suggestions from concerned parties." *Class EA, 1987*, p.189.

² An attractive approach to such problems, focusing on the identification of "values ecosystem components" through consultation with the interested parties, is set out in Beanlands and Duinker, *An Ecological Framework for Environmental Impact Assessment in Canada*, see especially pp.92-3.

In the submitted class assessment, MNR does recognise the need for monitoring of compliance and effects/effectiveness and for re-evaluation of the guides.¹ It notes that a specified minimum of baseline information is required, but only by the matters covered by provincial guidelines (tourism values, moose and fisheries habitat protection). Some compliance monitoring is to be done for annual reports on "past forest operations," though this is mostly centred on ensuring compliance with timber management plans, rather than compliance with the guidelines. Operations in areas of concern will get special attention and "specific compliance monitoring programs" will be developed for individual management units, but for the purposes of flexibility the nature of the specific programs will be left to MNR district staff. For tourism values, moose and fisheries habitat protection a scientifically rigorous "provincially-directed and coordinated monitoring program" is promised in the class assessment document, but again the scope of this program is limited to the tourism, moose and fisheries issues addressed by provincial guidelines.²

In sum, the class assessment commitments to monitoring and reporting, are creditable, but also incomplete and in many areas extremely vague. To some extent, incompleteness and vagueness are unavoidable. Because of the vast extent of timber management activities, the prevailing limits of information about forest ecology and operational effects, and the inevitable budgetary constraints, commitment to a fully complete and specific monitoring and review program is probably unrealistic. At the same time, however, reliance on unspecified studies and staff judgement falls short of the standard required for proper environmental assessment. A more acceptable response would at least describe a comprehensive provincial level framework of general guidelines, set out procedures for open development and well-scrutinised application of monitoring work tailored to local issues and conditions (preferably integrated into the procedures for development of the management plans under the class assessment), establish provisions at both the provincial and local levels for consultative priority setting in face of

¹ *Class EA, 1987*, pp.192-200.

² *Ibid.*, p. 199.

resource limitations, and make specified commitments to a regular process for identifying deficiencies and reviewing the current guides.

The final, major issue concerning the guidelines and manuals centres on uncertainties about their status. According to the class assessment document, "reference to" the silvicultural guides and "application of" the three provincial guidelines (tourism, moose and fisheries), and a promised access road construction manual are mandatory in timber management planning.¹ Use of certain other technical and operational manuals (e.g. on aerial spraying and prescribed burning) is also mandatory at least in the carrying out of planned activities.² Just what "mandatory reference" and "mandatory application" are expected to mean in practice is not clear, and the practical role of the other guidelines documents, including those still in draft form, is even less certain. This again is to some extent understandable. Room for discretion and flexibility is needed in light of the differences among regional and local ecosystems and the unavoidable limitations of general guidelines. But because most of the details about MNR's intentions for environmentally acceptable timber management rest in the guidelines and manuals, it is virtually impossible to evaluate the likely adequacy of the Ministry's proposed approach without a clear understanding of the method and consistency of their application.

There is no simple response to this dilemma. Nevertheless, it should have been possible to specify more clearly the limitations of the guidelines, possible needs for discretionary interpretation and application and means for ensuring that use of discretionary powers does not compromise environmental protection and wise management. As with monitoring, clarification of the status of the guidelines would have been easier if the preparation and use of these guidelines had been integrated into the process for developing, applying and eventually reviewing the class environmental assessment.

¹ Ibid., pp.185,188, and 190.

² Ibid., pp.190-1.

This may yet be accomplished through revisions to the class assessment or through conditions accompanying approval of the current approach. Certainly, evaluation of the acceptability of the current class assessment document, and the planning process it describes, will depend on judgements about the adequacy of the existing guidelines and manuals. And some means of addressing the limitations of these guides will be needed if there is to be a firm basis for confidence that the proposed approach to timber management planning will deal sensitively with conflicting forest values and sustain timber and non-timber forest values in perpetuity.

Barriers to effective public involvement

For any environmental assessment process to be effective, public involvement in the process and public scrutiny of the proposals is essential. Because environmental assessment requirements have had to be imposed on more or less recalcitrant proponents, forcing them to consider a range of factors they would otherwise downplay or disregard, the interested public stands as the best independent force for ensuring that proponents meet the requirements of the *Act* and fulfil the commitments made in assessment documents.

In the process set out in MNR's proposed timber management class assessment, effective public involvement is especially important. The public is not only given a general role throughout the planning process, but must also play a major part in what are, from the environmental perspective, the two most important components of the planning and assessment process - the identification of "areas of concern" and the exercise of "bump-up" provisions.

The public involvement process that is outlined in the class assessment document and that is currently being used by MNR, permits the general public and other interested parties to review and comment upon all plans, proposals and amendments within a certain time frame, typically thirty days after the documents have been displayed at a one-day open house. These

provisions, which reflect the requirements imposed by exemption order conditions as well as MNR's established preference for the open house approach to public contacts, do give members of the public some assured opportunity to view and comment on timber management planning documentation. Whether this approach provides a sufficient basis for effective public involvement is another question.

Some government reviewers of the class assessment document expressed skepticism. One noted that the public involvement process "does not appear to be structured as an interactive process"¹ and there were particular concerns about MNR's vagueness regarding how it expected to make use of the public comments it received. The process by which public comments are to be evaluated remains shrouded in mystery and the class environmental assessment document does not commit MNR to respond to comments or to provide reasons for rejecting them.

There also appear to be grounds for concern that public involvement in the planning process under the class assessment would be constrained by limited access to information. Members of the interested public are assured an opportunity to examine planning documents in the one-day open house sessions. Beyond that, however, they must go to the MNR district office to view the plans and supporting documentation such as maps, manuals and guidelines. The open houses may well be useful. But given that the relevant information can comprise hundreds of pages and may require close examination before potential concerns can be confirmed or relieved, it is reasonable to anticipate that brief access to the plans in open houses will be found insufficient whenever there is any basis for significant controversy. In such cases, at least, effective public participation may be frustrated if the information is available only in the district offices.

Limits on information accessibility are likely to be especially effective barriers to participation by interested parties living outside the centres in which district offices are located. This is particularly worrisome where native

¹ See letter from P. Joseph, MOE, to K. Morgan, MOE, October 14, 1986, Attachment A, p.14.

interests are involved. Native people in Ontario have certain rights entrenched in law and policy, and although there has been considerable controversy about the specific implications of these laws and policies,¹ MNR does have a legal obligation to consider native rights and how they may be affected by activities such as logging. Unfortunately, the class assessment document does not reveal clearly how MNR plans to discharge this responsibility.

All these concerns about the effectiveness of provisions for public involvement generally, and for recognition of the special rights of native people, are intensified and perhaps overridden by the more fundamental problems with MNR's approach - the lack of explicitly defined criteria for identifying and planning for protection of areas of concern, the limited credibility of the bump-up provisions, and most fundamentally the manner in which the public's role has been rigorously confined to commenting on immediate timber management planning matters.

As has been argued above, many of the most important local and regional controversies surrounding MNR and timber industry activities stem from much broader questions related to forest management policies set at the provincial level, without public involvement. The decision to pursue timber management rather than forest management, and the decisions on the timber production policy, for example, have clearly played crucial roles in timber management planning throughout Ontario, virtually governing many management decisions and activities. Yet the public has not in the past had a chance to participate in the decision making on these most fundamental matters, and the approach taken by MNR in the timber management class assessment keeps these issues outside the ambit of public involvement.² The

¹ See, for example, Paul Driben, "Fishing in Uncharted Waters: A Perspective on the Indian Fishing Agreements Dispute in Northern Ontario," *Alternatives* 15:1 (1987), pp. 19-26.

² The timber industry has encouraged MNR in taking this approach. In a January 26, 1988 letter to Environment Minister Jim Bradley, I.D. Bird of the Ontario Forest Industries Association wrote,
The Association supports the position of the Ministry of Natural Resources that matters of broad policy are the responsibility of Government and in particular Cabinet, and that the Class EA should not deal with broad policy issues such as provincial production policy, the

result is a fragmented and weak public role. Interested groups and individuals are given participative opportunities, but they are limited to addressing the specifics of a myriad of separate plans spread over time and across the province. And insofar as the fundamental policy decisions continue to predetermine much of what "must" be accomplished under each plan for each management unit, the public role is practically reduced to tinkering at the margins.

nature of the provincial forest inventory and decisions as to which company will be granted licences in specific areas.

Chapter 5

Options and Solutions

What should we do now?

Forest management presents two basic challenges. The first centres on the need to recognise conflicts among the extractive and non-extractive demands on the forests, and to establish proper means of allocating and protecting the forest to serve these competing purposes. The second is the problem of sustainability - how to govern specific uses of the forest, especially logging, in a way that will maintain forest values in perpetuity.

These challenges are inevitably linked. Unsustainable harvesting means a progressive shrinking of the resource base and, sooner or later, this brings worsening conflicts over the use or protection of what remains. In Ontario, where forest regeneration has consistently lagged behind timber cutting, conflicts between advocates of competing forest purposes have already become numerous and bitter. The habit of equating "forest management" with maximizing the timber harvest, still prevails in industry, government and even academic circles. But the reality is that the forests have long served a variety of purposes - from traditional native pursuits and tourist recreation to global ecological balancing - and today these demands are multiplying. The aspirations of a rising population and the requirements of an expanding economy are placing ever heavier pressures on the crown forests not just for timber extraction, but also for other commercial, recreational, ecological, cultural, even aesthetic purposes. Tourism industry operators, hunting and fishing interests, mining companies, native communities, cottagers (and would-be cottagers), park and wilderness advocates, builders of highways, transmission lines and pipeline corridors, industrial and commercial developers are placing claims on forested land more or less in competition with the timber industry.

The growing pressures on depleted forests have encouraged all parties to recognise the limited capacity of the crown forests, and to face needs for more careful stewardship if there is to be any chance of sustaining forest values and benefits. As a result, forest management has become an especially significant and difficult area of public controversy. Forest depletion and land use conflict concerns now predominate among the challenges facing the agency responsible for management of crown lands in the province - the Ontario Ministry of Natural Resources.

