

The Environmental Assessment and Planning in Ontario Project

Case Report No.1

**Environmental Planning
and the Niagara Escarpment:
A model to copy or to avoid?**

by
Tom Green

Department of Environment and Resource Studies
University of Waterloo
1993

The Environmental Assessment and Planning in Ontario Project

Problems have arisen at the intersection of environmental assessment and land use planning in Ontario for two main reasons. Established land use planning practices have failed to satisfy growing environmental concerns about individual undertakings and, more importantly, their cumulative effects. At the same time, environmental assessment, which has evolved into an approach to planning that requires greater environmental sensitivity, now both overlaps inefficiently with some land use planning decisions, and is in some ways attractive for broader application in planning decision making.

These two factors have led to two quite different, but perhaps ultimately complementary pressures for reform. The first is to apply environmental assessment requirements more broadly in land use planning decision making. The second is to provide for a more efficient rationalization of processes in the relatively small area where environmental assessment and land use planning requirements already overlap.

The Environmental Assessment and Planning in Ontario Project, funded by the Social Sciences and Humanities Research Council of Canada, aims to develop a better understanding of the existing problems and the needs and options for reform. The work completed thus far includes case studies of major controversies and responses to these controversies. *Environmental Planning and the Niagara Escarpment: A model to copy or to avoid?* is the case report of one of these studies. For other case studies and publications of the project, contact project coordinator and general editor of the case study series, Dr. Robert Gibson, Department of Environment and Resource Studies, University of Waterloo.

The *Environmental Planning and the Niagara Escarpment* case study

The 1985 Niagara Escarpment Plan was Ontario's and Canada's first large-scale environmental land use plan. Unlike other land use plans, its main purpose was to preserve and protect an environmental feature, but at the same time allow compatible development. Competing interests have complained about various aspects of the Plan and its implementation. While some have complained about excessive restriction of development options, others believe the Plan has only slowed environmental decline in the escarpment planning area. The case study reported here was carried out to assess whether or not the Niagara Escarpment Plan offers a possible model for more general application where there is evident need for more attention to environmental considerations in land use planning. The study was completed in 1992 and does not address more recent developments.

The author

This case report was prepared, by Tom Green, formerly the executive director of the Coalition on the Niagara Escarpment. Tom Green now lives in Nitassinan (Labrador) where he is the environmental advisor to the Innu Nation.

Acknowledgements

The author appreciates the assistance of the Niagara Escarpment Commission staff, particularly Cecil Louis and Keith Jordan in gathering the information for this case study to Labrador and providing comments. Responsibility for the case study rests wholly with the author.

Environmental Planning and the Niagara Escarpment: A model to copy or to avoid?

Contents

Introduction	1
The Niagara Escarpment	3
Criteria for Evaluation	3
History of Niagara Escarpment Planning	4
Lessons from the History	8
Key Components of Planning in the Niagara Escarpment Area (1985-1990)	9
<u>Legislation</u>	9
<u>Development Control, Permits and Offences</u>	9
<u>The Niagara Escarpment Plan</u>	9
<u>Local Municipality Official Plans</u>	12
<u>Decision-making Body</u>	12
<u>Hearings</u>	13
<u>Division of Responsibilities</u>	14
Environmental Features and Resources to be Maintained	15
Evaluation of Planning in the Niagara Escarpment Area	16
<u>Objectives</u>	16
<i>Maintenance</i>	16
<i>Continuity</i>	17
<i>Compatibility</i>	18
<u>Decision-making Criteria</u>	19
<u>Process</u>	20
<i>Fairness</i>	21
<i>Democracy and Openness</i>	24
<i>Timeliness</i>	26
<i>Conflict Resolution</i>	27
<i>Priority Setting</i>	27
<u>Implementation of Decisions</u>	28
<u>Information Needs</u>	29
<u>Cost Effectiveness of the Planning Effort</u>	30
<u>Updating</u>	32
<i>Learning from Experience</i>	32
<i>New Information</i>	33
<u>Boundaries</u>	33
<u>Cumulative Effects</u>	35
<u>Durability</u>	37
The Escarpment Package	37
What to Copy, What to Avoid, What to Change	38
Conclusions	40

Environmental Planning and the Niagara Escarpment

Introduction

In the 1950s and 60s a growing number of Ontario residents recognized that the Niagara Escarpment was an environmental jewel worth preserving. But how would preservation be achieved? Existing planning approval mechanisms were recognized as inadequate.¹ Already, the escarpment was suffering from gravel pits and quarries, development of recreational facilities, the creation of new lots, urban expansion and infrastructure build-up. The concerns led to studies, hearings, plans, revisions to plans, and a long and acrimonious political and public debate. Finally, in 1985 the Niagara Escarpment Plan was put into place as Canada's first large-scale environmental land use plan. Unlike other plans, its main purpose was to preserve and protect an environmental feature, but at the same time allow compatible development.

By the late 1980's, it was no longer possible to ignore a much broader need for an environmentally enlightened approach to land use planning in southern Ontario. Protecting the Niagara Escarpment was an important objective, but what of all the other aspects of Ontario's natural heritage? With the economic boom, cities, roads, housing and other development swallowed farmland, wetlands and other natural areas. Faced with such tears in the rural landscape, the public began to broaden its definition of environmental problems to include the loss of natural and rural lands. Citizens concerns about the environmental inadequacy of conventional land use planning practices in other parts of southern Ontario began increasingly to look to the Niagara Escarpment Plan as a model for broader application. At the same time, many of the landowners affected by the Niagara Escarpment Plan saw it as unwarranted provincial interference in local affairs.

Two major shortcomings of the existing land use planning approval process have been its inability to deal with all environmental considerations in a coordinated manner, and the total lack of consideration of cumulative effects. When a planning or development proposal is reviewed by various agencies, each agency involved looks at only a portion of the overall picture. For instance, the local Health Unit may consider the septic system; the Ministry of Natural Resources may evaluate the impact on forest resources; the Ministry of Agriculture and Food might examine the impact on adjacent farming operations. In this kind of piecemeal review, certain issues may never be addressed, or an overall assessment of the proposal may not be completed. For instance, if a proposal has minor negative impacts on a number of resources reviewed by different agencies, the total effect of the proposal is unlikely to be understood: each agency could identify a minor but tolerable impact and allow the project to proceed, although the total impact on all the different resources may be unacceptable.

The incremental impact of development is not addressed by a case-by-case review of development proposals. Traditionally, each proposal is evaluated on its own merits, with little or no consideration given to its potential impact on surrounding land uses and resources, the carrying capacity of the landscape, or development which can be predicted to occur in the future. It is as if each proposed development were on a parcel of land floating

¹ Marion Plaunt, *The decision-making process that led up to the passing of the NEPDA*, unpublished manuscript, November 27, 1978.

in space: as long as the parcel of land is suitable for the development, the development is approved. But because of the combined incremental impacts of developments, the interaction of seemingly harmless individual undertakings may result in unacceptable cumulative effects. Unfortunately these often are noticed too late for practical corrective action.

Planning documents have also lacked environmental vision. While they may describe the type of rural or neighbourhood atmosphere that they aim to obtain, and contain general prescriptions for the economic development of the planning area, official plans rarely include a vision of the developed environment. Such a vision would set out the agricultural, forest, wetland, wildlife, water and groundwater resources of the planning area that should still exist at the end of the planning period. Development which would impact or decrease these environmental resources beyond the objectives set out in the official plan would not be allowed. Provisions for official plan amendments dilute any such environmental vision, as the amendment process is designed to facilitate further growth, and frequent changes to planning documents detract from a long-term planning approach. Therefore, a particular challenge for environmentally enlightened planning is to provide for integrated decision making to ensure consideration of cumulative effects, and to set out and achieve a vision of an environmentally viable and attractive future for the area.

The Niagara Escarpment Plan has been cited as an example of a Canadian land use plan which considers cumulative development.² The NEP also provides for a more coordinated examination of development proposals. It is therefore relevant to carry out a more detailed examination of planning in the escarpment area, to see how well the planning regime has worked to achieve environmental objectives, and to determine whether cumulative effects are truly considered and effectively avoided.

Although the escarpment contains significant natural areas and areas of great beauty, it is similar to other areas that require good environmental planning. Like other environmentally significant parts of Ontario, and other jurisdictions, the Niagara Escarpment area is made up of watersheds, habitats, wetlands, forests, farmland, and flood plains. It doesn't follow administrative boundaries and it requires holistic planning. The lessons from the Niagara Escarpment should therefore be transferable elsewhere.

But what are these lessons? Is the Niagara Escarpment Plan a model that can be applied in other areas across Ontario, by being duplicated to protect selected natural features or ecosystems? Or is it too unwieldy and does it generate too much opposition in its implementation? Alternatively, would it be more appropriate to transfer certain features and concepts contained in the plan into provincial planning legislation and policy, so that all areas of Ontario benefit from greater environmental protection?

This case study examines the plan, its history, strengths and weaknesses, its potential for being applied in other areas, and the lessons it may offer for provincial planning legislation. Much of the information in this case study is based on the personal experience of the author, who was a board member of the Coalition on the Niagara Escarpment (CONE) for three years, executive director for two years, and led a study team commissioned by CONE to monitor the decisions of the Niagara Escarpment Commission (NEC) following the plan's approval.

² E.B. Peterson et al., *Cumulative Effects Assessment in Canada: an Agenda for Action and Research* (Ottawa: Canadian Environmental Assessment Research Council, 1987).

The Niagara Escarpment

The southern Ontario portion of the Niagara Escarpment winds 725 kilometres from Queenston to Tobermory. It is the outer rim of an ancient sea bed, some 400-450 million years old. Hiking its length, one finds clear streams, centuries-old cedars, magnificent cliffs, rolling hills, as well as farmland, hamlets and even cities. One also finds landfill sites, gravel pits and rock quarries, subdivisions, golf courses, and frequent notices on trees or fence posts warning of impending development.

The Niagara Escarpment straddles 37 municipalities, and 8 regions or counties. The Ministry of Natural Resources, Municipal Affairs, Environment, Culture, and the Niagara Escarpment Commission all have responsibilities which affect its preservation. Without a coordinated approach to the preservation of the escarpment, the varying approaches and levels of commitment of the different jurisdictions would almost certainly preclude successful preservation of the escarpment.

The development and implementation of Niagara Escarpment Plan, however, has been a very controversial political initiative. Concerns about it have often been raised in the legislature; a provincial election was almost precipitated by a minister's approval of a conference centre on the escarpment;³ and people at public meetings have been physically threatened for supporting the plan. While there has been a well-recognized need for an overall approach to planning for the escarpment, it is less clear that the chosen mechanism and its implementation have been ideal.

Criteria for Evaluation

In this evaluation of the planning approach used in the Niagara Escarpment area, performance will be assessed in light of criteria which address both the plan's ability to achieve environmental goals, and the suitability, efficiency and fairness of the planning process. For this case study, the following criteria are used:

- Objectives - are the objectives clear and appropriate?
- Decision-making criteria - do the criteria provide the decision-makers with clear criteria, which, if applied, will achieve the plan's objectives?
- Process - is the process fair, democratic and open to the public? is it able to make the necessary decisions in a reasonable amount of time? does it encourage cooperative approaches to conflict resolution; does it focus on the issues of greatest importance?
- Implementation - are the decisions and conditions attached to decisions properly implemented, are planning restrictions enforced?
- Information - is adequate information available to the decision-makers? is there baseline information from which to monitor change? is there monitoring and reporting to assess the effects of decisions?
- Cost-effective - are planning goals achieved without unreasonable expenditure of human and monetary resources?
- Up to date - does the process adjust to new information? does it provide for learning from experience?

³ A political storm erupted when the minister overturned the decision of the NEC, the recommendation of the hearing officers, and the recommendations of different ministries to approve the Cantrakon development. See *Hansard*, November 3, 1978, p.4560.

- Boundaries - are the planning boundaries appropriate for protecting the resource? does the defined area conflict with other planning areas? are the responsibilities of different parties coordinated?
- Cumulative effects - does the plan address cumulative effects?
- Durable - will the planning regime survive shifts in government, public priorities and economic fortunes? does it achieve public support? does it address the underlying pressures and incentives for development?

To conduct this evaluation, it is also useful to have an understanding of the environmental resources for which protection is needed. An environmental land use plan for an endangered ecosystem would have to meet more stringent criteria than a plan for preserving agricultural land, just as the two plans would have to address different environmental impacts.

History of Niagara Escarpment Planning

The escarpment presented challenging terrain and poor farmland to early pioneers, which left it sparsely settled. In the Niagara Region, the escarpment created good climatic conditions for tender-fruit production, off the escarpment itself. A number of watermills were built along the escarpment to take advantage of streams tumbling down steep valleys, and small industrial centres developed around these mills. Rock was quarried in small operations, but otherwise the escarpment was left relatively untouched.

In the 1950s and 60s, growing numbers of people saw the need for natural areas, and the escarpment was now appreciated for being relatively undeveloped. Public interest in the escarpment was heightened by the efforts of Ray Lowes, a Hamilton naturalist, to establish a hiking trail from Niagara to Tobermory which would allow people to enjoy the escarpment and become advocates for its preservation.⁴ It also became clear that the hills and cliffs could no longer forestall development. The escarpment was being liquidated, as a source of aggregate for road-building and brick-making, as an area for hobby farms and recreational properties, as a nuisance in the path of highways and hydro lines. It became clear that unless action was taken, the escarpment would not be preserved as an entity.

The government commissioned a study in 1967 to respond to the increasing public pressure to do something to protect the escarpment. It was announced by the Premier as "a wide-ranging study of the Niagara Escarpment with a view to preserving its entire length."⁵ In 1968 the study was released. Known as the "Gertler Report" after its chair, Dr. Len Gertler, the report recommended a combination of land use regulations, land acquisition, the establishment of multi-purpose parks system, regulations on the pit and quarry industry, and joint provincial/municipal control.⁶

The Ontario government's initial reaction was to pursue three initiatives: to emphasize the escarpment in the government land acquisition program, to require municipalities to incorporate escarpment preservation measures in their land use controls, and to restrict the pit and quarry industry.

⁴ Ray Lowes, "The Bruce Trail Story", *Bruce Trail News*, Summer 1977, p.10.

⁵ Toronto *Globe and Mail*, August 1, 1984.

⁶ L. Gertler et al., *Niagara Escarpment Study Conservation and Recreation Report*, 1968.

In 1972 an Inter-ministerial Task Force was appointed to determine how the Gertler Report should be translated into government action, and it reported by the end of the year.⁷ Five years after the Gertler report was released, the government passed the *Niagara Escarpment Planning and Development Act* (NEPDA), aimed at maintaining the Niagara Escarpment as "a substantially continuous natural environment." The act established the Niagara Escarpment Commission (NEC) to develop a plan for the escarpment, and provided for a very complex hearings and approval process before the plan would come into effect. Through regulation, a development control area was created. Any new lots, buildings, additions or other significant developments that were not exempted required planning permission through a development permit issued by the NEC. An appeal process for development permits was created, before special hearing officers who make recommendations to the minister, who in turn makes the final decision. In addition, a temporary pits and quarries restrictive area was created, where new pits were prohibited.

The commission prepared a plan in the face of mounting public hostility towards provincial interference in municipal affairs and private property, and criticisms that the plan covered an unnecessarily large area that went well beyond the escarpment cliffs. During this plan preparation process, several interim documents were used by the commission to evaluate development proposals before plan approval. The first was a set of development control guidelines, followed by the first draft of the plan, the *Preliminary Proposals* (1978), which was similar to a large-scale official plan. The *Preliminary Proposals* set out a very complicated land use designation system, set limits on development, and provided for criteria against which development was to be evaluated.

Many affected municipalities and landowners reacted forcefully and negatively to the *Preliminary Proposals*. Faced with increasing discontent during the plan preparation process, the government slashed the plan area by 63%, leaving significant elements of the escarpment without protection other than whatever policies the local municipality decided to implement. As it became clear that the plan would never be put into effect without organized pressure, several provincial and national environmental groups banded together under the Coalition on the Niagara Escarpment (CONE) in August 1978.

In 1979, based on the experience applying the *Preliminary Proposals* and anticipating likely public and municipal reaction, the NEC prepared a new document, the *Proposed Plan for the Niagara Escarpment*. For the next two years, the *Proposed Plan* was the subject of acrimonious hearings. While environmentalists supported the plan and sought to strengthen it, many landowners and municipalities submitted that the plan would unfairly limit landowners' rights to enjoy property, interfere with local planning, and cause property values to plummet.⁸ At the end of the hearings, the hearing officers recommended to the minister major deletions, less restrictive zoning for many properties, and fundamental alterations to the plan.⁹ The *Toronto Globe and Mail* condemned the hearing officers' recommendations in an editorial, writing, "In short, they recommended that the plan be gutted like a fish."

⁷ Ministry of Treasury, Economics and Intergovernmental Affairs, *Development Planning in Ontario: the Niagara Escarpment*, June 1973.

⁸ Despite development control in effect since 1974, there was no evidence that property values were dropping. See for instance Richard S. Roberts, *Appraisal Report, Land Evaluation Study, Niagara Escarpment Planning Area, Township of Keppel, County of Grey*, April 1980. This report concluded that "there has been no measurable decrease in the value of land in the planning area since 1974."

⁹ A.L. McCrae, W.T. Shrivess, and M.D. Henderson, *Niagara Escarpment Proposed Plan Hearing Report*, January 1983.

The commission decided to disagree with the major recommendations of the hearing officers, and recommended to the minister the *Final Proposed Plan for the Niagara Escarpment* (1983) which was essentially the original plan with minor modifications. The commission had now had several years of experience applying development control and using this experience to develop each successive version of its plan.¹⁰ Meanwhile, CONE commenced an application for judicial review of the hearing officers' report, based on the argument that testimony by CONE's expert witnesses had been ignored.¹¹

The minister then responsible for the plan, Norman Sterling, was personally committed to the Niagara Escarpment. Facing increasing pressure from environmental quarters and the general public, the minister chose basically to ignore the hearing officers' report in preparing his recommended plan. The minister submitted his recommended plan to cabinet for final approval in July, 1984. Any person unsatisfied with the minister's recommendations had a final chance to make submissions to cabinet, and 350 submissions were received. Finally, to the environmental community's great delight, the plan was approved by cabinet and came into effect on June 12, 1985.¹² The plan set out land use designations, specified allowable land uses, set limits on the density of development and lot creation, and established criteria by which all development would be reviewed.

With the plan in place, most preservation advocates involved in the battle moved on to other issues. Given that there was a commission with staff and a mandate to protect the escarpment, it was felt that the protection of the escarpment was assured.

On paper the plan and the act may have looked good, but in its implementation shortcomings quickly became apparent. The composition of the commission was a major weakness. Half of the voting members are municipal representatives, who reflected local interests and adopted the position that "flexibility" was required in interpreting the plan. Flexibility translated into approval. The public at large representatives, appointed by the premier, often had worrisome credentials. Appointed members included the past president of a local real estate board, and outspoken critics of the plan. There were some commissioners with preservationist credentials, but for the first few years of plan implementation they were in a minority.

Responsibility for the plan was assigned to the Ministry of Municipal Affairs. Because this ministry constantly deals with municipal concerns and municipal councillors, there was a conflict of interest: its priority was to appease councils, not to confront them.¹³ The legislation provided that the minister could request a hearing if he or she did not agree with the commission's decisions, in effect assigning the minister a role as monitor of the commission.¹⁴ During the minority government period of the Liberal-NDP accord in the mid-1980s, the minister appealed a couple of decisions that conflicted seriously with preservation objectives. When a Liberal majority government was elected, however, there

¹⁰ Cecil Louis, NEC, personal communication, January 8, 1992.

¹¹ Coalition on the Niagara Escarpment, *CONE News*, Issues #15 (June 1983) and #16 (January 1984). The judicial review was never carried out because the hearing officer's report was essentially ignored.

¹² The plan's passage seemed highly unlikely. Norman Sterling apparently went to cabinet seven times to have the plan approved. As it became clear that the short-lived Miller government would fall to the Liberal-NDP accord, the government sought to show that it had some credibility on environmental issues by passing the plan only days before the Liberals took over.

¹³ This conflict of interest was raised in the legislature in 1988. *Hansard*, Standing Committee on General Government, First Session, 34th Parliament, December 15, 1988.

¹⁴ NEPDA, section 25 (6).

were no more minister-initiated appeals, and the minister too started talking about the necessity for flexible interpretation. Inadequate funding for the commission, despite rapidly increasing applications for development permits, resulted in further weakness. At the time, CONE suffered from apathy and disorganization, and was unable to bring public attention to the issues.

The pressure for further development from developers, "retiring farmers", local councils, especially in the northern section of the escarpment, increased with the economic boom then occurring in Ontario. The plan suffered from being interpreted very loosely. Developers discovered loopholes through which subdivisions could pass,¹⁵ and found that associated legislation could be used to do an end run of the hearing process.¹⁶ There was no separate funding for enforcement; the responsibilities of the many government agencies involved were poorly defined;¹⁷ and "farmer retirement lots" provided for in the plan were being promptly resold. Even so, there were calls for increased flexibility, for "reasonable interpretations," and for reducing the amount of rural area protected by the plan ("save the best, release the rest"). In the fall of 1987, local councils from Grey and Bruce Counties presented proposals to emasculate the plan. The government appeared to be listening.

In early 1988, CONE and other environmental organizations became concerned that protection of the Niagara Escarpment was failing despite the existence of the plan. CONE commissioned a study of how closely the commission was following the plan in cases where the staff recommendation had been overturned. The researchers concluded:

...an unexpectedly high proportion of these decisions conflicted with the plan (78%). There is concern that if the NEC's decisions continue to conflict in this way, the plan's objectives may not be met.¹⁸

CONE recorded and publicized the voting patterns of individual commissioners, and it lobbied for a better appointment process and other improvements. Local escarpment groups were organized, and proved invaluable against specific developments, gaining significant victories. The improved fortunes for the plan angered some, as evidenced by the formation of the Grey Association for Development and Growth, whose objectives include gutting the plan.

The Niagara Escarpment received international recognition when it was designated as a World Biosphere Reserve by UNESCO in 1990. With increasing interest in environmental issues and in the escarpment, along with a change in government and payoffs from diligent lobbying, the plan's fortunes were turned around. In June 1990 responsibility for the plan was transferred from the Minister of Municipal Affairs to the Minister of the Environment, resulting in stronger ministerial and bureaucratic support for the plan.

¹⁵ NEP, section 1.5 New Lots 6) allowed subdivisions in the "rural" designation. The author was present when the commission almost passed without debate a proposal that would have allowed over a dozen houses. Once the commissioners realized that the plan did not even require considerations of the need for or appropriateness of the subdivision, there was agreement that this section required review. The commission has proposed at the five year review that this section be deleted.

¹⁶ The *Consolidated Hearings Act* allowed an easy method for developers to get a hearing before the more lenient Ontario Municipal Board.

¹⁷ Cresap (a Towers Perrin Company), *Niagara Escarpment Program Evaluation Final Report*, September 1988.

¹⁸ LURA Group, *Review of the Decisions of the Niagara Escarpment Commission for the Coalition on the Niagara Escarpment*, 1988.

The next challenge for the plan was the five year review of the plan, mandated by the legislation. This review is to assess the plan's implementation and, if required, to make changes to the plan. By June 1990, the government had done none of the preparatory work, and there was no baseline assessment of the condition of the escarpment. Environmentalists saw the review as an opportunity to strengthen the plan, opponents as another chance to water it down.

The commissioners, of whom a small majority were plan supporters, proposed basically sound revisions to the plan for the five year review. Environmental organizations mostly supported the proposals. Predictably, the aggregate industry and the Ministry of Natural Resources opposed many of the revisions, which would curtail new pits, and once again many landowners saw "infringements" on their property rights. As of writing, the five year review is still in progress. Since the effects of the changes that will result from the five year review cannot be evaluated, this case study concentrates on the plan's performance during 1985-90.

Lessons from the History

Ensuring the protection of the Niagara Escarpment has been an intensely political effort, from having the escarpment area recognized as worthy of protection, to getting the legislation in place, to making sure the legislation is followed and the plan developed and implemented. The pressures to develop or otherwise dispose of the escarpment have been intense, and the provisions of the legislation and the plan have not been sufficient in themselves. While these documents are basically sound, the government and the commission itself have often decided to interpret them as needed. Without resorting constantly to lobbying, to the media and to hearing bodies, the advocates for the escarpment would not see their goals met, despite the plan. Perhaps only the most significant features would have been protected, as interesting but ecologically sterile landforms in a sea of development.

Yet if the plan had not existed at all, the escarpment would certainly now be in much worse shape. One only has to look at the level of severances outside of the planning area in Grey County during the late 80s,¹⁹ or the development of Niagara fruitlands not protected by the plan, to see that the plan has had a calming effect. Many organizations have been devoted to preserving agricultural and significant natural lands, but working within the confines of the Ontario Municipal Board and the *Planning Act* has meant that only the most flagrant cases of inappropriate development could be stopped.²⁰ The Niagara Escarpment Plan definitely gave the advocates for environmental preservation a more useful tool for participation.

Could a similar plan be implemented elsewhere? Governments will likely resist using such a model in other areas. At the provincial level, the plan has generated much more controversy and required much more energy than politicians are likely to accept again. It is therefore important, in examining the specifics of the plan and the legislation, to identify modifications which would lead to a less antagonistic and politicized process while still achieving protection.

¹⁹ Grey County Planning Approvals Committee, *Severance Activity in Grey County, 1984-90*.

²⁰ The efforts of the Preservation of Agricultural Lands Society (PALS) are a good example. The Board ordered costs against PALS when they intervened before the board for the protection of tender fruit lands. The cost order was overturned by cabinet.

Key Components of Planning in the Niagara Escarpment Area (1985-1990)

Legislation

The provisions for developing and administering the Niagara Escarpment Plan and for the functioning of the Commission are set out by the *Niagara Escarpment Planning and Development Act* (NEPDA). The legislation sets out the structure for escarpment planning, providing for

- the Niagara Escarpment Commission,
- the preparation of the Niagara Escarpment Plan,
- an area of development control,
- a system for development permits,
- an appeals and hearings process,
- fines and orders for restoration where the act is violated,
- delegation of development control, and
- funds for the acquisition of land.

Each of these is discussed in more detail below.

Implementation of the Act involves a very complex plan development, amendment and hearing process, which proponents and opponents of the plan have been almost unanimous in saying requires simplification.²¹

Development Control, Permits and Offences

The act sets out by regulation an area of development control.²² Unfortunately, because of the convoluted history of the plan, areas covered by the plan are not necessarily covered by development control. The act provides that no person shall undertake any development in the regulated area unless the development is exempt in the regulations, or unless a development permit has been issued. Further, no building or other permits can be issued by local municipalities or provincial agencies until a development permit is issued.