For over a decade MNR has been engaged in strategic planning exercises, changes to land tenure arrangements, and other efforts to renovate its approaches to forest management. There is wide agreement that these initiatives have brought important improvements. But it is also clear to all that the improvements have not been enough. The Ministry still faces a wide range of increasingly intractable land use conflicts, and increasingly insistent questions about what management philosophy and practices should prevail throughout the province.

The question of what to do about the forest depletion and land use conflict problems is a subject of intense public and professional debate. This is hardly surprising, since the problems are daunting and for many people the stakes are high. Even for the relatively simple individual questions and controversies there are few easy answers, and there is probably no overall response that could satisfy all parties. Nevertheless, the need for a coherent overall approach seems inescapable. Because the competing demands and sustainability issues are so tightly linked, no single, narrowly-focused initiative is likely to enjoy much long-term success in the absence of a coherent and comprehensive strategy for addressing the two challenges of forest management.

It is in this context that MNR has, since 1976, been engaged in developing a response to its obligations under the *Environmental Assessment Act*, which has required the Ministry to prepare for public review an environmental

assessment document setting out and justifying its approach to forest management planning.

Operating under lengthy series of temporary exemption orders, the Ministry spent over ten years wrestling with the problem. These efforts, the various draft assessment documents, and the final submission - *The Class Environmental Assessment for Timber Management on Crown Lands in Ontario* - have been examined in detail in this report. The conclusion, overall, is that the product of MNR's labours is a disappointment. The document finally submitted does not represent a coherent and comprehensive strategy or an adequate response to the two basic challenges of addressing conflicts and ensuring sustainability. *The Class Environmental Assessment for Timber Management* focuses narrowly on timber, instead of forest, management and provides for a limited form of integrated, multi-purpose management only in ill-defined "areas of concern". The document also fails to provide grounds for confidence that future management plans and practices will meet the sustainability objective.

At the same time, the class assessment document and the hearings now underway before the Environmental Assessment Board have provided a basis and a forum for public debate on forest management issues in Ontario. Use of the environmental assessment process has thus opened for review not just the details of timber management planning, but also the larger questions about how the Ministry of Natural Resources and the province should respond to the challenges of forest management. By the end of the hearings, the Board will have heard much about the larger challenges of forest management as well as about the narrower range of matters addressed in the class assessment document. The Board will then be faced with judging the inadequacies of the present approach, and determining how they might best be corrected.

Some of the evident deficiencies of the submitted class assessment document will be reduced through additions and clarifications provided in the course of

the hearings.¹ However, the submitted document establishes the framework of MNR's intended approach to environmental assessment of forest management, and the main strengths and weaknesses of this approach are likely to persist through the hearings. It is therefore appropriate now to revisit the basic principles of the case, to evaluate the options available to the Board in its deliberations on the strengths and weaknesses of *The Class Environmental Assessment for Timber Management*, and to consider the implications of this examination for the future of environmental assessment and forest management.

Applying environmental assessment to forest management

The basic principles

Application of environmental assessment requirements to forest management planning in Ontario has considerable potential as a framework for developing an effective, integrated response to the competing demands and sustainability challenges. Ontario's *Environmental Assessment Act* requires proponents to be clear about the need or needs they are addressing (and hence the "purpose" or "rationale" for their "undertaking"), to identify the various ways of responding to this need (the "alternatives"), and to evaluate these alternatives in light of their comparative social, economic, cultural and biophysical effects (the "environmental effects"). Moreover, the *Act* requires that the steps and results of this enlightened planning work be documented (in the "environmental assessment") and provides for public scrutiny and review.

¹ In its decision on the proposal by SNC Inc. for approval of an energy from waste facility in the Regional Municipality of Peel, the Joint Board established under the *Consolidated Hearings Act* ruled that material presented at hearing before the Board could be considered part of the environmental assessment, in addition to the material contained in the submitted environmental assessment document itself, at least for the Board's purposes in making a decision on the acceptability of the environmental assessment. See The Joint Board, *Reasons for Decision and Decision: Proposed Energy from Waste Facility - An Undertaking by SNC Inc. in the Regional Municipality of Peel*, October 24, 1988, esp. pp.31-2, 126.

The *Act* is, essentially, a means of forcing decision makers to take a more open and comprehensive approach to problem solving. It pushes proponents to incorporate an additional set of broadly "environmental" considerations along with the usual political, economic and technical factors in the conception and planning of undertakings. Accordingly, the expected results are not merely plans and projects that meet the minimum standards for environmental acceptability, but carefully selected and designed undertakings that are, relative to other options, most in accord with broad public interests.

In principle, at least, this more open and comprehensive approach would seem well suited to forest management planning, given the biophysical as well as economic dimensions of the sustainability questions, the increasingly intractable conflicts over appropriate forest purposes and uses, and the insistence of competing interests demanding significant roles in the decision making. Forest management is, however, an atypical problem for environmental assessment. Usually, environmental assessment requirements are imposed on proponents planning reasonably well-defined, individual projects. In contrast, forest management comprises a vast range and number of activities, large and small, which have cumulative as well as individual effects, and which are in their selection, design and implementation reflections of broad policy determinations as well as site- and problem-specific evaluations.¹

Environmental assessment processes generally have had difficulty ensuring proper attention to cumulative effects and underlying policy issues. And certainly neither of Ontario's main approaches to environmental assessment - conventional individual assessments for specific-project undertakings and conventional class environmental assessments for small-scale recurring projects - was designed to handle a problem like forest management. But environmental assessment is a relatively new and still developing process.² Effective application of environmental assessment requirements to forest

¹ See the final section of chapter one.

² See chapter one for a discussion of Ontario's environmental assessment process and the class environmental assessment version of this process.

management is not impossible; it just involves a measure of imagination and innovation.

What environmental assessment of forest management should do

The environmental assessment principles set out above fit well with the nature of the forest management challenges. Certainly these challenges are significant enough and controversial enough to be worthy of the kind of serious attention required by environmental assessment provisions. The forest depletion and land use conflict issues at the centre of forest management concerns in Ontario reflect the limitations of past approaches to forest management, and all parties are now demanding a participative role in forest management decision making. Given this situation, what is needed is an effective public process for reviewing the basic purpose and rationale for forest management as well as the specific effects of forest management options. In principle, at least, the broad approach of Ontario's environmental assessment process would seem admirably suited to the task. While it has some important weaknesses, in structure as well as in application,¹ it does provide an open decision-making process; requires critical examination of alternative approaches in light of biophysical, social, economic and cultural criteria; and can be used to impose requirements for better research, planning and management.

To be useful, however, environmental assessment of forest management would have to recognise and address the basic requirements of proper forest management planning that we outlined in chapter one. These are, in summary, requirements for

- understanding the importance and interrelations of all forest values and purposes, the objectives associated with each, the likely and unavoidable conflicts and the opportunities which can be pursued together or successively;
- collecting detailed and reliable information about

¹ See Gibson and Savan, *Environmental Assessment in Ontario*.

- the capabilities of specific forest ecosystems to serve the various objectives sustainably,
- the practical capabilities of available forest management techniques, and
- the realistic availability of financial support and expertise;
- recognising the limits of current knowledge about forest ecology and social impacts, about the potential effects of certain activities, and about the likelihood of success in protection, regeneration and damage mitigation efforts;
- producing, implementing and monitoring the results of detailed management plans governing how specific forest lands will be protected, exploited and regenerated, with each plan incorporating
 - measurable and attainable objectives,
 - an analysis of impediments to achieving these objectives, including impediments arising from the nature of the resources and from the institutional and political structures governing them,
 - explicit means of overcoming these impediments,
 - a schedule of activities for implementation of the plan,
 - measures to determine the effectiveness of these actions in moving towards the desired objectives,
 - a means of evaluating actual progress relative to desired progress, and
 - provisions for systematic periodic reviews in which deviations from planned goals can be corrected by altering the objectives, the plans, the activity schedules or all of these factors;¹
- applying an iterative process for developing provincial and regional objectives, strategies and management guidelines (based on detailed local information on inventory, capabilities, impacts, conflicts and concerns) to avoid conflicts and ensure sustainability, applying these overall directives in local planning, and using the monitoring findings on the actual local results to revise and update the directives; and

¹ This list is based on Baskerville, *An Audit*, pp. 7-8.

- carrying out all decision making through a clear, open, rigorous and fair process that maximises sensitivity to public concerns and facilitates anticipation and avoidance of conflicts.

These are onerous requirements. Some, particularly those demanding detailed knowledge of forest ecosystems and capabilities, cannot be satisfied without lengthy and sophisticated research, much of which has yet to be done in Ontario.¹ Nevertheless, this outline of proper forest management planning characteristics provides an appropriate basis for judging the adequacy and acceptability of any proposed approach to forest management, including the approach set out in MNR's *Class Environmental Assessment for Timber Management on Crown Lands in Ontario*.

MNR's approach in the Timber Management Class Environmental Assessment: an evaluation

Judged in light of the criteria set out above, MNR's response to its obligations under the *Environmental Assessment Act* is unsatisfactory. The approach adopted by the Ministry and described in the class assessment document perpetuates a narrow focus, viewing the forest almost exclusively as a resource base for timber industry purposes, and provides only marginal recognition of other forest interests. As such it is more likely to exacerbate than to reduce land use conflicts. Moreover, the Ministry's approach to timber management provides little basis for confidence that its implementation will ensure sustainability even within the limited ambit of timber purposes.

The major weaknesses of the Ministry's efforts, through all five attempts to produce an appropriate class assessment document, were reviewed in detail in chapters two and four. In summary, the failure to meet conflict resolution needs results from three different levels of narrowness in MNR's approach:

¹ It is important to recognize this, not only to be fair and realistic, but also to underline needs for special care in face of our prevailing ignorance.

- Despite an exemption order requiring production of "a class environmental assessment for forest management,"¹ MNR focused on timber management. The Ministry's assessment document outlines an approach to timber management in which consideration of the multiple demands on the crown forests to serve non-timber as well as timber interests is either left outside the scope of the assessment and the class process (in the case of provincial and regional objectives) or included as a marginal item (in "areas of concern" at the unit planning level, or indirectly in damage mitigation directives set out in timber management manuals and guidelines).
- Approaches to timber management that would provide for more extensive and more effective consideration of non-timber values, were not addressed by MNR despite the requirement to consider the reasonable "alternatives to" the undertaking and "alternatives methods of carrying out the undertaking."² Such alternative approaches (including, for example, integrated review of competing forest objectives, provisions for consideration of cumulative effects, multi-purpose planning for all areas rather than just for special "areas of concern", planning by all stakeholders rather than just by the timber companies and/or MNR) were not presented, even though these would appear to be considerably more realistic alternatives to the timber planning undertaking than the alternatives that MNR presented in the class assessment document (harvest without renewal, wood product recycling, and no harvest).
- The limited provisions for integrated management in "areas of concern" appear to be biased heavily in favour of timber interests and to offer insufficient assurance of adequate steps to protect non-timber values. Several factors contribute to this:
 - The concentration of multi-value considerations in "areas of concern" limits attention to protection of non-timber interests elsewhere. Outside the "areas of concern" non-timber values are assured of little consideration beyond what results from industry

¹ Exemption Order MNR-11/9, s.8.

² *Environmental Assessment Act*, s. 5 (3).

efforts to comply with the "guidelines" set out in a series of manuals for timber management.¹

- Detailed criteria and clear responsibilities for identifying "areas of concern" are not provided.
- Development of management plans is left largely to the timber industry, giving the industry an advantaged position in protecting its interests.
- The burden of identifying and pursuing needs for protecting non-timber values is placed largely on special interest groups or the general public.
- The "areas of concern" approach, focusing on site-specific considerations, does not provide for recognition or evaluation of the cumulative effects of timber management activities.
- Greater protection of non-timber values is not assured, even within identified "areas of concern". Priority given to timber purposes means that in some categories of already identified "areas of concern" current restrictions on timber harvesting will be reduced. As a result, the overall net effect of the "areas of concern" approach may well be to increase quantities of timber harvested from recognised sensitive areas.

The failure of MNR's current approach to ensure sustainability, even for timber purposes alone, also results from three main deficiencies:

- Timber management planning under the class environmental assessment will proceed with an improving but still inadequate inventory of the existing stock of growing trees and the biological capability of the land to replace these trees after they are harvested.
- The planning also continues to rely on a forest (timber) production policy based on provincially aggregated data derived from outdated

¹ The manuals are focused on ways of reducing or mitigating damages for timber management operations on specific non-timber interests. They include *Timber Management Guidelines for the Provision of Moose Habitat* (Toronto: MNR Wildlife Branch, February 1988) and *Timber Management Guidelines for the Protection of Fish Habitat* (Toronto: MNR Fisheries Branch, April 1988).

yield tables rather than from knowledge of the actual biological capability of the land.

- The prevailing means of calculating acceptable annual depletion rests heavily on several tenuous and largely unproved assumptions, including the beliefs
 - that all areas depleted by fires, logging or pests will be regenerated with desirable species of the right quality and quantity, in the right locations and maturing at the right time;
 - that there will remain in place a political commitment to allocate funding for artificial regeneration (planting or seeding) and stand tending (thinning, spacing, weeding) at or beyond the levels seen in the past five years;
 - that any productive forest lands that have been previously abandoned and are not currently stocked with commercially desirable tree species will be brought back into production; and
 - that current logging methods will be adapted to reduce site degradation and encourage more natural regeneration.

Each of these assumptions tends to be optimistic. If the optimism of any one of them is unrealistic - if the expected regeneration fails to produce the volumes anticipated or will only do so with inputs of fertiliser and additional stand maintenance, costing more money than is available - then the annual depletion calculations will lead to over-cutting the resource and eventually to a shortage of wood fibre.

What was and is needed

Identifying the major inadequacies of MNR's proposed approach to assessing forest management is not difficult. The bigger challenge is to identify what needs to be accomplished and to determine what should be done now. While a good portion of the Ministry's problem may be explained as unwillingness to alter established ways of doing things, and disaffection with environmental assessment requirements that reduce the Ministry's autonomy, MNR had no

conveniently-available, well-established model to follow and seems not to have been given any clear and authoritative direction on how to proceed in the absence of such a model.

As we have seen, Ontario's two main conventional approaches to environmental assessment - detailed assessment for individual undertakings and class assessment for small-scale recurring projects - are not well designed to meet the extraordinary demands of the case.¹ Forest management poses problems for assessment because it involves concerns about cumulative as well as site-specific effects and it involves land use conflict and sustainability issues that raise questions about underlying policy positions as well as planning and management practices in particular areas. Individual assessments, even those dealing with single, very large undertakings, are seldom able to address cumulative effects and policy matters directly and authoritatively. In the forest management case, where reliance on the individual assessment approach would mean multitudes of individual assessments of particular forest management activities (access roads, harvesting prescriptions, pesticide spray programmes, etc.) or plans (for each forest management unit), there is little likelihood that cumulative effects and overall policy issues would receive much attention. Similarly, conventional class assessment in Ontario, which has been applied to environmentally modest undertakings, has centred on setting out streamlined planning processes for these undertakings; it has not been used to consider cumulative effects or policy matters.

What was, and still is, needed in this case is a process that would bring the benefits of environmental assessment to forest management both at the overall level of cumulative effects and policy options and at the more specific levels of planning and practice in the Ministry's individual administrative districts and in the forest management units. This would seem to require an environmental assessment process, or set of carefully interrelated processes, addressing generic cumulative effects and policy issues at the provincial level (on the basis of reliable, on-the-ground analyses); land use conflicts,

¹ See the final section of chapter one, above.

opportunities and planning options at the regional/district level; and planning/management issues at the individual forest management unit level.

These requirements cannot be met without innovations and adjustments to the existing approaches to environmental assessment in Ontario. But much of what is needed could be accomplished, without dramatic departure from existing approaches, through a somewhat unconventional use of the class assessment process.

An unconventional class assessment process for the forest management case

Class assessments in Ontario have typically included two main elements: a generic discussion covering the standard information requirements for individual assessments (purpose, rationale, alternatives, etc.), and a description of a streamlined process to be used in the planning and approval of individual projects within the class. Largely because the kinds of undertakings addressed by class assessments have been relatively minor in scale and environmental significance, the emphasis has been on the second element - providing for a streamlined decision making process. But certainly the generic discussion element could be given more importance. Indeed, in cases characterized by concerns about cumulative effects and overall policy issues, emphasis on the generic level (or more appropriately, the level of regional and provincial scale effects and policy matters) would seem necessary if the assessment is to be effective and credible.

In the forest management case, this somewhat unconventional approach to class assessment would mean a policy/class document that would present both

- an overall assessment of forest management, examining forest purposes and problems, identifying policy and management options, evaluating them in light of their biophysical, social, economic and

cultural implications, and justifying the selection of a preferred policy "undertaking"; and

- a process for integrating environmental assessment into forest (not timber) management planning and practices at the forest management unit level, including streamlined "class-type" procedures for uncontroversial and environmentally moderate plans and activities, with conditions and bump-up provisions, plus automatic bump up of certain kinds of especially difficult, controversial, environmentally significant undertakings.¹

The policy component of this approach would be devoted to development of a package of policies and management prescriptions for integrated forest management, addressing both the land use conflict and sustainability issues. It would involve reviewing the records and projections of demands on the forest, studying the conflicts and compatibilities, and reassessing specific objectives for sustaining and exploiting the forest (e.g. the objectives set out in the forest production policy) in light of the various other demands and the actual capabilities of the crown forests.

All this would have to be built on a base of unit, district and regional information and expertise. It would entail re-examining the adequacy of existing inventory, impact and regeneration information and reviewing the state of knowledge about biological diversity, ecological systems and environmental quality in the forests, about the immediate and cumulative effects of forest activities, and about the implications of global-scale changes in precipitation acidity, atmospheric chemistry and climate. It would identify areas of ignorance and outline the implications for responsible planning as well as the needs for further research. And it would use the results in re-evaluating the goals and assumptions used to guide management planning

¹ Although the idea of a "class" of undertakings is mentioned, no class assessment process is outlined in the *Environmental Assessment Act*. The content and form of class assessments have been defined by administrative experimentation and convenience. The approach suggested here would follow the same path of innovation already established in the introduction of class assessments.

(e.g. the assumptions underlying calculation of the long term sustainable yield and appropriate annual depletion rates).

The ground that would be covered in the policy part of a policy/class assessment would be in many ways similar to that covered by Gordon Baskerville in his 1986 audit of MNR management practices. The scope would be broader, especially in examining the actual condition of the forests and in addressing non-timber values and purposes. The policy review goal would be somewhat more ambitious, and the public review and approval element would enhance the political authority of the exercise. But policy assessment approached in this manner through a form of class assessment would perform an auditing function - ensuring rigorous outside scrutiny of performance in a critical area of public policy. Moreover, because class assessments are generally approved only for specified periods (e.g. five years), and reviewed prior to renewal, this approach would provide for a regular, periodic audit that would encourage diligent monitoring of actual results, and appropriate re-evaluation of assumptions, calculations and objectives.

In addition to the setting of overall integrated management objectives and prescriptions, the policy component would have to examine means of applying the results and ensuring the same attention to integrated, environmentally sensitive planning at the regional and district levels as well as the forest management unit level. While the class assessment component of the approach proposed here can deal with the unit level problem, this is probably not enough.

Because of the great difference in scale between policy making at the provincial level and planning in the forest management unit, integrative work at an intermediate level is also necessary. Over the past decade or so, MNR has addressed this need through the Strategic Land Use Planning Process, which involved preparation of land use plans (eventually downgraded to guidelines) for each administrative district. The SLUP exercise was, as we have seen, problematic.¹ However, the basic idea of

¹ See chapter three.

district level planning to address land use conflict issues seems to be sound and, as the initial SLUP results become more dated, it will become increasingly useful to revisit district level planning. A new initiative for updating and strengthening the district land use guidelines would be more credible and probably more useful if it were designed to incorporate the qualities of proper environmental assessment, and if it were carefully integrated into the policy/class environmental assessment process for forest management. There are two main options here: SLUP could be redesigned and implemented as an environmental assessment type process or the resulting district plans could be subjected to conventional individual assessment under the *Environmental Assessment Act*. These options and means of implementing them could be addressed in the policy component of the policy/class assessment.