The NEPDA does not provide direct authority to the minister or the minister's delegate to control lot creation, since decision-making authority on "consents" for lot severances remains at the local level under the *Planning Act*. However, each region or county must seek the NEC's comments on consents. If the region or county decides to issue a consent over the NEC's objection, the commission may refuse to issue a development permit, or may appeal the region or county decision to the Ontario Municipal Board.

The Act provides that any development undertaken which is not exempt by regulation or covered by a development permit is violation of the Act, and fines have been recently increased to a maximum of \$25,000 for the first conviction (double for corporations; the old limit was \$10,000). In addition, the minister may order restoration of the site to its condition prior to the undertaking.

The Niagara Escarpment Plan

The plan implements the legislation, and is divided into three parts: land use policies, development criteria, and the parks system. The land use policies define different categories of lands from highly to less protected: escarpment natural, escarpment protection, and

²¹ The late commissioner John Alexander disagreed. He felt that because the process was so complicated and difficult it discouraged developers from applying for amendments, and thus restricted development.

²² NEPDA, section 22.

escarpment rural. It also sets out areas where development should be concentrated: escarpment recreation area, minor urban centre, and urban area. The mineral resource extraction designation is designed to permit the extraction of aggregate (gravel, rock, sand and clay). The designations have been applied on a series of 1:50,000 scale maps based on criteria set out in the plan.²³

For each designation category the plan provides a short explanatory section, and then objectives. For example, the escarpment natural designation is to serve three stated objectives: to maintain the most natural escarpment features, stream valleys, wetlands and related significant natural areas; to encourage compatible recreation and conservation activities; and to maintain and enhance the landscape quality of escarpment features.

The objectives are followed by criteria for designation, which indicate why the designation was applied. The criteria for escarpment protection are as follows:

- escarpment slopes and related land forms where existing land uses have significantly altered the natural environment;
- areas in close proximity to escarpment slopes which visually are part of the landscape unit; or
- regionally significant areas of natural and scientific interest (ANSIs) that are recognized because of life science features.

The plan also specifies the permitted uses for lands in each designation. For the rural designation, the uses include

- existing uses,
- agricultural operations,
- single family dwellings,
- recreational uses such as campgrounds,
- forest, wildlife and fisheries management,
- transportation and utility facilities,
- incidental uses (e.g. swimming pools and tennis courts) provided there is minimal impact,
- small scale institutional uses,
- home occupations, and
- new licensed pits (an amendment may be required).

Finally, each designation includes a policy on the creation of new lots, setting restrictions on the density of lot creation. These densities become greater as the designation becomes less restrictive. The most important designations (natural, protection, and rural) are compared in Table I.

²³ The designations are not always appropriately applied. The organization Keep the Escarpment Environment Protected (KEEP) asked the commission to review the designation of lands that Lac Minerals wanted to quarry. The NEC agreed that the lands should have been designated natural and protection, rather than rural. Since rural can be amended to Mineral Resource Extraction, an important natural area was almost lost to a quarry.

TABLE I: Comparison of Main Designations under the NEP*

	Natural	Protection	Rural
Objectives	Maintain natural features	Maintain prominent features, serve as a buffer to prominent features	Maintain scenic values, open landscape, buffer, encourage agriculture and forestry
Designation	Least disturbed, most ecologically significant	Less disturbed, visually significant	Open landscape, minor features
Permitted Uses	Existing uses, single dwelling, non-intensive uses	All natural uses, plus agriculture, recreation, utilities	All protection uses plus small scale industry, new pits
New Lots	40 hectare lots + farmer retirement lot	40 hectare lots, + one extra per 40 hectare lot, + one farmer retirement lot	40 hectare lots, + 2 new per 40 hectare lot, + one farmer retirement lot, + low density plan of subdivision if development criteria met

* The escarpment natural, escarpment protection, and escarpment rural designations make up approximately 90% of the total planning area.

The plan also contains development criteria, specifying what criteria need to be considered before a development permit may be issued. These criteria are very important, providing for example for the consideration of cumulative impact, encouraging development on the least sensitive portion of a site, protecting escarpment slopes, and setting out how new lots should be created. It should be noted that the plan did not necessarily have to include the consideration of cumulative impact, as the Act did not set out the form of the plan, but rather specified what planning considerations could be covered, and cumulative impact was not specifically listed by the legislation.²⁴

The plan contains detailed development criteria for forest management, agriculture, mineral resources, heritage, recreation, areas of natural or scientific interest (ANSIs), transportation and utilities. However, the plan is not as strong in this regard as it might appear. For example, the forest management provisions are implemented by regulation. Updated regulations which reflect the plan have been ready for implementation for several years, but they have not been issued. Therefore the forestry section of the plan has no effect, leaving

²⁴ NEPDA, section 9. The point here is that the legislation would not necessarily have resulted in a plan containing these important elements. For instance, the act does not specifically refer to cumulative effects, but it does specify that environmental quality should be maintained and enhanced.

the forests of the escarpment subject to the same Ministry of Natural Resources resource extraction oriented rules that apply province-wide.²⁵

Local Municipality Official Plans

Municipal official plans are still in effect in the Niagara Escarpment Plan area. The Act provides that those local official plans must not be in conflict with the NEP. However, a more restrictive official plan is not considered to be in conflict.²⁶ This provision allows local municipalities to continue to have some control over planning in their portion of the escarpment, to plan at a more detailed level, and to provide for even greater environmental protection. The NEP in effect sets a minimum standard, which a few municipalities choose to further tighten. Since any large scale planning exercise may involve a fair amount of compromise, this provision which allows for even greater protection is of significant value.

Decision-making Body

The Niagara Escarpment Commission is the initial decision making body.²⁷ It is composed of 17 members: eight members plus the chair representing the public-at-large, and eight members representing county or regional government. This composition has been problematic. Getting good public-at-large appointees in the past required extensive lobbying efforts with the premier's office, often with disappointing results. As these appointments can vary from one to three year terms, it was necessary to lobby on a yearly basis and, with delays in announcing appointments and commissioners resigning, lobbying to fill vacancies was often a year round effort.

With 17 members, the commission's size is unwieldy. If each commission member decides to participate in discussing a case, it takes a long time to reach a decision. Meetings have typically run for very full days. But how could the commission's composition be modified? Regions will likely object fiercely to any reduction in their representation, and the public-at-large representatives have been important in counterbalancing the local interest in more development.

The Commission was set up by the legislation as a decision-making rather than as a hearing body. There is no provision for a hearing component to its work: initially proponents submitted applications and without appearing before the commission they received a decision. If a party disagreed with the commission's decision, it could appeal to the minister, and a hearing would take place. This process left the commission vulnerable to accusations of being an undemocratic institution, faceless, and unwilling to listen. In response, the commission decided to allow short presentations (usually five minutes) by proponents and objectors.

This had a marked effect on its decisions. For the first three months after the plan was approved, the staff monitoring report noted with concern "applicants who appear before the commission have a much higher success rate in having staff reports recommending refusal

²⁵ Ontario Regulation 685/1980.

²⁶ NEPDA, sections 13 and 14.

²⁷ The Act set out that the minister would make the decisions or could delegate his or her authority to the commission or to the regional municipalities or counties. This responsibility was given to the commission for the entire 1985-90 period.

overturned".²⁸ Applicants often present information in conflict with staff reports, and using this process staff cannot always verify the information before the commission makes a decision. In other cases, extraneous information is presented such as stories of personal hardship. Poor decisions have resulted. In cases where there is new information or a disagreement with the information gathered by commission staff, it is usual practice to delay the decision until staff can verify new information or check their information, but this has not always occurred. Whenever there is substantive doubt on the merits of an application it should be refused to allow a more thorough examination of the case by a hearing officer.

The Niagara Escarpment Commission benefits from a dedicated planning staff, committed to the plan even when political fortunes turn against the planning effort. The staff reports have been generally very sound: few substantive errors have been pointed out at commission meetings and staff recommendations have fared well in hearings. Since having a good planning analysis is important to the commission's ability to make wise decisions, any other such planning effort should try to attract excellent staff.

Hearings

The hearings process for appeals of development permit applications has been very accessible, much more so than hearings in front of the Ontario Municipal Board. The Act provides that the minister appoints a hearing officer for the appeal, the hearing officer conducts the hearing and makes a report to the minister and provides a recommendation, and the minister makes the final decision.²⁹ The Act does not specify who the hearing officer will be. It has developed that usually three individuals have been appointed as Niagara Escarpment hearing officers, and minister assigns the appeals to the hearing officers.

In this arrangement, hearing officers have become knowledgeable about the escarpment and its planning system. The mechanism provided for in the Act does not ensure that knowledge accumulates since each hearing could be before a totally new hearing officer. It would be appropriate to modify the legislation to reflect the beneficial current practice of having hearing officers specifically assigned to do NEP hearings.

Applicants or objectors often appear without legal counsel and do not face a substantial disadvantage by doing so; there are no fees to be paid to initiate the hearing process, and the hearing officers' reports as a rule closely follow the plan and are well reasoned. Many participants choose to be represented by an agent familiar with the plan and the hearings process but who is not a lawyer. These factors make it much easier for neighbours to appeal questionable decisions of the commission, providing a further safeguard for the plan. Easy access also makes it easier for applicants who have been turned down to have another try at getting their development permit, which could undermine the plan if hearing officers were weak or opposed to the plan.

No intervenor funding is available. Despite the unavailability of funding, experience has shown that the hearing process is not onerous for cases on minor matters such as a new lot. A neighbour may oppose a development unrepresented and win the case, since the decision-making criteria in the plan are usually clear in such instances. For more complex issues that

²⁸ Niagara Escarpment Commission, *Information Report*, June 30, 1986. When the applicant appeared, ten out of 14 were overturned; when the applicant did not appear, one out of six was overturned.

²⁹ NEPDA, Section 25 (6)-(12). If the minister initiated the appeal, the hearing officer is appointed by cabinet. Note that this is a different process from that for amending the plan or carrying out the five year review.

may require the use of expert evidence, the lack of intervenor funding limits intervenor participation and effectiveness. Even becoming an intervenor can be difficult: organizations cannot easily appeal commission decisions, since to appeal one has to have received notice of the commission's decision, which is sent to all property owners within 120 metres of the property.³⁰ However, anyone may speak at a hearing if one is held.

The hearing officer's report is a recommendation to the minister, and the minister has the final decision. Ministry staff receive the NEC staff report, the commission's decision, and the hearing officer's report. These documents are reviewed to make a recommendation to the minister.

Division of Responsibilities

While the NEPDA set out the division of responsibilities between cabinet, the minister responsible, hearing officers, regional and local councils, and the commission, the relationships which have developed have become even more complex as other ministries have become involved. For instance, MNR is a major player because of its role in parks acquisition and management, forestry, fisheries, and aggregate. The Ministry of Culture and Communication is involved because of the significant cultural sites found along the escarpment, because it has broadened its definition of heritage to include natural heritage, and because the Ontario Heritage Foundation administers the Niagara Escarpment fund. The Ministry of Food and Agriculture comments on development proposals and consents and their relationship to the Foodland Guidelines and the agricultural code of practice. Many of these relationships are the same as they would be between a municipality and an agency; others are specific to the escarpment.

A government-commissioned study of the implementation of the NEP documented that the poorly defined division of responsibilities had been a major impediment in implementing the plan. The report noted:

The most significant cause of disappointing implementation results achieved to date is the unworkable organization or roles and responsibilities for the many implementation partners. Over a dozen groups are involved in one way or another in implementing the Plan. The allocation of narrow program responsibilities to too many groups [government agencies] has paralysed implementation through lowering accountability, offering the opportunity for differing implementation of roles and responsibilities, and contributed to an atmosphere of distrust.³¹

The Act envisioned that as municipalities became familiar with the plan and brought the local plans into conformity with the NEP, they could receive from the minister the authority to issue development permits. This delegation of authority carries with it several problems, since many of the regional councils are opposed to at least portions of the plan, because criteria would be subject to varying interpretations, and because it would become much more difficult for watch-dog organizations to observe or intervene in decision making (because delegation could involve up to seven regional or county governments plus city councils). At present, there appears to be no move by government to delegate such authority, nor any demands from upper tier municipal governments to receive such authority.

The main responsibilities can be summarized as follows:

- Legislature - amendments to the legislation, approval of changes to the escarpment planning area.

³⁰ NEPDA, section 26.

³¹ Cresap, *Niagara Escarpment Program Evaluation Final Report*, p. II-9

- Cabinet - final approval of the plan, plan amendments and five year review.
- Minister - may initiate plan amendments, final decision on development permits, may amend local plans to bring into conformity with the NEP, may delegate certain responsibilities, initiates five year review, designates areas of development control, enforces the act (or delegates such enforcement), appoints hearing officers for appeals regarding development permits and makes recommendations to cabinet on plan amendments.
- Commission - preparation of the draft plan, appoints hearing officers to consider plan or amendments to the plan, administers development control through delegation from the minister, may initiate plan amendments, and administers plan amendment process.
- Affected ministries - comment on development permit applications and plan amendments; administer respective escarpment programs, e.g. parks system, acquisition.
- Upper tier municipalities - exercise development control if so designated by the minister, ensure regional plans conform with the NEP, approves consents where related development permit has been issued by the minister or the commission (or themselves if authority has been delegated).
- Local municipalities - must ensure official plans conform with the NEP; issue building permits where development permit has been granted.

Of course, the above represents only the formal division of responsibilities. Other parties who play an important role include opposition critics in the legislature, the media, environmental protection advocates, developers and the aggregate industry.