The class assessment process component of this approach would address how integrated forest management planning should be done at the management unit level. Like more standard class assessments, it would centre on a set of procedures designed to ensure environmentally sensitive and publicly open planning without imposing the full weight of the individual environmental assessment process on typical management unit planning efforts. In light of the environmental significance and frequently controversial character of forest management planning, even at the unit level, the streamlined, class version of the process is reasonable only under certain conditions:

- The policy review component would have to be completed to provide an overall planning context with greater prospects for sustainability and fewer land use conflicts.
- The assessment document would have to include schedules defining undertakings - plans or portions of plans - that are nominally within the class but warrant full individual assessment (e.g. plans for areas with major, unresolved resource value/use conflicts; proposed uses of new methods not evaluated in the policy/class assessment; major

incursions into areas previously without road access; major new pesticide use programmes, etc.);

- The document would also have to include workable provisions for bump up of plans or activities proposed in plans that are found, in the course of integrated management planning under the class assessment process, to be worthy of full individual assessment. Such provisions would involve specific criteria and open procedures for use in the evaluation of bump-up requests, as well as agreeable and practical means of producing interim management plans avoiding the matters under dispute.

This policy/class assessment would have to be designed to ensure that the two parts were effectively linked. The policy level deliberations would have to be based on reliable information on actual forest capabilities, regeneration success rates, demands and concerns; and the planning of local activities would have to respect the regional and provincial policy prescriptions designed to avoid negative cumulative effects, ensure sustainability and reduce land use conflicts. Together these would have to be iterative planning processes, with continuous monitoring of applications and results, regular feedback, and scheduled re-examinations and revisions of positions and practices in light of improved information.

If we could turn the clock back to 1976, to the beginning of deliberations on how to apply environmental assessment requirements to forest management activities, this is the general framework we would recommend - a policy/class assessment to address the overall principles, purposes and objectives and the process for integrated forest (not just timber) management planning, including a district and regional land use planning process incorporating environmental assessment, and a class assessment process with effective bump-up procedures at the management unit level.

In addition we would advocate steps to ensure that the necessary data collection work was underway to provide better information for prediction of impacts and design of mitigation measures, for re-evaluation of objectives

and anticipation of conflicts, and for determining realistic prospects for sustainability under various conditions.

The difficulty, of course, is that this is not 1976. The Ministry of Natural Resources has followed a different path and the current decision making necessarily centres around how to respond to MNR's proposals now before the Environmental Assessment Board.

What to do now: response options

The Board has three main options. It can accept the *The Class Environmental Assessment for Timber Management on Crown Lands in Ontario* and approve the undertaking (timber management planning carried out in the manner described by MNR in the assessment document and in the hearings). It can approve this approach subject to various terms and conditions. Or it can reject MNR's proposals, either flatly or with advice on what would be needed for acceptable application of environmental assessment requirements to forest management. Each of these options involves further choices. The Board is faced with considering the strengths and weaknesses of all of them and selecting the one most in keeping with the purposes of the *Environmental Assessment Act* - to serve the "betterment of the people of ... Ontario by providing for the protection, conservation and wise management ... of the environment."¹

Option 1: Accept the timber management class assessment approach as proposed

The timber management planning approach to forest management, set out in the current class assessment document as amended and expanded upon in submissions during the hearings, has the practical advantage of being largely in operation. The document and submissions reflect MNR's efforts to meet environmental assessment requirements, but the approach presented is more

¹ *Environmental Assessment Act*, s.2.

a description of MNR's current procedures than a proposal to be adopted in the future, if it is approved. This is a relevant consideration since timber management activities, including planning on crown lands are ongoing.

The chief problems with this option are those discussed above - the current approach does not meet the central needs for facilitating conflict resolution and ensuring sustainability. Simple acceptance and approval would not establish this inadequate approach permanently. Class assessment approvals are generally time-limited and subject to provisions for review before renewal. But without specific conditions requiring steps toward preparation of an improved approach there is little likelihood that designs for better forest management will be ready for evaluation and adoption when the approval period for the current approach ends.

Also, simple approval will leave most participants uncertain about what commitments have been made and to what extent they are binding. Because environmental assessments are apparently now considered to include both the submitted environmental assessment document and the submissions made during the hearings, the approved assessment could consist of a vast pile of material in documents and transcripts, in addition to the original assessment document. In this case, an approval decision that was not accompanied by a condition requiring proper consolidation of the relevant material would leave timber management planners or other interested parties without a reasonably clear and accessible reference source that set out clearly just what had been approved and how timber management planning was to be implemented in compliance with the approval.

Option 2: Accept the timber management class assessment approach conditionally

Most Board decisions are conditional approvals. This is clearly appropriate when the Board finds an undertaking (or a proposed approach to a class of undertakings) generally satisfactory but identifies needs for improvement to some aspects through mitigation requirements, clarification of obligations,

monitoring provisions and the like. In the forest management case, there are plenty of openings for specific improvements of this sort, especially through conditions that would improve prospects for addressing conflicting demands and ensuring sustainability. If the Board concludes that the MNR's proposed approach provides at least an acceptable framework there is little doubt that an approval subject to such conditions would be in order .

But the conditional approval option may also be attractive even if the Board agrees that the timber management approach is fundamentally flawed and that a different approach is needed to establish an integrated approach to forest management. Timber management planning and operations will continue, whether or not the current approach is approved. Consequently, the immediate practical question is how these activities will continue after the hearings. If the Board simply rejects the class assessment, timber activities would presumably continue under the terms of the current exemption order or a somewhat revised replacement. Facing this prospect, the Board might reasonably conclude that the public interest would be better served by a time-limited, conditional approval that established an improved regime for timber management planning for an interim period and set out directions for development of a properly integrated forest management assessment.

There are, therefore, two quite different kinds of conditional approvals worth considering: conditional approvals that accept the proposed framework and aim to improve specific aspects of it, and conditional approvals that accept this improved version of the current approach only as an interim measure while a proper response is being prepared.

Option 2a: Accept with conditions to improve the current approach

Within the current framework as described in the timber management class assessment, a variety of steps could be taken to encourage a more balanced forest (vs timber) management approach ensuring careful attention to non-timber values/interests, and to provide for clearer objectives and

commitments allowing for more effective monitoring of efforts to meet sustainability goals. Appropriate conditions would include requirements for

- production of a single, clear environmental assessment document (prepared by MNR within a specified period, subject to Board approval) that would consolidate in one place the class environmental assessment document, the subsequently submitted guidelines and manuals, and other relevant commitments, clarifications and conditions judged by the Board to be part of the approved environmental assessment;
- clarification of MNR's obligation or discretion in carrying out the specific environmental protection and forest regeneration measures outlined in the guidelines and manuals, etc.;
- preparation of environmental study reports for each forest management plan, including quantified management objectives and impact predictions, description of monitoring plans, justification of proposed activities in light of the sustainability requirement, etc.;
- public reports of monitoring studies covering attainment of objectives (e.g. for regeneration), comparison of predicted and actual impacts, etc., for each management unit, and aggregated for each region;
- strengthened/clarified procedures and criteria for identifying "areas of concern" and for planning and managing activities in these areas;¹
- specification and clarification of "bump-up" criteria² and provisions for design of acceptable interim management plans for affected units; and

¹ The condition(s) here could either set out improved procedures and criteria, or require their development within a certain period, through a specified process (e.g. cooperatively by MNR and MOE, with subsequent review by parties to the hearings and approval by the two ministers).

² These would include, for example, plans for areas with major, unresolved resource value/use conflicts; proposals to harvest on lands where successful regeneration of desired species is not likely; proposed uses of controversial new methods; major incursions into areas previously without road access; and plans for major new pesticide use programmes. If the "areas of concern" approach persists, appropriate bump-up criteria would include identification of areas of concern of certain scale and/or significance rating.

- provision for automatic bump-up of specific kinds of plans or activities that warrant full individual assessment.

In addition to these conditions, the Board might also impose requirements aimed at preparing for possible revision of the approved process. Class assessments are conventionally approved only for a specified period and the timber management class assessment would likely be subject to review and renewal requirements after five years or so. Choice of the simple "accept with conditions" option implies acceptance of MNR's basic framework. But even so, given the controversial nature of MNR's current approach, the Board might emphasize monitoring and review conditions that would ensure more effective use of experience to identify the strengths and weaknesses of the approved process and to guide later decision making on the need for revisions or a new approach. Such conditions could be limited to the kind of monitoring provisions suggested above or could extend to detailed requirements for studies and reports on the successes and failures of sustainability and conflict resolution efforts, on overall predictive accuracy and on cumulative effects, as well as requirements setting out the agenda, timetable, and process for the evaluation and review.

Option 2b: Accept conditionally as interim approach only and require development of a more satisfactory environmental assessment of forest management

Acceptance of the current approach means acceptance of two central propositions: that the timber management class assessment represents a proper means of meeting requirements for environmental assessment of forest management activities; and that decision making following this class assessment will respond effectively to the main challenges of forest management - resolving land use conflicts and ensuring sustainability. We have argued in this report that neither proposition is reasonable. If the Board reaches a similar conclusion, and agrees that these deficiencies can only be reduced through approval conditions, its preferred option may be to grant a conditional approval that also requires use of the interim approval period to develop a more satisfactory approach to environmental assessment of forest management.

Earlier in this chapter we outlined an alternative approach that, in our view, would be more appropriate and more effective. This alternative, using a policy/class assessment of provincial, district and unit level forest management planning, is based on the current class version of the environmental assessment process. It involves some innovation but would not require a wholesale revision of either environmental assessment or forest management. Indeed, it could be developed in an incremental way beginning with conditions imposed on the current class environmental assessment and culminating with a well-prepared new approach ready to replace the current process when the interim approval period ends.