Environmental Features and Resources to be Maintained

The real test for planning in the Niagara Escarpment area is not how the different critics rate the plan, nor will it be the outcome of the current or future plan reviews. The real test, the reason for the entire planning exercise, will be the state of the escarpment's environmental features and resources in 50 and 100 years. What was the baseline condition of the escarpment when the protective mechanisms came into effect? What will be the condition in the year 2085?

The broad brushstroke description of the 1985 baseline condition of the Niagara Escarpment would include the following:³²

- wildlife - 53 species of mammals, 36 species of reptiles and amphibians, 300 species of birds;
- fishery resources - some of the best cold water fisheries in Ontario, and 90 fish species;
- water resources - it is a ground water recharge zone, and the escarpment contains the headwaters of many streams and rivers;
- 100 varieties of "special interest flora" including 37 types of wild orchids;
- ancient cedar trees with ages of up to 700 years;
- samples of the Carolinian forest, significant forested area and resources;
- prime agricultural land including tender fruit production, and a large proportion of good and marginal agricultural land;
- over 100 sites of geological significance;

³² The information here is based on data provided by the Niagara Escarpment Commission.

- diverse recreational opportunities, including the Bruce Trail, caving, swimming, canoeing, camping, rock climbing, nature appreciation, hunting and fishing, cross-country and downhill skiing;
- educational opportunities including outdoor and natural science schools for urban students;
- wide open spaces and natural areas, spectacular scenery;
- historic sites and tourist attractions; and
- significant aggregate resources (which preservation advocates believe should lie untapped).

The evaluation criteria for the planning regime should assist in assessing whether these resources will be maintained.

Evaluation of Planning in the Niagara Escarpment Area

Seen as a package, how do the implementing legislation (NEPDA) and the Niagara Escarpment Plan fare against the evaluation criteria spelled out earlier?

Objectives

The objectives are set out in the NEPDA in two sections. The purpose of the Act, described in section 2, states that it is "to provide for the *maintenance* of the Niagara Escarpment and land in its vicinity *substantially as a continuous natural environment*, and to ensure that only such development occurs as is *compatible* with that natural environment" [emphasis added]. Three key elements need further discussion:

- "maintenance" means that further deterioration from the initial condition when planning comes into effect is not acceptable, but does not specifically provide for restoration to deal with past deterioration;
- "substantially as a continuous natural environment" stresses the importance of keeping the escarpment in a natural state and recognizes that homes, roads, railways, towns and development have already caused some fragmentation of the Niagara Escarpment, that a certain degree of further fragmentation will be allowed for, but that the continuity of the escarpment is an important goal in itself; and
- "compatible development" specifies that only development which ensures maintenance and continuity is allowed.

Maintenance

Section 8, concerning the objectives of the act, provides further elaboration on the goals to be sought in preparing and implementing the plan. Three of the goals are particularly relevant to this discussion:

- protection of *unique* ecologic [sic] areas;
- to maintain and *enhance* the quality and character of natural streams and water supplies; and
- maintain and *enhance* the open landscape character of the Niagara Escarpment in so far as possible; [emphasis added]

The objectives broaden from the concept of maintenance, as specified in the purpose, to the goal of enhancement. While restoration could be provided for under the term enhance, enhance could be interpreted in a more anthropocentric fashion. For example, emphasis could be placed on enhanced fishing opportunities, which could benefit game fish at the expense of other species, or the "improved" landscape that some would see in a golf course replacing abandoned fields.

From an environmental perspective, these objectives are insufficient. It is not enough to protect only unique ecological areas, or to maintain and enhance water quality and the open landscape character. To have a functioning natural environment requires a sufficiently large land base in a relatively natural state, especially if the area is bounded by areas of intense development. It would be appropriate to add to this section of the act a new objective to ensure that the escarpment is maintained as a functioning environment, which could be worded as follows:

to ensure the escarpment's ongoing health as a natural ecosystem supporting indigenous wildlife populations and plant communities through the preservation of land in both natural and compatibly developed states.

Such an objective would make it clear that the purpose of the plan was to achieve more than human goals. The objectives of the Act can be seen as being limited by the prevailing approach to the environment that prevailed in the 1970s: protect the unique and the beautiful, give cities some breathing room, and keep the water clean.

Fortunately, the commission interpreted the Act's objectives broadly in developing objectives for the plan. The escarpment natural area designation, which aims to maintain the least disturbed slopes, forest abutting the escarpment, and the most significant ANSIs, stream valleys and wetlands, goes beyond protecting "unique" areas; it protects ecologically important areas.

At the same time, the plan clearly contravenes the Act's stated objectives in its treatment of aggregate resources. The rural designation provides that new pits and quarries may be developed through plan amendment. Pits and quarries are a real threat to the integrity and continuity of the escarpment. The maps of land use designations show areas where the extractive designation clearly fragments the linear integrity of the escarpment.³³ Because extractive operations strip vegetation, disturb topsoil, affect drainage, groundwater and the landscape, and create traffic, emissions and noise, they should be considered fundamentally incompatible with the purpose of the Act.³⁴

Continuity

The concept of keeping the escarpment "substantially as a continuous natural environment" has been a controversial aspect of the purpose of the Act and the contents of the plan. While the dangers of habitat fragmentation are increasingly obvious, the purpose can be interpreted as allowing further development and fragmentation. Continuity is encouraged, however, by the Act's objectives, particularly that of enhancing the open landscape character of the escarpment.

The continuity of the escarpment was a major issue in the hearing officers' report on the final proposed plan. Their recommendations would have removed much of the land not directly associated from the escarpment cliffs from protection, failing to understand that these discrete elements could not survive without a buffer or interconnection. They saw no need for land use regulations where the escarpment was buried, reasoning that if the purpose of the Act was to preserve the escarpment burying would do it: "... what better

³³ See the escarpment in the vicinity of Milton, where over 50% of the escarpment is designated aggregate extraction, despite the narrow width of the plan in this area.

³⁴ Government policy as expressed in Ministry of Treasury, Economics and Intergovernmental Affairs, *Development Planning in Ontario: the Niagara Escarpment*, June 1973, recognized that "aggregate production is, by its very nature, disruptive to the natural environment" but then went on to "protect the Escarpment's valuable mineral resources" by requiring that mineral resource areas be designated for new pits and quarries.

protection can be afforded to the scarp then having 300 feet of soil on it."³⁵ The government rejected out of hand this creative interpretation of the Act.

The plan does not explicitly address the issue of what continuous means. Continuity could be threatened by the quality, quantity and placement of development. By setting out the density of development and the permitted uses, the plan sets a limit on the number and size of "holes" that can be punched into the escarpment fabric. The plan addresses the placement of development by restricting ribbon or strip development (where a line of houses, driveways, lawns, etc. could create an ecological barrier). It also specifies that new lots created by consent shall front onto an existing public road which is of reasonable standard. This reduces the need for new roads, which are significant threats to continuity.

Development criteria which direct activity away from steep slopes and ravines; water resources; and wooded areas also contribute to continuity because of the linear nature of these natural features. Development criteria respecting transportation and utilities encourage authorities "to design and locate new and expanded transportation and utility facilities so the least possible change occurs in the environment," but fail to address the issue of continuity directly. The Niagara Escarpment parks system objectives include protecting unique sites and distinctive features as well as special plant communities and animal habitats, all important goals, contributing to but not directly addressing continuity.³⁶

An informal pressure to maintain continuity is provided by the Bruce Trail Association, which aims to secure a permanent route for its trail, through natural and rural lands (presently much of the trail is along roadsides). The presence of the trail also shows the benefits, from a recreational point of view, of continuous strips of green space. If the association is successful, a narrow strip along the length of the escarpment would be protected in a relatively undeveloped state (although the popularity of the trail will result in environmental impacts along this strip).

The Act's purpose of achieving continuity is therefore not adequately addressed by the plan, and it is up to the implementing authorities to make reference back to the purpose of the Act and its requirement for continuity in their decisions. For some, continuity could be more of an aesthetic goal or, as the hearing officers' report illustrated, not a goal at all. But if the escarpment environment is to survive in a healthy state over the long term, and if this survival is to include wildlife populations and plant communities, a clearer objective would be appropriate. Otherwise, the escarpment could end up being like a string of pearls, each pearl representing a beautiful plot of land with a wildlife population and plant community too small to survive on its own, and unable to interact with the neighbouring populations.

Compatibility

Finally there is the question of compatibility. The Act's objective that all new development should be compatible with the natural environment leaves "compatibility" to be defined. This is done in the permitted uses section for each designation and in the development criteria. These criteria address the issues of environmental impact, cumulative impact, water

³⁵ A.L. McCrae, W.T. Shriver and M.D. Henderson, *Niagara Escarpment Proposed Plan Hearing*, January 1983, p.24.

³⁶ Cecil Louis disagrees on this point, saying that the park system is based on the concept of continuity - parks are the pearls on the string. But there is danger that the parks, in isolation, will not be able to maintain continuity - they will be the pearls without the string. The alternative of one park extending the length of the scarp is not feasible. Parks could, however, be used to link areas where continuity is a problem, e.g. there would be priority to set up new parks where there is a risk that continuity will be lost. The present setup does not ensure this.

quality, etc., and development cannot occur unless criteria are met. However, this elaboration of compatibility is deeply affected by prevailing North American approaches to land and property rights. The right to enjoy one's property is sacrosanct. The development criteria therefore "permit reasonable enjoyment by the owners of all lots that can sustain development" and conditionally allow that each lot may be developed for its permitted uses.

If the commission were to disallow the construction of any dwelling on an empty lot on the grounds that the lot could not "sustain" development, the property owner could see the decision as expropriation without compensation since the plan had removed the right to enjoyment. The commission has been sensitive to such issues, and the question usually becomes not whether a dwelling can be built on a lot within the environmental objectives of the planning regime, but where on the lot should the dwelling be built or how the design could be modified. However, there are a number of lots where no dwelling has been allowed due to the environmental sensitivity of the site.³⁷

Another aspect of our cultural heritage with a bearing on the escarpment is the right and social pressure for each person to accumulate capital, enjoy it, and show it off to neighbours. The planning area is favoured by the well-to-do, and contains many large estates. The plan contains no restriction on a dwelling size as this type of detail was thought best to be applied by the local municipality. A mansion of over 15,000 square feet, with complete recreational facilities, has been approved as a single family dwelling.³⁸

Thus, although the plan sets out criteria from which to assess compatibility, this is limited by our cultural heritage. Despite these limitations, the purpose and objectives of the Act, and the objectives contained in the NEP have been frequently and successfully used by both the commission and escarpment advocates to obtain decisions which preserved the escarpment.

Decision-making Criteria

Decision-making criteria are contained in the plan in both the permitted use section for each designation and in the list of development criteria. The criteria for development are very specific. They include, for instance

- setting a maximum number of lots per original township lot (100 acres);
- directing lot creation to the least sensitive designation;
- discouraging ribbon or strip development;
- requiring that lot size and configuration must meet the designation's objectives; and
- requiring that the new lot must front onto an existing road.

But while the criteria are specific, they are not all-encompassing. As noted earlier, there are no criteria or objectives which are specifically intended to help decision makers address the issue of continuity. Unfortunately, the plan's criteria have all too frequently been ignored.

The legislation provides no criteria for use by the hearing officers or the minister in considering the plan, a plan amendment or the five year review. The hearing officer is merely instructed to

...report to the commission a summary of the representations made together with a report stating whether the plan should be accepted, rejected, or modified, giving his reasons thereof.³⁹

³⁷ For instance, files P/R/85-86/266 (Huron Trail), D/R/86-87/148 (Halbert), G/R/90-91/350 (Schmit).

³⁸ The property in question was the Eaton Estate in the vicinity of Caledon.

³⁹ NEPDA, section 10(6),

This may help explain why the hearing officers considering the draft plan felt they had such a broad mandate. Likewise, the minister and cabinet are given no guidance. However, in each of these cases the purpose of the Act and the objectives provide strong and clear guidance. Strong and clear objectives are to no avail if they are disregarded, something that ministers and the commission have been willing to do, particularly for developments expected to bring substantial economic benefits.

The absence of criteria for the five year review creates the potential for additional problems. Is each five year review an opportunity for every landowner to seek changes to the designation of their property and is the whole concept and justification for the plan up for review? The minister has set out terms of reference for the current review which do not allow for the designation of individual lots or the existence of the plan itself to be brought into question. But the legislation does not provide a clear basis for setting out terms of reference. Opponents to the plan have threatened a judicial review of the hearings. Unfortunately, the NEPDA suffers from weak drafting, and it is unlikely that the Ontario legislature ever contemplated the headache of dealing with a full scale examination of the plan every five years.

The omission of criteria to be considered in approval or rejection of amendments is serious, when the long term planning needs of the Niagara Escarpment are considered. If many amendments to the plan are approved, the vision and the development limits contained in the plan may be lost. An important criterion that should be included in the legislation and the plan is the consideration of the "need" for the amendment⁴⁰. Decision makers should be required to consider whether there is a public need for the amendment, and whether the development could be satisfied through alternative approaches or by moving the development off the escarpment.

Process

The NEPDA sets out five key processes representing steps in the implementation of the Niagara Escarpment Plan:

- the plan development and approval process,
- the plan amendment process,
- the five year review process,
- the development permit process, and
- the land acquisition process (not examined in this case study).⁴¹

The second and third processes follow the first with appropriate modifications, and all three can be analyzed as one process.

The overall process involves many steps, each step with its provisions for public notice, commenting periods, recommendations, and final decisions. Not surprisingly, the commission, preservationist groups and developers alike have criticised the process for being unwieldy and time-consuming. The plan's development and approval have created

⁴⁰ NEPDA, section 10(5) provides that "justification" should be considered. Since 1987, justification and need guidelines have been used by the commission. By using the concept of "need" common in environmental assessment legislation, this requirement would be strengthened.

⁴¹ NEPDA, section 18 allows for land acquisition, subject to the *Expropriations Act*. Since land acquisition has generally been through a willing-seller, willing-buyer basis, and since this is beyond the experience of the author, it is not discussed further. However, the fear that large scale expropriation would take place has certainly been one of the causes for landowner concern about the Niagara Escarpment Plan. There have been experiences which suggest that government agencies have been slow to move on properties targeted for acquisition which are for sale or which have been offered as donations.

public acrimony and division, much of which has centred on concerns related to fairness, democracy and openness, timeliness of decisions, means of conflict resolution, and appropriate priority setting.

Fairness

The plan approval process is open to all parties. In the experience so far, each version of the plan has been available for public review and the hearings have been well advertised and attended. For the individual landowner, the hearings were accessible. Anyone could appear before the hearing officers without counsel and present concerns or support the plan. Indeed, 743 submissions were received. However, the impartiality of the hearing officers during the 1980 hearings was challenged and many landowners sympathetic to the plan felt abused. In addition, since the hearing body is similar to a tribunal, anyone appearing faced the potentially daunting prospect of cross-examination by hostile interests.

For organizations interested in the overall plan, the unavailability of intervenor funding has diminished their ability to be effective participants. The plan approval hearings dragged on for 26 months, while the five year review process has required almost two years for preparation and participation. CONE was only able to attend for the duration of the plan approval hearings because staff were dedicated to the cause and worked for a pittance. CONE's participation in the five year review was made somewhat easier by the existence of youth hiring grants, but effective participation requires experienced staff and the ability to retain counsel and experts. Unfortunately, while intervenor funding has been made available for many other environmental processes, it has not yet been extended to the Niagara Escarpment hearings. However, the lack of intervenor funding has not been the only problem; the plan approval hearings should never have taken up so much time in the first place.

The question of fairness was clouded by the outcome of the hearing officers' report. Many of its major recommendations were not accepted by the commission, the minister, or cabinet. Instead, cabinet eventually approved a plan which closely resembled the *Proposed Plan* which had been prepared by the commission. CONE members and other escarpment supporters doubted the fairness of the hearing because their views seemed not to be fairly represented in the hearing officers' report. But because a great deal of the hearing report was considered irrelevant by the final decision makers, even those hearing participants who welcomed the hearing officers' conclusions, had reason to doubt that their efforts had any significant influence on the final plan. While the effect was unfortunate for all parties, this problem cannot be blamed on the process set out in the legislation. In Cone's view, at least, the wrong individuals had been selected to be hearing officers, and had demonstrated unacceptable bias.⁴²

The process has worked better for amendments to the plan. Because a relatively small area and/or relatively few provisions are affected, the hearings are more focused. Even so, with approximately ten amendments per year being considered since the plan's passage, it has been impossible for escarpment advocates to give any but the most important amendments appropriate attention. Local citizens have found it difficult to participate in hearings involving complex issues such as the supply of aggregate for a new brick factory, because of the difficulty in raising sufficient funding to present expert evidence and to be represented.

One local escarpment organization which proposed an amendment appreciated the degree to which commission staff were able to assist them. When Keep the Escarpment

⁴² The backgrounds of the hearing officers were raised in a May 12, 1983 editorial in the *Globe and Mail*.

Environment Protected (KEEP) proposed a local amendment to redesignate a proposed quarry expansion site from "escarpment rural" to "natural" and "protection" to block the expansion, it presented a good argument to the commission staff who then reevaluated the designation based on the criteria for designation and prepared a staff report which provided justification for the amendment. The cost of hiring a professional planner to do the same would have presented a significant barrier to accessibility. (This case is somewhat of an anomaly as it appears that the designation was initially to have been "natural" and "protection", but through a mapping error the area was designated rural). KEEP leadership did find that the length of the process (further extended by the aggregate operator's recourse to the courts) made it difficult to maintain the interest and involvement of the membership.⁴³

Developers have complained that the lengthy and cumbersome process makes it difficult for them to plan their projects. Often all stages of the process have been completed but the final decision from cabinet does not come until many months later. The commission has been well aware of how cumbersome this process has been, with the result that it has approved a number of development permits for minor variances with the plan where really a plan amendment would have been more appropriate.⁴⁴

The development permit application process raises a couple of issues with respect to fairness. The first is that only a landowner who receives a copy of a development permit decision may appeal the decision, so this often restricts appeals to those landowners with properties within 120 meters (the commission may decide to circulate beyond 120 metres, and anyone may request a copy). This makes it more difficult for public interest groups, or landowners who are further from the proposed development but may be affected, to appeal. It would be better for the legislation to state that any person may appeal.

The second issue with respect to fairness relates to the ability of both the proponent and any opponent to a development to have a fair chance to present their cases fully. For routine development permits, the approval process is quite straightforward and does not impose any great financial hardship on the applicant. If the development permit is refused by the commission, or challenged by a neighbour, a hearing may result. The applicant or the challengers may appear without counsel and many choose to do so. In fairly routine cases, this process does not appear to give either party significant advantage, although it may be difficult for an opponent (who does not stand to benefit from the development) to get time off work to attend the hearing. However, if the issue in question is complex, and either party needs to retain counsel and expert witnesses, then the opponent would be at a significant disadvantage, because he or she can expect no financial benefit from the outcome of the hearing to compensate for the costs of legal and expert representations. As the complexity of the case increases, the absence of intervenor funding becomes a greater burden.

If the opponent wishes to be represented to ensure that a development not permitted by the plan is not approved, and hires counsel familiar with the NEPDA to review the evidence, prepare the case, appear before the commission for a five minute presentation and attend a one day hearing, the cost may easily reach \$5,000.

The entire Niagara Escarpment planning regime is seen by many landowners as fundamentally unfair, both in the way the plan was developed and in its day to day

⁴³ Patricia Gunther, personal communication, April 28, 1991.

⁴⁴ Files in this category include 4710/D/I/91-92/167 (Toronto Board of Education), 2786/D/P/84-85/104 (North York Board of Education), D/L/87-88/318 (pace), 2636/P/R/85-86/43 (Frazer), 2823/P/C/85-86/130, W/R/85-86/78,79,80 (Zucker), W/C/86-87/34 (Wecks Bros.)

implementation. It has been criticised as being an instrument to expropriate without compensation (often based on a incorrect or exaggerated understanding of the restrictions placed on landowners). It is seen as an undemocratic institution which has stopped landowners from making adequate returns on their property investment by limiting development potential. Landowners who developed their properties before the Act and the plan came into existence, and landowners just outside of the planning boundaries, are felt to have an unfair advantage. Of course, this situation is not unique to the Niagara Escarpment Plan.

Whether planning is seen as fair or unfair depends largely on the viewer's set of values. Supporting good planning can be seen as part of the individual's responsibility to society and a method of maintaining the land and environment upon which life depends, or it can be seen as state intervention in the landowner's management of lands and investments.

The attitudes of landowners along the escarpment concerning this issue have been changing. While Grey County was initially the fiercest opponent of the plan, the formation of the Grey Association for Better Planning demonstrates that a shift in values is occurring. The organization's fall 1991 newsletter clearly sets out the new approach:

The rights of an individual may only be considered in a framework of a society's rights. No one person has the right to alter the environment so that it harms another individual or the community at large. Water, air and land are part of the total community. Individual property owners are only stewards.⁴⁵

Nevertheless, there continue to be landowners who are as implacably opposed to the NEP and NEC as ever. The promotional material for a new book critical of the NEC promises the reader...

...indisputable evidence that the NEC is biased, unfair, unjust, expensive, dictatorial, discourteous, narrow-minded, practising favouritism, preventing job creation, harmful to the environment...⁴⁶

A more extreme position is presented in a November 1991 advertisement in an escarpment area paper, which states:

Others have publicly compared the NEC to a communist organization. I don't think that analogy goes far enough. The socialist-loving, tree-hugging NEC seems to have the power and authority of a dictator, much more like the control Hitler had over the German people...⁴⁷

Perhaps one of the reasons for the extreme reaction that the NEP set off (and continues to generate) against planning is related to the need that individuals feel to participate in and make the decisions that affect their lives. Some authors familiar with the escarpment have suggested that encouraging voluntary stewardship agreements with landowners offers better promise than regulation:

... a regulatory approach denies the participation element so important for human dignity. Landowners often object as much to the process employed as to the content

⁴⁵ Grey Association for Better Planning, *Bridging the GAP* Vol 1, No 2. Fall 1991.

⁴⁶ R.N. Richards, *Abuses and Improprieties of the NEC*, (Willowdale: Medric Ltd., 1991). This self-published book is based mostly on Richard's experience trying to get approval from the NEC for a pond. Unfortunately, the book contains many significant errors and few substantive examples of either abuses or improprieties. It does contain a few surprising observations such as "...although the environment is important, it is probably better than it has been at any time during the past 100 years" and "The loss of agricultural land is largely a myth. If a national emergency ever arose this land [referring to a large front yard] ... could be converted to farmland within hours."

⁴⁷ Advertisement placed by Don Gallinger in the *Enterprise Bulletin* on November 6, 1991.

of the conservation message. A process that is open and voluntary enables at least some positive progress to be made.⁴⁸

The author of the above quotation also reports that between 43% and 57% of property owners contacted with significant natural features on their properties were willing to enter into voluntary handshake stewardship agreements. However, it should be noted that a completely voluntary process would have an extremely poor chance of working in current circumstances. It would only take one uncommitted landowner creating a subdivision to destroy continuity or affect water quality. Perhaps the lesson is that the escarpment program should have placed greater emphasis on the stewardship approach, while continuing to implement land use regulations.

There is an obvious contradiction occurring in the escarpment area. Many people live in or have acquired property in the escarpment area precisely because of their love of the natural beauty that surrounds them. Others, who have had a farm or property on the escarpment in the family for several generations, are deeply attached to the land. Both of these groups have a vested interest in seeing development controlled. It would seem then that it would be feasible to sell a process designed to protect the land to this constituency, so long as the process did not depress property values and so long as farmers were able to make a living off the land. However, many of the landowners who would fit in the above categories despise the NEC and the NEP.

If one compares the results of public opinion polls on environmental issues with the lack of support by landowners for restrictions on development, the contradiction is again stressed. Over the last few years, there is consistently high support for action to protect and restore the environment, and a majority of the population sees itself as sympathetic to environmentalism⁴⁹. In the author's experience, the relationship between land use and development and the environment is poorly understood by the general public and property land owners. Mention environmental issues, and people think of the garbage crisis, the 3 or 4 R's, water and air pollution. Few will initially mention land use issues.⁵⁰ It is not always understood that even a well crafted loghome tastefully hidden among trees in some escarpment valley has environmental impacts.

Although the current introduction to the plan tries to make the linkage between land use and environmental preservation, perhaps a more comprehensive and convincing justification should be included in the plan, since many land owners on the escarpment will make reference to the plan at some time or other when considering whether to further develop their property. This information could also be incorporated into NEC public relations and educational material. A better appreciation of the need for planning could make the plan seem less unfair and arbitrary. However, the emotions are so powerful, the clash in values fundamental, and it is doubtful whether such measures would have any effect on those people who become irrational when the plan is discussed.

Democracy and Openness

⁴⁸ Stewart Hilts, "Sustainable Development and Private Stewardship: the Landowner's Role in Resource Conservation" in *Landscape Architectural Review*, May 1990.

⁴⁹ For instance Gallup Poll results published July 5, 1990 in the *Toronto Star* showed that ninety five percent of Canadians are concerned about the state of the environment (73% very concerned and 22% somewhat concerned).

⁵⁰ Tony Hill "Encountering the Countryside" in *The New Yorker*, August 28, 1989 provides an excellent description of the growing realization in the US of the need to institute stronger land use controls.

Some of the strong feelings have arisen from perceptions that the process is not democratic and adequately open to the public. Accusations that the Niagara Escarpment planning and development approval process is undemocratic have been commonplace. The commission is accused of being undemocratic because it is an appointed rather than an elected body. Half of the commissioners are appointed to represent the public at large at the pleasure of cabinet, and the other half are similarly appointed but from lists of not less than three names submitted by each upper tier municipal government.

Ideally, perhaps, the commission could be made up of representatives elected from the planning area, with perhaps a couple of commissioners representing the provincial interest. Or, implementation of the plan could be delegated to the municipalities. However, many of the elected representatives on county and municipal councils are on the record with their opposition to the plan. It appears that until there is a significant change in values, either of the above moves would be disastrous in terms of implementing environmental planning objectives.

But does the fact that the members are not elected make the commission into an undemocratic institution? It was created by the Ontario legislature, and the plan which the commission implements was approved by all three parties. There are many such institutions such as the courts or administrative tribunals which are appointed and which have not received the same criticisms.