It would be unreasonable to expect MNR to take the initiative and adopt such an approach voluntarily. Throughout the decade of work that led to submission of the current class assessment document, the Ministry consistently resisted pressure to address forest management comprehensively. It would also be unreasonable to expect that changes to establish this more comprehensive approach could be made quickly through review and revisions at the end of an interim approval period. If the alternative approach is to be developed practically and effectively, the Ministry will have to be directed to prepare a new environmental assessment, following a specified outline and timetable so that the new approach will be designed, reviewed, approved and ready for implementation when the interim approval expires.

The interim approval option has two main elements. The first is the set of conditions for immediate improvements outlined above. The second is a further set of conditions requiring and directing preparation of a new environmental assessment within specified time period.¹

¹ There may be some question about the authority of the Environmental Assessment Board to impose such requirements and directions as conditions of approval. Some authority of this kind is recognizable. For example, time-limited application, and review and renewal requirements, are established conditions of class assessment approvals. And while proponents generally retain responsibility for defining undertakings, the terms of the current exemption order, which required MNR to submit a class assessment covering "forest management," would seem to provide a firm basis for Board insistence that a forest

This second set of conditions, which would establish the principles and framework to be used in designing the new environmental assessment, would begin with a reiteration of the original requirement to address *forest* management. Accordingly, directions for the assessment work would specify that the subject of the undertaking is (integrated) forest management in Ontario, that this subject embraces management for the various purposes and uses of the crown forests and is not limited to timber management, and that it covers forest management planning and activities at the provincial, regional and district levels as well as at the management unit level.

If the policy/class assessment model for this new environmental assessment is adopted, the requirements and directions would specify work on two interrelated components: an overall or policy assessment component that would cover provincial level management issues and options, and a class assessment component that would address issues at the management unit level and outline class procedures for "integrated forest management" planning in each unit.

The policy level component would be required to

- address integrated forest management policy issues, identify and evaluate alternative policy options and generic ways of using and protecting forest values and resources;
- consolidate a base of unit/district/regional information and expertise on all aspects of forest capability (including more comprehensive inventories of all aspects of the forest, including flora and fauna, as well as timber stocks, and broader evaluations of existing environmental quality), actual results of regeneration efforts and

management assessment be prepared. Together these points suggest that the Board could at least use conditions of approval to outline requirements for review and possibly specify many of the particulars. Insofar as the Board finds its condition-imposing authority insufficient for detailed prescriptions, it can provide the appropriate guidance as recommendations to the Ministers and to Cabinet and urge that the details of the preferred approach be imposed through Cabinet directive.

- impact mitigation measures, and appropriate recognition of remaining uncertainties;
- identify and respond to cumulative impact issues;
 - recognise implications for sectoral policies and management practices and identify appropriate responses (e.g. by incorporating re-evaluation of the timber production policy along with re-evaluation of other forest-related policies in the assessment); and
 - include a process for development and review of updated strategic land use plans at the district and regional levels and incorporating this process into forest management planning.

The class assessment component would, essentially, reshape the current class assessment into a forest (vs. timber) management approach to planning at the management unit level. This would involve

- consideration of the unit level implications of provincial, regional and district issues, policies and guidelines;
- provisions for gathering and analysis of forest inventory and capability data, monitoring of regeneration and mitigation efforts, identification of information gaps and uncertainties, and evaluation of possible future demands and potential conflicts;
- identification of unit level forest management issues and appropriate response options, including alternative management options, silvicultural prescriptions, and means of resolving conflicts;
- description of class procedures for preparation, review and approval of "integrated forest management" plans for each forest management unit;
- preparation of a schedule listing of kinds of individual planning cases/undertakings that merit individual environmental assessment (e.g. cases expected to involve provision of access to previously roadless areas, major new pesticide use programmes, proposals to harvest on lands where successful regeneration of desired species is improbable, use of controversial new methods not addressed in the policy assessment component, or likelihood of significant and unavoidable

resource value/use conflict), and are therefore not to be covered by the class process;

- establishment of clear criteria for identifying when it is appropriate to bump up a plan or part of a plan to deal with problems arising during forest management planning (e.g. where management unit planning leads to controversial proposals and persistent forest value/use conflicts of the kind outlined as reasons for automatic bump up) and practical procedures for applying these criteria; and
- provisions for continuing assessment, evaluation and feedback of results in an iterative manner, within the unit level and between the units and the upper levels, so that planning and practice would improve steadily over time.

Option 3: Reject the timber management class assessment approach

There is certainly a case for declaring the proposed timber management class assessment unacceptable. In our view, the approach set out in the current class assessment document is unsatisfactory in ways that cannot be corrected adequately through approval conditions. Unfortunately, the effects of a decision to reject are likely to be even less satisfactory than the effects of conditional approval.

Rejection of the proposed timber management class assessment will not force an end to timber management planning or timber extraction and regeneration activities. It would simply mean that they will not proceed under the provisions of a (conditionally) approved class assessment. Just what environmental assessment provisions would apply is uncertain.

Most likely a new exemption order would be issued by Cabinet.¹ It could be permanent or temporary and it would probably be conditional on compliance

¹ The other theoretical possibility is removal of the exemption for forest management activities. This would leave MNR subject to the standard individual assessment requirements for each planning and management activity, or at least require the Ministry to seek individual exemptions in each case. Implementation of this option might not be impossible but it would probably mean sharply increased administrative burdens (even if

with some set of requirements. The exemption order conditions could require use of the procedures set out in the rejected class assessment. Some of the possible approval conditions outlined above could be incorporated. Even the suggested directions for preparation of a new forest management assessment could be included. The possibilities are endless. But at best the rejection-exemption order option would amount to using ill-suited tool to achieve a result that could have been provided more directly and efficiently through a conditional interim approval.

Summary, conclusions, recommendations

Over the past decade or more, the Ministry of Natural Resources has taken many creditable steps to improve management of the crown forests in Ontario. Forest management in the province nevertheless remains a subject of great controversy and concern. The bulk of these worries have centred on the apparently increasing number and intensity of conflicts between advocates of competing forest purposes, and on continuing doubts about the sustainability of extractive activities, especially logging, at current and projected rates of harvest and renewal.

In this context, the Ministry spent over ten years preparing a response to its environmental assessment obligations for forest management. The Ministry's efforts and the eventual result, *The Class Environmental Assessment for Timber Management on Crown Lands in Ontario*, have been reviewed in detail in this report. We have found MNR's general approach to environmental assessment and forest management wanting on three main grounds:

First, MNR's approach does not meet the reasonable basic requirements for environmental assessment of forest management activities. This is in part because the Ministry has focused narrowly on timber management planning

exemptions were commonly sought and granted), heighten conflicts (e.g. over the defining of undertakings), and do little to improve forest management planning. Cabinet enthusiasm for this approach is unlikely.

rather than the more comprehensive forest management issues that were the proper subject of assessment. But excessive narrowness also results from the Ministry's decision to follow the conventional class assessment model as if timber management activities were environmentally modest and only locally significant, to consider only planning at the management unit level and thus to neglect the cumulative effects and the regional and provincial level issues (e.g. regarding timber production policy) that are equally important and worthy of attention.

Second, decision making following this class assessment is unlikely to respond effectively to the challenge of resolving land use conflicts. The approach is limited to planning at the management unit level, sees the forest primarily as a resource base for the timber industry, and appears to recognise non-timber interests only grudgingly in arranging for special treatment of "areas of concern" and in guidelines for timber management practices. There is little reason for optimism that the proliferating conflicts over forest land use can be addressed successfully through an approach that treats forest management as the equivalent to timber management with marginal adjustments.

Third, the Ministry's approach to timber management provides little basis for confidence that its implementation will ensure sustainability even within the limited ambit of timber purposes, chiefly because it relies on inadequate information about the existing stock of growing trees and the biological capability of the land to support future growing and harvesting, and on overly optimistic assumptions about the likely success of regeneration and other timber management efforts.

In our view, application of environmental assessment requirements to the challenges of forest management is an important enough job to do properly. We believe that the three main deficiencies would be addressed most successfully through a conditional, interim approval of the currently proposed class environmental assessment (option 2b, above). One set of approval conditions, governing the immediate application of the class

assessment process, would be devoted to encouraging greater respect for non-timber values, improving the quality of planning information and providing fairer and more reliable means of conflict resolution. A second set would direct preparation of a new, policy/class assessment of integrated forest management, covering forest management planning and activities at the provincial, regional and district, and management unit levels.

This policy/class assessment approach would provide a vehicle for careful consideration of the broadly environmental aspects of forest management. It would establish a well-integrated means of strengthening forest management information and planning, in part by ensuring regular opportunities for public scrutiny and comment on forest management plans and performance at all levels. If implemented in an incremental fashion as recommended here, beginning with a set of immediate improvements to the current system and a schedule for developing a more complete response, the policy/class assessment approach should also be practically feasible.

An initiative by the Board to establish a policy/class assessment option would have repercussions beyond the immediate case of forest management. Many other kinds of local activities raise concerns about cumulative effects and reflect regional, provincial and even national level policy issues. At least some of these could be examined profitably through a policy/class assessment process like the one outlined here.¹ More generally, the use of an environmental assessment process to address issues related to provincial objectives, purposes and guidelines for forest management would represent a valuable first step toward regular and open assessment of the environmental implications of government policies. Proposals for environmental assessment of policies have recently begun to attract serious attention in Canada and elsewhere as means of encouraging the long overdue integration of environmental and economic considerations in government decision

¹ One example is agricultural land drainage in Ontario. See Robert B. Gibson and Graham Whitelaw, "Environmental assessment and agricultural drainage," a paper presented at the Federation of Ontario Naturalists and Ryerson Polytechnical Institute conference, *Ontario's Wetlands: inertia or momentum?* Toronto, 21-22 October 1988.

making.¹ The forest management case gives the Board, and Ontario, an opportunity to use a modest adjustment to its existing class assessment process to demonstrate a practical vehicle for policy assessment and thereby to set an important example for other jurisdictions.