One way to reduce this criticism of the commission and to allow escarpment residents more involvement would be to make the upper tier municipal representatives into elected positions, rather than appointed from a list submitted by the regional government. This would not likely have a detrimental effect on the "balance" on the commission because the regional appointees have often been very anti-plan, even when there was strong support in the area they represented.⁵¹ Another way to continue to allow regional representation while improving the chances that candidate commissioners are supportive of the plan would be to select four commissioners from the eight regions, introducing competition into the selection process.⁵²

The commission was not set up as a hearing body, but it has decided to allow proponents and opponents the opportunity to "present a brief synopsis of any matters you wish to bring to the Commission's attention" (usually limited to five minutes) before making its decision. This contributes to the perception that it is undemocratic. For such important decisions, how can the applicant or intervenor feel satisfied with five minutes? As one applicant has stated, "I was given only five minutes to speak before the NEC to fight for property I'd spent ten years improving."⁵³ The commission is in a quandary. It could allow for longer presentations, but then it would not have the time to make all its decisions. It could continue as it does now with the short presentations. Or it could eliminate hearing submissions altogether, which would make it be seen as moving even further away from a democratic process. None of these options will win the commission a more democratic reputation. The problem is that the commission is trying to fulfil a role it was never intended to fit.

⁵¹ When CONE released its assessment of the voting patterns of individual commissioners, one of the regional councils was upset to see that its representative had been found to be an opponent of the plan, and the region passed a resolution affirming its support for the plan and requesting copies of all NEC minutes to keep track of decisions made by their representative.

⁵² Currently the premier has to choose one candidate from a list of three, and if all three do not support the plan there is not much choice. Introducing competition between regions might improve the lists submitted to the premier. The commission's size could be reduced accordingly.

⁵³ Advertisement placed by Don Gallinger in the *Enterprise Bulletin* on November 6, 1991.

The development permit process is in other respects open to the public. Files may be examined, documents reviewed, staff consulted, and the commission makes its decision in public.

Timeliness

Perceptions about the acceptability of the NEC's process are also influenced by the time taken to reach decisions. The plan approval and amendment process is, as was noted earlier, extremely slow. The development approval process achieves a turnaround of six to eight weeks for routine applications, which is acceptable when compared to other planning processes. For more complex applications where further study may be required, or for those cases where the commission refuses to issue the permit or a neighbour appeals and a hearing is required, the length of the process obviously increases.

Hearings are usually scheduled within three to four weeks, the hearing takes place four weeks later, hearing officers take one to three weeks to issue their report to the minister. The Niagara Escarpment Unit (the ministries' implementation team) aims for a five day turnaround to prepare its comments and recommendations, which are batched and sent to the minister on a monthly basis. Simple decisions are announced within a month,⁵⁴ while controversial matters may be delayed for months at the minister's office. An applicant can therefore receive a decision within four months of first applying, which is considerably quicker than if the matter had gone before the Ontario Municipal Board. A mechanism which ensures that there will be a decision within a certain timeframe should perhaps be added to the NEPDA in the interest of fairness. It could provide that if the minister has not made a decision within six months, the recommendation of the hearing officer becomes a decision.

If the application involves a sensitive area, such as development on or near slopes, the commission may require that studies be prepared to determine if the application can be accommodated. Of course, in such an instance, the most important criterion is whether the final decision meets planning objectives, not the timeliness.

In fact, the commission may be under too much pressure to provide quick turnaround. For example, for most development permit applications sent to the City of Burlington for comments, city planning staff are unable to prepare planning reports for and have them approved under the city planning process before the NEC makes its decision. As a result, city planning staff must respond directly when asked for comments on development permit applications by the NEC. However, this procedure has come to be accepted by the Burlington city council.⁵⁵

As noted earlier, the commission does not have the authority to grant or refuse consents to create a new lots. This authority remains at the local level. The commission may appeal a consent or refuse to issue a development permit for the new lot, making the new lot useless. However, the commission has limited time to appeal, and it has developed the practice of issuing development permits if it does not appeal the consent. A staff report dated November 14, 1989, noted that "due to staff workload problems" three appeals had been missed, and therefore three new properties were created. The underlying message was that if the commission doesn't do its work within the allotted time period, the development is approved. The commission has now changed the process to allow staff to launch the appeal, which is then ratified or dropped at the next commission meeting.

⁵⁴ Keith Jordan, manager of development control, NEC, personal communication, January 8, 1992.

⁵⁵ Gary Wade, planner, City of Burlington, personal communication, January 9, 1992.

Conflict Resolution

The decision-making mechanisms envisioned by the NEPDA are for the most part based on the standard adversarial model. One illustration of how the Act presupposes that there will be no cooperation centres on section 15, which provides means of bringing local official plans into conformity with the NEP. Section 15 allows municipalities to submit proposals to the minister to resolve conflicts in situations where the local zoning by-law conflicts with the NEP. If there is no submission, or if the proposal does not resolve the conflict to the minister's satisfaction, the minister can amend the local by-law.

In the conformity efforts undertaken so far, a cooperative approach has been used which resulted in agreement between the upper tier municipalities and the NEC on the required local plan or by-law amendments.⁵⁶ However, the Act contains no provision clearly empowering the minister to amend these local instruments when there is agreement. The agreement-seeking approach that has been favoured in practice is not always well suited to ensure preservation and enhancement of the escarpment. Compromises have been pursued in some cases to achieve conformity under section 15 where there was disagreement on the interpretation of local plans. One example is the "Grey County deal" in which agreement was pursued to the apparent detriment of plan objectives, and in the author's opinion.⁵⁷

The actual process for development permits can end up being quite cooperative. If an applicant submits a development permit application which does not quite satisfy the plan, staff will advise the applicant on how the application could be modified to conform with the plan. This could involve moving a building to a less sensitive portion of the site, changing the layout of driveways, or modifying the design of a structure. Often a proposed development will be revised several times through such a process before it is presented to the commission.

A person who objects to a proposed development creates conflict. In a rural area with a close-knit community, forcing a hearing can have significant implications. It violates the widely-held notion that the property owner may act unrestrained by outside considerations, and may result in the plaintiff being ostracised and subjected to threats to property or self. These are significant deterrents to launching appeals. Such difficulties are most effectively avoided by adoption and consistent application of clearly defined decision-making criteria.

The hearings stages of the plan approval process and of the five year review have been bitterly adversarial. The economic interests involved and the fundamental conflict in values are so intense that a more cooperative approach does not seem to hold promise, although it would be very desirable.

Priority Setting

The commission has developed procedures for focusing on the issues of greatest importance. For instance, applications to be considered at a commission meeting are divided by staff into separate packages. Major applications which each require careful

⁵⁶ Cecil Louis, personal communication, January 8, 1992.

⁵⁷ The NEC had been using the Grey County Official Plan as a basis for refusing to issue development permits in some consent cases in the county, since the official plan was more stringent than the NEP. Grey County was ignoring its plan at the time and in the commission's view, granting inappropriate consents, that the NEC would then appeal. The minister wrote to NEC on May 2, 1989 instructing the commission to negotiate a settlement. In effect this amounted to forcing NEC to ignore the Grey Plan. Since the NEP provides that if a local plan is more restrictive, the more restrictive criteria apply, the deal resulted in a loosening of development restrictions.

scrutiny because substantive issues are raised or because the development is significant are separate from routine applications. Routine applications for which approval is recommended are treated and approved as a batch, although commissioners often request that one or two of the routine applications be removed from the batch to be discussed and considered individually. Since 1983, the commission has sought authority to delegate internally the approval of routine applications, but so far each application must be considered by the commission as a whole.⁵⁸

To avoid being buried by the constant flow of applications requiring approval, the commission holds regular policy meetings where the larger issues are examined. At these meetings the commission has considered issues ranging from recognizing heritage resources in the plan to determining the fate of farmer retirement lots. These meetings have resulted in the commission deciding to initiate plan amendments or put forth proposals at the five year review, and have changed the way the commission hears from potential applicants. The commission has now considered more than 50 policies to provide for greater guidance and consistency in its decision making, and to identify needed changes to the plan and to the Act.

Implementation of Decisions

The commission issues roughly 1000 development permits per year. Ensuring that the conditions attached to these decisions are properly implemented represents an essential component of the planning effort. As well, the commission must ensure that development is not occurring without the commission's knowledge or approval and must, if it detects any such development, take action to ensure compliance with the legislated requirements.

Each development permit comes with standard conditions, respecting the length of time a permit is valid, and specifying that the permit will be null and void if conditions are breached. For typical applications involving a dwelling, there are conditions on the septic system (suggested by the local health unit), restrictions on tree cutting and grading, simple site plan requirements, conditions that must be met before a building permit may be issued by the local municipality, and a recommendation that in any landscaping work, "major trees, species native to the area - e.g. cedar, maple, beech, ash, birch and pine - should be used rather than exotic species." In such instances, commission staff visit the site once construction has begun to see if conditions are adhered to. Due to the limited time available to staff for inspections, the site visits are often cursory examinations. Since other agencies are also involved (e.g. the NEC builds in the requirement that the conditions must be met before the building permit can be issued, and the health unit gives final approval to the septic system) any major deviation from the conditions has a good chance of being detected. The NEC has also hired summer students to review compliance with conditions.⁵⁹

In the early stages of plan implementation, the commission frequently complained that it lacked resources for enforcement and monitoring. A number of developments have been discovered that were proceeding without permits, including a large nuclear fall-out shelter built with 43 buried buses, and a farmer who was caught allowing dozens of truck loads of waste to be dumped on his fields.

When violations are discovered, the commission usually treats them very seriously. The owner is asked to submit a development permit application. If the permit is refused by the commission (or, on appeal, by the minister), the owner is deemed to be in violation of the

⁵⁸ Cresap, *Niagara Escarpment Program Evaluation Final Report*, page II-9

⁵⁹ Keith Jordan, personal communication, January 8, 1992.

plan and the Act, and court action is often initiated. The commission is patient in cases where the developments in question were allowed for by the plan and the owners were merely in ignorance of the proper procedure. So long as the owners submit the necessary applications once the plan's requirements are brought to their attention, the commission is generally satisfied.

Frequently, violations are noticed and reported by neighbouring property owners. The NEC's ability to enforce the plan is limited because the NEPDA does not give staff the authority to go onto private property for a site inspection. The commission has stated that the offence provisions of the NEPDA are insufficient. The Act makes no provision for offences other than the failure to obtain a development permit. If a developer refuses to comply with a restoration order, there is no fine and the NEC's only recourse is to seek a court order for restoration. If this order is ignored, the landowner is in contempt of court, and can therefore be subject to court-imposed penalties.

Information Needs

For proper planning, the commission requires adequate baseline information as grounds for decision making on individual cases, and for identifying overall changes, including successes and failures, that have implications for plan reform. As well, the commission needs monitoring and reporting data for assessing individual case compliance and overall plan implementation performance. All of these information needs are interdisciplinary, involving legal information such as the location of approved lots or the provisions of local plans and by-laws; environmental data on water quality, site classifications and resource inventories; and social information on matters such as historic sites and existing infrastructure.

Currently existing information is typically held in many different sites, including local municipal offices, land registries and health units, as well as the offices of various ministries including Environment, Municipal Affairs, Natural Resources, and Culture, and agencies such as conservation authorities. Much of this information has never been assembled together, and what has been collected has rarely been integrated, in part because the initial information gathering has not been well-enough coordinated to ensure the results are reported in sufficiently consistent and comparable ways to allow for successful integration.

In addition to strengthening the base for decision making, better information could assist efforts to increase public support for escarpment planning measures. By making baseline and predictive information available to the public in easy to interpret formats, greater understanding of the value of planning controls might be achieved. If landowners could see the special resources of their area (such as the presence of a wildlife corridor or a ground water recharge zone) they might be more likely to support restrictions to protect these resources.

The need for good baseline data has not always been well understood in official circles, however. In one meeting between CONE's executive and officials of Municipal Affairs in 1989, the most senior official's reaction to the argument for gathering baseline information was: "I call that bean counting. What will you do when you know how many beans there are?"

The commission has been successful in gathering information from a variety of sources in considering individual applications. The commission circulates development proposals to affected agencies and obtains comments. By gathering information on agricultural, environmental, natural resource and other matters and considering this information in staff reports, the commission can often approximate an integrated assessment of the impact of

proposed development. Moreover, the collected information appears to have been reasonably accurate. There have been very few instances where substantive errors in staff reports have required correction.

Nevertheless, the commission has recognized the importance of developing a stronger information base. After plan approval in 1985, plan implementation proceeded without adequate baseline information. As the first five year review approached, the commission, CONE and other preservationist organizations argued that the government should urgently initiate the collection of baseline information, already compromised by development which had occurred since the plan's approval. Among the most crucial areas for concentration are the following:

- escarpment surface and ground water quality, including wetlands;
- habitats, wildlife and wildlife corridors;
- vegetation, forest resources;
- agricultural resources;
- density of development; and
- the interrelationships among the above components.

The commission has also recognized needs for predictions based on the information. For instance, the NEC conducted a study to foresee the impact if all existing lots of record were developed in the Beaver Valley, to determine if additional severances could be permitted while achieving plan objectives. The commission has done a similar exercise in examining its severance policies for the five year review.⁶⁰

There have been problems even when information is available. One instance centres on comments from the Ministry of Agriculture and Food on the interpretation of their Foodland Guidelines. When the commission ignored the ministry's comments (and its own staff recommendations) and the ministry did not appeal the NEC's decisions,⁶¹ the commission began to feel that the ministry's comments could not be taken seriously.⁶² This instance shows how access to information on its own will not achieve good planning, if there is no commitment to use the information.

Cost Effectiveness of the Planning Effort

It should be obvious that planning for the escarpment creates special needs. The plan covers a large area, deals with many jurisdictions, and is designed to protect very significant natural features. The overall escarpment program also aims to buy and protect the most sensitive lands. All of this costs money.

Any assessment of the cost effectiveness of a planning effort will depend partly on the assessor's assignment of value to the resources being preserved by the planning effort. In the case of the Niagara Escarpment Plan, some would feel that any money spent would be too much, others would be willing to invest substantial sums.

If it is assumed that the purpose and objectives of the NEPDA are worthwhile several questions remain. Is the public getting its money worth? Or is the process inefficient, full

⁶⁰ The NEC prepared a number of background papers for the five year review. *Retirement Lot Policy*, *Second Dwellings*, *New Lots for Agricultural Purposes*, and *Plans of Subdivision* all deal with this issue.

⁶¹ Ministry staff explained to the NEC that they only had the resources to appeal the five or six worst cases across Ontario to use as examples.

⁶² The NEC's five year review proposals would delete reference to the foodland guidelines.

of duplication, and wasted resources? How does its performance compare with that of other planning regimes?

During 1973-85, the plan development stage, the Commission's budget totalled \$17 million.⁶³ The costs for other government agencies, hearings and the cost of land acquisition are not reflected in the commission's budget.⁶⁴ This cost should not be extrapolated to other planning efforts if the NEC model were to be used elsewhere, as plan development could hopefully proceed quicker, in a less adversarial and more efficient way.

The current annual budget for the NEC is over \$2 million to cover operations, staff wages, commissioners, hearing officers and administrative support. In 1988-89 the ministries of Municipal Affairs, Culture and Communications, and Natural Resources had an equivalent of 16 full time staff working on implementation. The total expenditure of public funds by the Ontario government for the Niagara Escarpment program in 1988-89 was \$5.1 million.⁶⁵ In addition, \$25 million was set aside for the ten year period 1985-95 for land acquisition.

Complying with the NEP appears to add costs to the planning efforts of local and regional municipalities as these bodies must comment on development permits, conduct site visits, participate in hearings, and consider plan amendments. The senior planner for the town of Caledon estimates that the plan requires an additional 2 staff days per week⁶⁶, and a planner for the City of Burlington agrees that because of the NEP an additional effort is required by the City, but "not an overly significant commitment."⁶⁷

Added to the above costs are the expenses of five year reviews, special studies and costs borne by landowners in complying with the plan, and burdens on other residents. The Ministry of Housing has estimated that the revisions proposed by the NEC at the five year review will raise the costs of a house in Toronto by \$2300, and other ministries have identified higher costs for roads resulting in higher municipal taxes. But there are reasons for doubts about these estimates.⁶⁸

The direct and indirect costs associated with the Niagara Escarpment planning effort are fairly easy to calculate and are often bandied about in public. But the dollar value of the benefits that this effort provides is much more difficult to calculate. The NEP should result in decreased need for expenditures for environmental remediation. For example, with poor planning ground water is easily contaminated, services inefficiently used, and natural resources lost. The preservation of the escarpment has obvious benefits for tourism and recreation, and it provides much needed "breathing space" in Central Ontario. Many of these benefits are simply unquantifiable, at least not in dollars.

CONE has argued in the past that some of the limited resources available to the commission are poorly allocated. For instance, the development awards program, which

⁶³ The figures here are from the Niagara Escarpment Commission.

⁶⁴ Cecil Louis, Personal communication, January 8, 1992.

⁶⁵ Cresap, *Niagara Escarpment Program Evaluation Final Report*.

⁶⁶ D. Renzella, senior planner, Town of Caledon, personal communication, January 9, 1992.

⁶⁷ Gary Wade, planner, City of Burlington, personal communication, January 9, 1992.

⁶⁸ The author was formerly a researcher for the now defunct Foundation for Aggregate Studies. The aggregate industry and MNR have been calculating the expected costs resulting from the NEP (and any other restrictions) for many years. However, the assumptions for depletion of existing pits and for the increased distances to access substitute sources are questionable.

recognizes landowners who develop their property with sensitivity for the environment, sends out mixed messages. The well-off property owner who builds a large house, carefully integrating it into the landscape, is a good candidate for the award. The small farmer who maintains his century home just the way it always was receives no recognition. Nor does the landowner who leaves his or her property undeveloped. The commission has also spent significant amounts of money on municipal and public interest forums which CONE felt were not in the NEC's mandate (since participants at forums were led to understand that changes would be made to the plan before the five year review) and which added municipal pressure to weaken the plan. But these are relatively small matters.

Overall, is the public getting good value for its money? During an Ontario legislature estimates hearing, the Progressive Conservative critic on escarpment issues, Norman Sterling, drew the following conclusion:

All I can say is that for \$2 million, in terms of land use and planning, you are probably getting the best deal anywhere in Ontario with regard to what this commission has done for 44 municipalities, for 440 kilometres [sic] of a beautiful part of our province. I think you are getting one hell of a deal because you have some really outstanding people working for the commission who have been there a long time. I tell you, if they did not believe in it, they would have left a long time ago because of the pressures and the work they put out.⁶⁹

In the author's assessment, the Niagara Escarpment planning effort has been good value. It would have been excellent value over the first five years had the government properly undertaken implementation and the commission more closely followed the plan.

Updating

To keep up to date, a planning process like that for the Niagara Escarpment must be iterative, that is to say it must incorporate knowledge gained from experience, and adjust to new information.

Learning from Experience

The NEP has a built-in mechanism for learning from experience - the review to be carried out every five years provided for by section 17 of the NEPDA. The Act does not define the purpose of the five year review, but the review may either result in the plan being confirmed or modified. The first five year review shows that this provision has been taken seriously by the commission, and that it has discovered much room for improvement. The commission has proposed many changes, including:

- adding a purpose to the land use policies;
- requiring justification, including public need, for amendments to the NEP;
- not allowing any new mineral resource extraction areas, except for municipal pits;
- defining "after uses" for pits and quarries;
- including cultural heritage as a resource to be protected;
- deleting provisions for farmer retirement lots and tightening other provisions for lot creation;
- tightening provisions for ponds;
- formally including the siting of the Bruce Trail as a planing objective;
- making recreational development more in keeping with the spirit of the plan; and
- further restricting development on escarpment slopes, linking this to the need "to maintain the escarpment as a continuous natural environment."

⁶⁹ *Hansard*, First Session, 34th Parliament, December 15, 1988, p.G-340. The figure of 440 would be correct in miles.

These changes were prepared on the basis of 21 policy reports prepared by the commission on issues such as municipal official plans, density approach, retirement lots, second dwellings, infilling, plans of subdivision, contour changes, and comments received.

The commission did not wait until the five year review to consider improvements to the NEP. When either commissioners or staff identified a persistent issue that required further analysis, or a new issue that required detailed investigation, a staff report was prepared for discussion during policy meetings. In some cases a subcommittee was set up. These procedures have worked well, but they cannot be used to assess and learn from the performance of the commission itself, as an arm's-length relationship is required between the reviewer and the reviewed.

On occasion, staff have reported to the commission certain trends in its decision making (for instance, the effect of an applicant's appearance on the outcome of their case) and recommended means to improve a situation. But this is of limited value if the commissioners have decided they do not agree with the plan and are going to vote against it. For this reason, the ability of both the minister and neighbouring landowners to appeal a development permit approval is important and should be broadened to include any landowner or public interest group. The informal checks and balances, such as the scrutiny by CONE, the legislature and local escarpment groups have also been very important.

The commission has also done some negative learning from experience. When it ignored comments from Agriculture and Food, and there was no appeal, it took the comments much less seriously and proceeded to allow the creation of additional lots.

New Information

Since the NEPDA's passage in 1973, and even since the plan's approval in 1985, there has been a great increase in environmental knowledge, and further evidence of the serious problems that confront our ecosystem. There are shifts in public priorities. How well does the planning regime adopt to new information?

In the first five years of the plan, the commission learned that the small, scrawny cedars along escarpment cliffs were ancient relics. In some areas these trees were being cut to provide lookouts along trails or in parks. They were also being damaged by heavy traffic of walkers and climbers. The commission invited the scientist studying these trees to make a presentation, so that they would understand how protection could be achieved. The commission intends to develop policies to protect these trees, but given financial restraints it is unable to retain a consultant to develop such policies.⁷⁰

On the whole it would appear that the planning process and the informal mechanisms that have been developed enable the commission to remain up to date.

Boundaries

There are mixed views on the adequacy of the Niagara Escarpment Plan boundaries to protect the resource in question. One of the key strengths of the plan is that its boundaries were specifically designed to protect an environmental feature, rather than following arbitrary administrative boundaries. Unfortunately, not enough of the escarpment area is included within the boundaries of the plan to protect the escarpment's features and values adequately. In addition, there are questions about the intersection of escarpment planning

⁷⁰ Cecil Louis, personal communication, January 9, 1992.

boundaries with the boundaries of associated ecological features, including the Oak Ridges Moraine and the several watersheds which have headwaters in the escarpment area.

When Ontario municipalities and counties were set up, their boundaries were based on the work of early surveyors who favoured straight lines placed regular distances apart, with little or no relation to ecological realities. The Niagara Escarpment was divided among many counties and regions, municipalities and conservation authorities. Similarly, other ecological areas, for example watersheds in the province are often divided among under several jurisdictions. In such circumstances, it is difficult to ensure that consistent decisions are made that will maintain the health of the area. Even a jurisdiction with exceptional environmental commitment would find it a major challenge to address the impacts that its activities might have in other jurisdictions and keep track of those activities of its neighbours that may have trans-boundary impacts.

While the Niagara Escarpment Plan's boundaries are based on the resource to be protected, they do not encompass it sufficiently.⁷¹ It is not clear that the plan contains the critical land mass needed to maintain healthy ecosystems. The planning boundaries for the escarpment suffered from the political backlash that occurred when the plan was announced and two thirds of the original planning area were removed. Even a cursory examination of the NEP maps will show that the excluded areas include headwaters of streams, valleys and other escarpment features (e.g. outliers) were removed from the plan's protection, seriously compromising the ability of the plan to meet its objectives. Those parts of the escarpment area left outside the NEP boundaries are vulnerable to the development policies of the municipalities whose land abuts the NEP. Recently, there have been moves by citizens to add land back into the plan to ensure its protection.

The watersheds involved pose special boundary problems. Some bioregionalists have argued that land use planning should be on a watershed basis. The NEP clearly takes a different approach, focused on protecting the natural environment of the escarpment and lands in its vicinity. It contains portions of several watersheds, but it is not designed to protect any entire watershed. However, there are good reasons for watershed-based planning and as the province begins to recognize the advantages of developing watershed plans, there will be need for the NEC to links its efforts with those centred on the watersheds that lie in part in the escarpment planning area.

Further links beyond the existing boundaries of the NEP will be increasingly necessary as the province responds to public pressure to establish some kind of special planning regime for the Oak Ridges Moraine, a similarly significant landform which runs east from the escarpment.

Ensuring consistency among overlapping or adjoining environmentally-based plans is likely to become an increasingly important challenge for the commission. Plans for watersheds and for features such as the escarpment and moraine are likely to have much in common despite the varying landscapes that they are meant to protect. Each aims to maintain natural areas, be concerned about water resources, and seek to restrict and direct development. It is therefore unlikely that there will be significant conflicts. However, there are likely to be situations where neighbouring landowners under different plans may face different development restrictions despite having similar properties. Such inconsistencies

⁷¹ The discussion here addresses only the perimeter boundaries of the NEP area. The internal boundaries of zones in the plan, which dictate the degree of protection to be afforded to land, must also be environmentally based. It is beyond the scope of this case study to ascertain whether these boundaries have been appropriately applied.

can contribute significantly to negative public attitudes to environmental planning and efforts to avoid them are well justified.

Cumulative Effects

It is now well recognized that environmentally-enlightened planning must incorporate mechanisms to identify and respond to the cumulative or overall effects of existing and new activities. However, there is no agreement on a definition of cumulative effects, and no clearly effective method for assessing cumulative effects is available to planners and decision makers.⁷² As a result it is difficult to evaluate how well the NEP has succeeded so far in incorporating cumulative effects considerations into its decision making.

In the discussions and conclusion of a 1985 workshop on cumulative effects, cumulative effects were divided into five different classifications: time-crowded perturbations, space-crowded perturbations, synergisms, indirect effects and nibbling.⁷³ Although each of these can be an issue in land use planning, the space-crowded and nibbling effects of development are probably the most important to address on the escarpment.

The plan requires that "the cumulative impact of development will not have serious detrimental effects on the escarpment environment (e.g. water quality, vegetation, soil, wildlife, and landscape)."⁷⁴ This poses a considerable challenge since the established decision making process is not suited to the task of anticipating and avoiding cumulative impacts:

- planning approvals for new "development" traditionally occur on a case by case basis;
- each severance brings with it a potential for a range of environmental impacts, such as:
 - further development (a new dwelling and associated structures),
 - the need for water and disposal of sewage,
 - servicing infrastructure (hydro, road access, waste disposal),
 - increased resource use (recreation, harvesting wood for heating),
 - potential land use conflicts,
 - habitat fragmentation and alienation,
 - potential use of pesticides in gardens, conversions to exotic species, and
 - clearing land to improve views;
- the above impacts are considered by a variety of agencies, and some do not fall within the mandate of any agency and are not given consideration;
- the interactions between impacts are rarely considered; and
- each of the impacts may be minor for a single development, but when multiplied by all other similar developments along the scarp a cumulative effect may be noticed, unfortunately too late to prevent damage.

⁷² The Environmental Assessment Advisory Committee spelled out this difficulty in its review of planning in Grey County as follows:

"The term 'cumulative effects' is presently used to describe environmental impacts of land uses in a variety of different contexts without a clear consensus about its meaning in the specific context of Ontario's planning and approval process. Not surprising then there is no clear understanding of the term or of appropriate, accepted methodologies which can be used to determine cumulative effects."

- Environmental Assessment Advisory Committee, *Environmental Planning and Approvals in Grey County*, December 28, 1990, p.37.