All of this, however, depends on success in applying the policy/class assessment approach to forest management and there is no point in pretending it will be easy. In the preceding sections we have set out the principles lying behind the recommendation of a conditional, interim approval leading to policy/class assessment approach. As well, we have identified some of the major issues to be addressed in approval conditions. But this amounts to no more than an outline of what is needed. While the conclusions presented here are the product of the only comprehensive analysis of MNR's class assessment efforts completed so far, we are not in a position to offer detailed recommendations on approval conditions or on the substance of an ideal policy/class assessment for forest management. It will be another year or more before all the interested parties have made the last of their presentations to the Environmental Assessment Board on the nature, strengths and weaknesses of the current approach.

Informed but also burdened by all these submissions, the Board will not have an easy job determining the priority needs for immediate action and specific requirements to be set out in detailed conditions. Indeed the Board may find some difficulty in adopting the framework recommended here. The forest management case is unusual, and although the policy/class assessment approach appears to be the most appropriate and workable solution, the Board may have to test the limits of its powers in order to impose this approach.

¹ See, for example, Canadian Environmental Advisory Committee (CEAC), *Preparing for the 1990s: Environmental Assessment, an Integral Part of Decision Making* (Ottawa/Hull: CEAC, February 1988); Environmental Assessment Program Improvement Project (EAPIP), "An Introduction to the Project" (Toronto: Ontario Ministry of the Environment, April 1988); and Rawson Academy of Aquatic Science, *The Environmental Impacts of Government Policies*, a report prepared for the Canadian Environmental Assessment Research Council (Ottawa/Hull: Rawson, August 1988).

The difficulty of the Board's task is, however, matched by the need for a strong response. We are convinced that unless a broader, more open and more rigorous approach to forest management is introduced in Ontario, concerns about sustainability and conflicts over competing forest purposes will continue to grow. This will increase the dilemmas and narrow the options of all who are involved in managing and protecting the crown forests. Stated simply, the choice is between a demanding but hopeful initiative now and tougher decisions under less agreeable circumstances later.

Appendix

The Exemption Orders

The Environmental Assessment Act, 1975

MNR-11

THE ENVIRONMENTAL ASSESSMENT ACT, 1975

Exemption Section 30

Having received a request from the Minister of Natural Resources that an undertaking namely:

The management by the Ministry of Natural Resources of Crown land presently included within forest management units, which is currently exempted until July 1, 1978,

be exempted from the application of the Act for an additional period of eighteen months pursuant to Section 30; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the person(s) and property indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference with the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

I am of the opinion that it is in the public interest to order and do order that the undertaking is exempt from the application of the Act for the following reasons:

1. The Ministry of Natural Resources requires a further period of time prior to any application of environmental assessment procedures to the undertaking in order to complete revisions to its overall forest policy direction. The revisions include:

—a review of all aspects of forest regeneration and development of definitive policy guidelines on the size of clear-cuts,

—the completion of the study on the privatization of forest management in Ontario;

2. The Ministry requires additional time to establish refined benefit-cost figures resulting from the application of possible guidelines derived from an environmental assessment of the undertaking;

3. The undertaking is an ongoing activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. The application of the Act before December 31, 1979 in the absence of an approval under the Act would result in the halting of forest management in Ontario. Therefore the interference which would be caused would be undue;

This exemption is subject to the following terms and conditions:

1. This exemption expires on December 31, 1979;

2. A copy of any plan with respect to part of this undertaking shall, before the implementation of the plan commences or within 30 days of this order being issued, be made available to the public at a local office of the Ministry of Natural Resources and a copy shall also be sent to the Environmental Approvals Branch of the Ministry of the Environment to be kept with the records of environmental assessments and made available to the public in the same way as such records;

3. Where the carrying out of the undertaking requires that some activity, for which an environmental assessment has been done and an approval to proceed received, be conducted, that activity shall be carried out in accordance with the environmental assessment and approval to proceed.

This order comes into force and has effect on and after the date upon which it is signed.

Dated at Toronto, this 27th day of June, 1977.

GEORGE R. MCCAGUE
Minister of the Environment.

Approved by
O.C. No. 1748/78.

Exemption Section 30

Having received a request from the Minister of Natural Resources that an undertaking, namely:

The management by the Ministry of Natural Resources of Crown land presently included within forest management units, which is currently exempted until December 31, 1979,

be exempted from the application of the Act for an additional period of one year pursuant to Section 30; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons and property indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage or interference with the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management of the environment which would result from the undertaking being subject to the application of the Act;

I am of the opinion that it is in the public interest to order and do order that the undertaking is exempt from the application of the Act for the following reasons:

1. The Ministry of Natural Resources requires a further period of time to any application of environmental assessment procedures to the undertaking in order to complete revisions to its overall forest policy direction. The revisions include:
 - a review of all aspects of forest regeneration and development of definitive policy guidelines on the size of clear-cuts,
 - the completion of the study on the privatization of forest management in Ontario;
2. The Ministry requires additional time to establish refined benefit-cost figures resulting from the application of possible guidelines derived from an environmental assessment of the undertaking;
3. The undertaking is an ongoing activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. The application of the Act before December 31, 1980 in the absence of an approval under the Act would result in the halting of forest management in Ontario. Therefore, the interference which would be caused would be undue;

This exemption is subject to the following terms and conditions:

1. This exemption expires on December 31, 1980;
2. A copy of any plan with respect to part of this undertaking shall, before the implementation of the plan commences or within 30 days of this order being issued, be made available to the public at a local office of the Ministry of Natural Resources and a copy shall also be sent to the Environmental Approvals Branch of the Ministry of the Environment to be kept with the records of environmental assessments and made available to the public in the same way as such records;
3. Where the carrying out of the undertaking requires that some activity, for which an environmental assessment has been done and an approval to proceed received, be conducted, that activity shall be carried out in

accordance with the environmental assessment and approval to proceed.

This order comes into force and has effect on and after the date upon which it is approved by the Lieutenant Governor in Council.

HARRY PARROTT, D.D.S.,
Minister of the Environment.

Approved by:
O.C. No. 3350/79

Dated at Toronto, this 19th day of December, 1979.

(4246) 7

ORDER MADE UNDER
THE ENVIRONMENTAL ASSESSMENT
ACT, 1975

EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/3

Having received a request from the Minister of Natural Resources that an undertaking, namely:

The management by the Ministry of Natural Resources of Crown land presently included within forest management units,

be exempt from the application of the Act for an additional period pursuant to Section 30; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources requires additional time to establish and evaluate refined benefit cost figures resulting from the application of possible guidelines derived from an environmental assessment of the undertaking;
- B. The Ministry of Natural Resources has submitted a draft of the class environmental assessment to the Ministry of the Environment and will undertake measures to implement those guidelines of the class environmental assessment for public participation in respect to the approval of Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of herbicides and insecticides for forest management purposes;
- C. The undertaking is an on-going activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR-11/2 published in THE ONTARIO GAZETTE on the 19th day of December, 1979 has expired, the application of the Act before December 31, 1982 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources or its agent shall solicit input and comments from the public and government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as thirty days prior to the proposed plan being submitted for approval for implementation.
2. The first solicitation under Condition 1 does not apply to those plans commenced prior to the effective date of this order.
3. The Ministry of Natural Resources shall develop a procedure to solicit, evaluate and respond to input and comments from the public and government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and Company Management Units. This procedure shall be included as part of the class environmental assessment to be submitted for the Activity of Forest Management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
4. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the draft class environmental assessment for "Access Roads to MNR Facilities" on a trial basis. This procedure shall give emphasis to the identification of alternative road locations, the environmental effects of alternatives considered and an evaluation of the rationale for the selection of road location.
5. The Ministry of Natural Resources shall submit a class environmental assessment of the Forest Management Undertaking for formal review under the Act not later than March 31, 1982.
6. At least thirty days prior to the anticipated spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public and the appropriate Regional Office of the Ministry of the Environment of the project. During this period the Project Description shall be made available for public inspection at the appropriate District Office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the Public Notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as Schedule A.

7. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Approvals Branch, Ministry of the Environment for inclusion in the Public Record. The letter shall describe:

- (a) the area covered by the plan;
- (b) the duration of the plan;
- (c) the date of the public notification;
- (d) the nature of the comments received from the public and the government agencies; and
- (e) the proponent's responses to the comments received.

This shall be submitted when the final solicitation under Condition 1 is commenced.

8. Conditions 1 to 7 of this exemption order shall not apply to those plans of the forest management undertaking which are under review for approval prior to the effective date of this order.

9. The Ministry of Natural Resources shall provide the Director of the Environmental Approvals Branch of the Ministry of the Environment with a list of those plans referred to in Conditions 2 and 8 and those plans scheduled for approval during the period of this order.

10. Where the carrying out of the undertaking requires that some activity for which an environmental assessment has been done and an approval to proceed received be conducted, that activity shall be carried out in accordance with the environmental assessment and approval to proceed.

11. This order expires on the earlier date of December 31, 1982 or the granting of an approval under the Act for the forest management undertaking. O. Reg. 284/81.

HARRY PARROTT
Minister of the Environment

Dated this 2nd day of April, 1981.

Schedule A
ILLUSTRATIVE FORMAT FOR
PUBLIC NOTICE
FOR AERIAL SPRAYING OF
HERBICIDES AND INSECTICIDES

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands in (specified area) will be sprayed with an

(insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

- Responsible MNR Manager
- Address
- Telephone Number

ORDER MADE UNDER
THE ENVIRONMENTAL ASSESSMENT
ACT

EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/4

Having received a request from the Minister of Natural Resources that an undertaking, namely:

The management by the Ministry of Natural Resources of Crown land presently included within forest management units

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference against the betterment of the people of the whole

or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources requires additional time to establish and evaluate refined benefit cost figures resulting from the application of possible guidelines derived from an environmental assessment of the undertaking;
- B. The Ministry of Natural Resources has submitted a draft of the class environmental assessment to the Ministry of the Environment and will undertake measures to implement those guidelines of the class environmental assessment for public participation in respect to the approval of Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of herbicides and insecticides for forest management purposes;
- C. The undertaking is an on-going activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR 11/3 will expire on March 31, 1982, the application of the Act before December 31, 1982 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources, or its agent shall solicit input and comments from the public and government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as thirty days prior to the proposed plan being submitted for approval for implementation.
2. The first solicitation under Condition 1 does not apply to those plans commenced prior to April 2, 1981.
3. The Ministry of Natural Resources shall develop a procedure to solicit, evaluate and respond to input and comments from the public and government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and Company Management Units. This procedure shall be included as part of the class environmental assessment to be submitted for the Activity of Forest Management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
4. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the draft class environmental assessment for "Access Roads to MNR Facilities" on a trial basis. This procedure shall give emphasis to the identification of alternative road locations, the environmental effects of alternatives considered and an evaluation of the rationale for the selection of road location.
5. At least 30 days prior to the anticipated spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public and the appropriate Regional Office of the Ministry of the Environment of the project. During this period the Project Description shall be made available for public inspection at the appropriate District Office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the Public Notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as Schedule "A".

6. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Approvals Branch, Ministry of the Environment for inclusion in the Public Record. The letter shall describe

- (a) the area covered by the plan;
- (b) the duration of the plan;
- (c) the date of the public notification;
- (d) the nature of the comments received from the public and the government agencies; and
- (e) the proponent's responses to the comments received.

This shall be submitted when the final notification under Condition 1 is commenced.

7. Conditions 1 to 6 of this exemption order shall not apply to those plans of the forest management undertaking which are under review for approval prior to April 3, 1982.

8. The Ministry of Natural Resources shall provide the Director of the Environmental

Approvals Branch of the Ministry of the Environment with a list of those plans scheduled for approval during the period of this order.

9. Where the carrying out of the undertaking requires that some activity for which an environmental assessment has been done and an approval to proceed received be conducted, that activity shall be carried out in accordance with the environmental assessment and approval to proceed.

10. This order expires on the earlier date of December 31, 1982 or the granting of an approval under the Act for the forest management undertaking. O. Reg. 261/82.

K. C. NORTON
Minister of the Environment

Dated this 1st day of April, 1982.

Schedule A

ILLUSTRATIVE FORMAT FOR PUBLIC NOTICE FOR AERIAL SPRAYING OF HERBICIDES AND INSECTICIDES

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands in (specified area) will be sprayed with (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, regional or Main) Office of the Ministry of Natural Resources.

- Responsible MNR Manager
- Address
- Telephone Number

O. Reg. 261/82, Sched. A.

ORDER MADE UNDER THE
ENVIRONMENTAL ASSESSMENT ACT

EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/5

Having received a request from the Minister of Natural Resources that an undertaking, namely:

Forest management by the Ministry of Natural Resources on Crown land presently included within forest management units and associated tree nurseries

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources requires additional time to develop an approach to the application of the Act to the undertaking.
- B. The Ministry of Natural Resources will undertake measures to implement public participation with respect to an approval of Forest Management Agreements, Forest Management Plans and Operating Plans, including road plans prescribed by these, and with respect to aerial spraying of pesticides for forest management purposes.
- C. The undertaking is an on-going activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR 11/4 will expire on December 31, 1982, the application of the Act before June 30, 1983 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources or its agent shall solicit input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as thirty days prior to the proposed plan being submitted for approval for implementation.
2. The Ministry of Natural Resources shall develop a procedure to solicit, evaluate and respond to input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and company management units. This procedure shall be included as part of the Class Environmental Assessment to be submitted for the Activity of Forest Management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
3. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the approved Class Environmental Assessment for "Access Roads to MNR Facilities". This procedure shall give emphasis to the identification of alternative road locations and evaluation of the environmental effects of alternatives considered and shall provide a rationale for the alternative road location which is selected.
4. At least 30 days prior to the anticipated aerial spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public, the appropriate Regional Office of the Ministry of the Environment and the Environmental Assessment Branch of the project. During this period a project description shall be made available for public inspection at the appropriate district office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the public notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as follows:

**Illustrative Format for Public Notice
for Aerial Spraying of Herbicides and
Insecticides**

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands (specified area) will be sprayed with an (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

—Responsible MNR Manager

—Address

—Telephone Number

5. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Assessment Branch for inclusion in the Public Record. The letter shall describe:

- (a) the area covered by the plan;
- (b) the duration of the plan;
- (c) the date of the public notification;
- (d) the nature of the comments received from the public and the government agencies; and
- (e) the proponent's responses to the comments received.

This shall be submitted when the final solicitation under Condition 1 is commenced.

6. The Ministry of Natural Resources shall provide the Director of the Environmental Assessment Branch with a list of those plans scheduled for approval during the period of this order, by January 31, 1983. The Director shall be notified of any additions to or deletions from the list at the time of such changes.

7. Where the carrying out of the undertaking requires that some activity, for which an Environmental Assessment has been done and an approval to proceed received, be conducted, that activity shall be carried out in accordance with the Environmental Assessment and approval to proceed.

8. This order expires on the earlier date of June 30, 1983 or the granting of an approval under the Act for the forest management undertaking. O. Reg. 13/83.

KEITH C. NORTON
Minister of the Environment

Dated this 22nd day of December, 1982.

ORDER MADE UNDER THE
ENVIRONMENTAL ASSESSMENT ACT

EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/6

Having received a request from the Minister of Natural Resources that an undertaking, namely:

Forest management by the Ministry of Natural Resources on Crown land presently included within forest management units and associated tree nurseries,

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources will undertake measures to implement public participation in respect to the approval of Forest Management Agreements, Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of pesticides for forest management purposes.
- B. The undertaking is an on-going activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR 11/5, which was filed as O. Reg. 13/83, will expire on

June 30, 1983, the application of the Act before December 31, 1983 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.

- C. The Ministry of Natural Resources has completed a draft of the Environmental Assessment for forest management and has requested an additional period of time to allow interested parties to provide input to that Environmental Assessment before a formal submission for approval under the Act is made.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources or its agent shall solicit input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as thirty days prior to the proposed plan being submitted for approval for implementation.
2. The Ministry of Natural Resources shall develop a procedure to solicit, evaluate and respond to input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and company management units. This procedure shall be included as part of the Class Environmental Assessment to be submitted for the activity of forest management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
3. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the approved Class Environmental Assessment for "Access Roads to MNR Facilities". This procedure shall give emphasis to the identification of alternative road locations and evaluation of the environmental effects of alternatives considered and shall provide a rationale for the alternative road location which is selected.
4. At least 30 days prior to the anticipated aerial spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public, the appropriate Regional Office of the Ministry of the Environment and the Environmental Assessment Branch of the project. During this period a project description shall be made available for public inspection at the appropriate district office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the public notice shall be in the form of a paid public notice in one or more of such media. An illustrative form which may be used for a printed notice is attached as follows:

*Illustrative Format for Public Notice
for Aerial Spraying of
Herbicides and Insecticides*

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands (specified area) will be sprayed with an (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

- Responsible MNR Manager
- Address
- Telephone Number

5. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Assessment Branch for inclusion in the Public Record. The letter shall describe:

(a) the name of the Forest Management Unit or Forest Management Agreement Area (FMA) for which the plan is being prepared;

(b) a map of the Forest Management Unit or FMA covered by the Forest Management Plan, or

a map of the area within the Forest Management Unit or FMA covered by the Operating Plan;

(c) the duration of the plan;

(d) the date(s) of public notification;

(e) the nature of the comments received from the public and other government ministries/agencies; and

(f) the proponent's responses to the comments received.

This shall be submitted when the final solicitation under Condition 1 is commenced

6. The Ministry of Natural Resources shall provide the Director of the Environmental Assessment Branch with a list of those plans

scheduled for approval during the period of this order, by August 15, 1983. This list shall also identify plans which are under preparation during the period that this exemption is in force but which are scheduled for approval some time after the expiry date of this order.

7. Where the carrying out of the undertaking requires that some activity for which an Environmental Assessment has been done and an approval to proceed received or an exemption granted, be conducted, that activity is not exempt under this order but shall be carried out in accordance with the Environmental Assessment and approval to proceed, or the conditions of exemption whichever is applicable.

8. This order expires on the earlier date of December 31, 1983 or the granting of an approval under the Act for the forest management undertaking. O. Reg. 417/83.

K. C. NORTON
Minister of the Environment

Dated this 24th day of June, 1983.

ORDER MADE UNDER THE
ENVIRONMENTAL ASSESSMENT ACT
EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/7

Having received a request from the Minister of Natural Resources that an undertaking, namely:

Forest management by the Ministry of Natural Resources on Crown land presently included within forest management units and associated tree nurseries

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

- A. The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage, or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources will undertake measures to implement public participation in respect to the approval of Forest Management Agreements, Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of pesticides for forest management purposes.
- B. The undertaking is an on-going activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR 11/6 which

was filed as O. Reg. 417/83, will expire on December 31, 1983, the application of the Act before June 30, 1984 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.

- C. The Ministry of Natural Resources has completed a draft of the Environmental Assessment for forest management and has begun a process of public consultation to allow interested parties to provide input to that Environmental Assessment before a formal submission for approval under the Act is made.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources shall consult the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as a minimum of thirty days prior to the proposed plan being approved.
2. The Ministry of Natural Resources shall develop a procedure to solicit, evaluate and respond to input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and company management units. This procedure shall be included as part of the Class Environmental Assessment to be submitted for the activity of forest management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
3. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the approved Class Environmental Assessment for "Access Roads to MNR Facilities." This procedure shall give emphasis to the identification of alternative road locations and evaluation of the environmental effects of alternatives considered and shall provide a rationale for the alternative road location which is selected.
4. At least 30 days prior to the anticipated aerial spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public, the appropriate Regional Office of the Ministry of the Environment and the Environmental Assessment Branch of the project. During this period a project description shall be made available for public inspection at the appropriate district office of the Ministry of Natural Resources. Where there is a news-

paper or radio or television station serving the area concerned, the public notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as follows:

Illustrative Format for Public Notice for
Aerial Spraying of Herbicides and
Insecticides

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands (specified area) will be sprayed with an (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

- Responsible MNR Manager
- Address
- Telephone Number

5. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Assessment Branch for inclusion in the Public Record. The letter shall describe:

- (a) the name of the Forest Management Unit or Forest Management Agreement Area (FMA) for which the plan is being prepared;
- (b) a map of the Forest Management Unit or FMA covered by the Forest Management Plan; or
a map of the area within the Forest Management Unit or FMA covered by the Operating Plan;
- (c) the duration of the plan;
- (d) the date(s) of public notification;
- (e) the nature of the comments received from the public and other government ministries/agencies; and
- (f) the proponent's responses to the comments received.

This shall be submitted thirty days prior to approval of the plan.

6. The Ministry of Natural Resources shall provide the Director of the Environmental Assessment Branch with a list of those plans

scheduled for approval during the period of this order, by February 15, 1984. This list shall also identify plans which are under preparation during the period that this exemption is in force but which are scheduled for approval sometime after the expiry date of this order.

- 7. Where the carrying out of the undertaking requires that some activity for which an Environmental Assessment has been done and an approval to proceed received or an exemption granted, be conducted, that activity is not exempt under this order but shall be carried out in accordance with the Environmental Assessment and approval to proceed, or the conditions of exemption whichever is applicable.
- 8. This order expires on the earlier date of June 30, 1984 or the granting of an approval under the Act for the forest management undertaking. O. Reg. 2/84.

ANDY BRANDT
Minister of the Environment

Dated this 16th day of December, 1983.

ORDER MADE UNDER THE
ENVIRONMENTAL ASSESSMENT ACT

EXEMPTION—MINISTRY OF NATURAL
RESOURCES—MNR-11/8

Having received a request from the Minister of Natural Resources that an undertaking, namely:

forest management by the Ministry of Natural Resources on Crown land presently included within forest management units and associated tree nurseries

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

- A. The Crown and the public will be interfered with by the delay in planning and implementing of forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources will undertake measures to implement public participation in respect to the approval of Forest Management Agreements, Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of pesticides for forest management purposes.
- B. The undertaking is an ongoing activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR-11/7 which was filed as O. Reg. 2/84, will expire on June 30, 1984, the application of the Act before December 31, 1984 in the absence of an approval under the Act would result in the halting of forest management on Crown land. Therefore, the interference which would be caused would be undue.
- C. The Ministry of Natural Resources has completed a draft of the Environmental Assessment for forest management and is continuing a process of public consultation to allow interested parties to provide input to that Environmental Assessment before a formal submission for approval under the Act is made.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources shall consult the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans, as well as a minimum of thirty days prior to the proposed plan being approved.
2. The Ministry of Natural Resources shall follow the procedure it has developed to solicit, evaluate and respond to input and comments from the public and Government agencies at an early stage of the preparation of Forest Management Plans and Operating Plans for Crown and company management units. This procedure shall be included as part of the Class Environmental Assessment to be submitted for the activity of forest management on Crown land in Ontario for approval under the Act, and will also be incorporated into the forest management planning process.
3. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary public forest access roads on Crown Management Units in accordance with the approved Class Environmental Assessment for "Access Roads to MNR Facilities". This procedure shall give emphasis to the identification of alternative road locations and evaluation of the environmental effects of alternatives considered and shall provide a rationale for the alternative road location which is selected.
4. At least 30 days prior to the anticipated aerial spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public, the appropriate Regional Office of the Ministry of the Environment and the Environmental Assessment Branch of the project. During this period a project description shall be made available for public inspection at the appropriate district office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the public notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as follows:

Illustrative Format for Public Notice
for Aerial Spraying of
Herbicides and Insecticides

As part of the Ministry of Natural Resources ongoing program to regenerate and protect our forests, selected stands (specified area) will be sprayed with an (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

- Responsible MNR Manager
- Address
- Telephone Number

5. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Director of the Environmental Assessment Branch for inclusion in the Public Record. The letter shall describe:
- (a) the name of the Forest Management Unit or Forest Management Agreement Area (FMA) for which the plan is being prepared;
 - (b) a map of the Forest Management Unit or FMA covered by the Forest Management Plan; or
a map of the area within the Forest Management Unit or FMA covered by the Operating Plan;
 - (c) the duration of the plan;
 - (d) the date(s) of public notification;
 - (e) the nature of the comments received from the public and other government ministries/agencies; and
 - (f) the proponent's responses to the comments received.

This shall be submitted thirty days prior to approval of the plan.

6. The Ministry of Natural Resources shall provide the Director of the Environmental Assessment Branch with a list of those plans scheduled for approval during the period of this order, by August 31, 1984. This list shall also identify plans which are under preparation during the period that this exemption is in force but which are scheduled for approval sometime after the expiry date of this order.
7. Where the carrying out of the undertaking requires that some activity for which an Environmental Assessment has been done and an approval to proceed received or an exemption has been granted, be conducted, that activity is not exempt under this order but shall be carried out in accordance with the Environmental Assessment and approval to proceed, or the conditions of exemption whichever is applicable.
8. This order expires on the earlier of December 31, 1984 and the date of granting of an approval under the Act for the forest management undertaking. O. Reg. 442/84.

ANDY BRANDT
Minister of the Environment

ORDER MADE UNDER THE
ENVIRONMENTAL ASSESSMENT ACT

EXEMPTION—MINISTRY OF
NATURAL RESOURCES—MNR-11/9

Having received a request from the Minister of Natural Resources that an undertaking, namely:

Forest management by the Ministry of Natural Resources on Crown land presently included within forest management units and associated tree nurseries,

be exempt from the application of the Act for an additional period pursuant to section 29; and

Having been advised that if the undertaking is subject to the application of the Act, the following injury, damage or interference with the persons indicated will occur:

- A. The Crown and the public will be damaged by the loss of benefits anticipated to result from the forest management plans which are scheduled to proceed within the period of the exemption.

Having weighed such injury, damage or interference against the betterment of the people of the whole or any part of Ontario by the protection, conservation and wise management in Ontario of the environment which would result from the undertaking being subject to the application of the Act;

The undersigned is of the opinion that it is in the public interest to order and orders that the undertaking is exempt from the application of the Act for the following reasons:

- A. The Ministry of Natural Resources is undertaking measures to implement public participation in respect to the approval of Forest Management Agreements, Forest Management Plans and Operating Plans, including road plans prescribed by these, and in respect to aerial spraying of pesticides for forest management purposes.
- B. The undertaking is an ongoing activity of the Ministry of Natural Resources and is an integral part of the economy of the Province. Since the exemption for this undertaking under Exemption Order MNR-11/8 which was filed as O. Reg. 442/84, will expire on December 31, 1984, the application of the Act before December 31, 1985 in the absence of an approval under the Act would result in the halting of forest management by the Ministry of Natural Resources on Crown land. Therefore, the interference which would be caused would be undue.
- C. The Ministry of Natural Resources has completed a draft of an environmental assessment for forest management and is continuing a process of public consultation to allow interested parties to provide input to that environmental assessment before a formal submission for approval under the Act is made.

This exemption is subject to the following terms and conditions:

1. The Ministry of Natural Resources shall consult the public and Government agencies at an early stage of the preparation of forest management plans and operating plans, as well as a minimum of thirty days prior to the proposed plan being approved by the Ministry of Natural Resources in accordance with the *Crown Timber Act*.
2. Before December 31, 1984, the Ministry of Natural Resources will submit to the Environmental Assessment Branch a description of the procedure of when and how the district offices of the Ministry of Natural Resources will consult with the public and Government agencies in meeting Condition #1. If these procedures change during the period in which the order is in effect, the Ministry of Natural Resources will revise its description and advise the Environmental Assessment Branch.
3. For the period that this exemption order is in force, the Ministry of Natural Resources shall plan primary forest access roads on Crown Management Units including bridges and ancillary facilities associated with these roads in accordance with the approved Class Environmental Assessment for "Access Roads to MNR Facilities". This procedure shall give emphasis to the identification of alternative road locations and evaluation of the environmental effects of alternatives considered and shall provide a rationale for the alternative road location which is selected.
4. At least 30 days prior to the anticipated aerial spraying of herbicides or insecticides for forest management purposes, the Ministry of Natural Resources shall notify the public, the appropriate Regional Office of the Ministry of the Environment and the Environmental Assessment Branch of the project. During this period a project description shall be made available for public inspection at the appropriate district office of the Ministry of Natural Resources. Where there is a newspaper or radio or television station serving the area concerned, the public notice shall be in the form of a paid public notice in one or more of such media. An illustrative format which may be used for a printed notice is attached as follows:

*Illustrative Format for Public Notice for
Aerial Spraying of Herbicides and
Insecticides*

As part of the Ministry of Natural Resources' ongoing program to regenerate and protect our forests, selected stands (specified area) will be sprayed with an (insecticide or herbicide) to control (competing vegetation or name of insect) starting on or about (date).

Further details about this program, including specific locations, are available from the (District, Regional or Main) Office of the Ministry of Natural Resources.

— Responsible MNR Manager

— Address

— Telephone Number

5. The Ministry of Natural Resources shall prepare a letter for each plan prepared pursuant to this exemption and send it to the Environmental Assessment Branch for inclusion in the Public Record. The letter shall describe.

(a) the name of the Forest Management Unit (FMU) or Forest Management Agreement (FMA) for which the plan is being prepared;

(b) a map of the area covered by the plan being prepared for the FMU or FMA;

(c) the duration of the plan;

(d) the date(s) of public notification;

(e) the comments received from the public and other government ministries/agencies; and

(f) the proponent's responses to the comments received.

This shall be submitted not later than thirty days prior to approval of the plan.

6. By February 15, 1985, the Ministry of Natural Resources shall provide the Environmental Assessment Branch with a list of all plans currently under preparation or scheduled to commence preparation during the term of this Order with the scheduled approval dates of each plan specified. Any revisions will be reported quarterly to the Environmental Assessment Branch.
7. Where the carrying out of the undertaking involves some activity for which an environmental assessment has been done and an approval to proceed received or an exemption has been granted, that activity is not exempt under this Order but shall be carried out in accordance with the environmental assessment and approval to proceed, or the conditions of exemption whichever is applicable.
8. If a class environmental assessment for forest management has been submitted by the Minister of Natural Resources before December 31, 1985, this Order shall remain

in effect until a decision on approval is made with respect to the class environmental assessment but if such an environmental assessment is not submitted, this Order shall cease to apply on December 31, 1985. O. Reg. 2/85.

ANDY BRANDT
Minister of the Environment