⁷³ Canadian Environmental Assessment Research Council, *Cumulative Environmental Effects: a binational perspective*, workshop proceedings(Ottawa: CEARC, 1986).

⁷⁴ NEP, 2.2 General Development Criteria 1(b).

It would be prohibitively time consuming and expensive, as well as ineffective, to conduct a cumulative impact assessment for each development proposed for the escarpment. Fortunately, there is an alternative approach to ensuring that the plan adequately addresses the issue of cumulative effects. It centres on the setting of overall limits defining the total development potential accepted in (parts of) the plan.. If such limits were set conservatively, based on a careful evaluation of carrying capacity and potential cumulative effects, and if the plan were rigorously followed, it should be possible to avoid degradation through the cumulative effects of individual decisions.

To some degree, the plan's design was based on cumulative effects, since it sets limits for development in the different land use designations. But most municipal official plans set development limits, and most of these plans cannot be said to satisfy the need to consider cumulative effects. Clearly more is needed than preset limits. Development limits must be based on an assessment of the environment's carrying capacity, rather than on a planner's vision of the ideal density for different neighbourhoods as is the case in many official plans.

In the case of the NEP, the densities are environmentally based, since the more natural an area is the lower its development potential. However, the lot creation policies reflect the political realities of the 1980s. The provision for an additional lot for a retiring farmer reflects a societal and not an environmental value. The accepted density potential is the same for very different portions of the escarpment. It is doubtful whether the escarpment could withstand all the lot creation potential provided for by the 1985 plan. However, more stringent policies would not have gained the necessary political support. The commission's restrictions on new lots proposed for the five year review reflect a realization that the cumulative impacts of severances under the 1985 plan would have been unacceptable.

The plan cannot realistically provide for all circumstances. Cumulative effects from anticipated development could be radically altered by variations in development outside the plan's boundaries. The commission has been concerned about the suitability and capacity for artificial ponds on the escarpment. A new dam or other development on a river flowing into the escarpment area could significantly affect the individual and cumulative impacts of the ponds. Even without outside perturbations, monitoring may show that ponds are having unanticipated cumulative effects (for instance, causing streams to become too warm, or causing unacceptable risk of dam breakage where an upstream dam breaks and ruptures others downstream). For this reason, to address cumulative effects solely by setting development limits based on a thorough consideration of potential cumulative impacts is insufficient, and the planning instrument should provide for consideration of cumulative effects as one of the criteria for making any decisions. This would not mean that a cumulative effects study would always be required, but it would allow for rejecting a development based on such a consideration.

While the plan provides for the consideration of cumulative effects for each development, does it occur in practice other than through the mechanism of setting out patterns of development? How often have staff recommendations and commission decisions been based on cumulative effects?

In the case of new lots or development permits for the construction of dwellings, NEC staff comments on cumulative effects rarely appear. If the new lot is allowed by the plan, or the lot doesn't have a dwelling, the application is generally recommended for approval. In these instances, the question becomes where the new lot should be created, its size, where the house should be built on the lot, and what conditions need to be applied to protect the escarpment.

The commission has also had to deal with a number of more significant developments such as subdivisions, factories, quarrying operations, and landfills. In these instances, cumulative effects are likely to be considered by staff in their reports. Unlike participants at hearings before the Ontario Municipal Board under the *Planning Act*, participants at hearings under the NEPDA may argue on the basis of cumulative effects.⁷⁵

Part of the difficulty with dealing with the issue of cumulative effects is that it is a poorly understood and difficult to implement concept that requires more research. Legislation or plans that provide for consideration of cumulative effects need to be accompanied by guidance for staff, commissioners, hearing officers, and the minister how practically to address cumulative effects. As noted above (concerning information needs), adequate baseline data are also needed if the decision makers are to know what environmental stresses have already resulted and what further development may safely be permitted.

Durability

If the Niagara Escarpment planning effort is being undertaken to achieve the maintenance of the escarpment for future generations (and for its own sake), the planning process will need to maintain societal support for a long period of time. Perhaps as economic penalties for preservation and incentives for development are changed, and as society adopts a stronger land ethic, there will be less need for such a regulatory framework. But even with these changes, planning will still be needed.

The plan is vulnerable in several ways. A weak commission, hearing officers, or minister can influence the outcome of decisions and/or policy development. The commission's responsibilities could be delegated to upper tier municipal authorities, resulting in inconsistent implementation, or worse if regions or counties are hostile to the plan. Opposition to the plan (and to planning generally) continues to be found in a large portion of the populace. Finally, the five year review process allows for the entire plan to be reconsidered every five years (unless limited terms of reference are set by the minister), giving frequent opportunities for attack.

At the same time the plan has some evident durability. Now that the plan is in place, formally stopping the planning effort would require cabinet and legislative action to abolish the NEP planning area a politically contentious move given that all three parties have consistently given official support for the planning effort. Moreover, the commission has shown that it is monitoring its progress and making some of the necessary adjustments to keep the planning effort effective.

Despite its vulnerabilities, the NEP may well survive. However, the controversies and political headaches have been great enough that governments are likely to be very hesitant to become so deeply involved in another such planning effort, despite the tremendous benefits. This has important implications for the value of the Niagara Escarpment model for application elsewhere.

The Escarpment Package

⁷⁵ Local official plans could provide for the consideration of cumulative effects, but this may not be sufficient without an amendment to the *Planning Act*. Under the old *Pits and Quarries Control Act* the OMB has been unwilling to consider cumulative effects even though the Act and *Provincial Aggregate Resources Policy Statement* provided that the concentration of pits in an area should be examined.

While this case study focuses on the planning aspects of the overall effort to preserve the Niagara Escarpment, it should be recalled that the Gertler report, which initially identified the steps necessary to protect the escarpment, proposed a multi-prong approach. Gertler was convinced that land use regulation would not be enough. Accordingly, he recommended that significant lands be acquired and that a multipurpose park system be established.

The escarpment package's real strengths are that the NEP follows the length of the feature that it is designed to protect, that responsibility for the escarpment is for the most part brought together under one decision-making body, that avoidance of cumulative effects is one of the concepts on which the plan is based, and that the plan contains an environmental vision with objectives for aesthetics, water quality and other natural features. But because the plan boundaries do not include enough of the escarpment area to ensure protection and because of the limitations of development controls within the plan area, the land acquisition and park system components of the escarpment package are potentially important means of strengthening overall protection.

Two questions are central to evaluating the land acquisition and park system efforts: are the necessary lands being acquired; and, once acquired, are the lands being managed in an environmentally appropriate manner?

The budget allocated for land acquisition on the Niagara Escarpment was \$25 million over a ten year period. Land is also acquired through donations and with funding secured by the non-profit sector. In the period up to 1990, 2356 hectares of land and 28.4 km of Bruce Trail corridor were acquired. An additional 7579 hectares of lands and 437 km of trail corridor have been targeted for acquisition. Extrapolating from these figures suggests that there is insufficient funding to meet land acquisition targets. Meanwhile, land in private hands may be developed. Either more money or other mechanisms will be needed. There is also disturbing evidence that once land is acquired by the province or its agencies, the land is not necessarily managed in an environmentally appropriate manner, partially due to the resource mentality of the Ministry of Natural Resources and conservation authorities.

The effectiveness of the overall effort to preserve the Niagara Escarpment is therefore compromised by the slow rate of land acquisition, and by inappropriate management prescriptions for public lands.

What to Copy, What to Avoid, What to Change

The above analysis provides some grounds for adopting the Niagara Escarpment legislation and plan as a general model for application in similar environmentally-based planning efforts. But it is also clear that the Niagara Escarpment approach would need adjustment to correct evident weaknesses as well as to fit the particular circumstance of another area.

The main features of the NEPDA and NEP that are worth copying are as follows:

- The purpose and objectives section in implementing legislation has been very useful in keeping the entire planning program on track, and have proven to be very valuable for lobbying and during hearings.
- The boundaries of the plan are largely based on the natural feature they are designed to protect, although many important portions are missing as a result of plan area reductions.
- The development criteria cover environmental considerations, including cumulative effects; they provide clear direction to decision-makers.

- The hearings process makes involvement by neighbouring property owners effective in routine cases, and sound recommendations generally result.
- The recognition that there is a broader provincial (and even international) interest in protecting the escarpment that takes precedence over local priorities reflects the responsibility to maintain a healthy biosphere.
- The built-in process for monitoring change and adjusting the plan helps ensure the plan's long term effectiveness.
- The purchase of key environmentally significant properties by fee simple acquisitions, donations, and easements has been crucial.
- The Conservation Land Tax Reduction program to compensate landowners in the Escarpment Natural designation for preserving their lands has provided an important incentive for maintaining environmental quality.

These are accompanied by liabilities to be avoided. The main problems are as follows:

- Appointments to the commission are easily politicized, and commissioners can be appointed without any relevant skill or knowledge and with a background of blatant opposition to the plan. Moreover, because the appointment process was closed to public scrutiny until recently, intense lobbying was needed to protect the plan.
- The process used to develop the plan, and the misinformation that abounded, resulted in harmful opposition based on an incorrect understanding of how the plan would affect rights and property values.
- Baseline data to evaluate the functioning of the plan were not collected.
- There were inadequate resources for enforcement.
- The plan was initially assigned to the Ministry of Municipal Affairs, resulting in a conflict of interest.
- The roles and responsibilities of the many ministries and agencies involved in implementing the plan were poorly defined and distributed, resulting in conflicting priorities and wasted resources.
- Associated parts of the Niagara Escarpment program (such as revisions to the forest management regulations) have yet to be implemented.

Finally there are areas where reforms would greatly enhance the value of the Niagara Escarpment planning approach as a model for application elsewhere. These include the following:

- The plan could more directly address how the continuity of the escarpment will be guaranteed.
- The commission should be smaller. A decision making body which represents not only local interests but also the provincial interest has merit. However, the NEC is unnecessarily large, especially for considering routine permit applications.
- A process for ensuring that the commissioners are appointed based on merit is required. Direct election of commissioners representing the areas covered by the plan might be advantageous, as might a system which encourages some competition between regions in suggesting candidates, but these options require careful review.
- The law should provide for intervenor funding in significant hearings.
- The NEPDA's requirement that local plans must be brought into conformity appears to be costly without much benefit.
- The commission's individual decisions need to be monitored to see if the provincial interest is being met. Appeals should be launched by the minister when needed.
- Any environmentally-based plan also needs consistent monitoring of overall, cumulative effects (based on comparison with adequate baseline data) to assess performance and to allow sound adjustments to provisions of the plan.

Even with the above modifications, the NEPDA and NEP cannot guarantee the preservation of the escarpment. Obviously, even the best legislation and plan are of no avail if they are ignored by the government and agencies whose duty it is to implement them, if the decision-making body is composed of poorly qualified or uncommitted individuals, if economic and other pressures to ignore the plan are simply too great, or if other aspects of the overall preservation effort such as land acquisition and management are improperly carried out.

The escarpment suffered from these problems during the 1987-90 period, when the majority Liberal government did not see the escarpment as a priority but rather as a problem. With the economic boom providing money for development and increasing the demand for vacation properties, compounded by a depressed farm economy where farmers could make a better living parcelling up the land than trying to coax a decent income from agriculture, the escarpment's future looked bleak.

That same period showed that a basically sound planning instrument could be used by advocates even if the government was unwilling to act. Land can always be developed; once developed it is difficult if not impossible to restore to a natural state. There is therefore a requirement for eternal vigilance. Without the plan, advocates would have to monitor every development to assess its impact on the escarpment. With the plan, monitoring is still necessary, but only to ensure that the plan and the planning process are being followed and achieving their objectives.

Conclusions

The Niagara Escarpment Plan can be seen as achieving environmental planning successfully but with major imperfections and weaknesses. Can the model be applied in other areas of Ontario? Governments are likely to be extremely hesitant to engage in such an extensive and political planning exercise, unless there is extremely strong pressure to do so.⁷⁶ The model would therefore be more useful in a few specific instances, such as protecting another major natural feature for which significant public support can be mobilized, such as the Oak Ridges Moraine, rather than being applied as a model for each environmentally significant feature or for comprehensive environmental planning across the province.

If the model were to be used elsewhere, it should be significantly amended. These amendments would seek to ensure that the decision-makers would be well qualified, that the appointment process would be open to public scrutiny,⁷⁷ that the plan development process would be less cumbersome and more likely to gain the support of the landowners it would effect, and that the planning area would truly protect the area in question. In implementing the modified plan, one would look for the up-front identification of baseline environmental conditions and collection of appropriate baseline data, and a monitoring process to ensure the plan was being properly implemented and achieving its goals.

The success of a plan depends on the players involved. Until economic forces truly incorporate environmental considerations, there will always be the need for an advocate for

⁷⁶ The author agrees with the assessment in E.B. Peterson et al., *Cumulative Effects Assessment in Canada: an Agenda for Action and Research* (Ottawa: Canadian Environmental Assessment Research Council, 1987), p.16.

⁷⁷ The procedure now used by the NDP government allows potential commissioners to be questioned by a legislative committee, but this is not protected by legislation.

the plan, a watchdog organization, most likely made up of those who insisted on the need for the plan in the first place.

There are also lessons that can be applied across Ontario. The quality and knowledge of commissioners has a great bearing on the effectiveness of the plan. There have been calls for many years for better appointments to other planning decision-making bodies, such as the Ontario Municipal Board, whose decisions have a significant effect on the province's landscape.⁷⁸ Provincial planning legislation could provide for the consideration of cumulative effects in land use planning decisions, so that each development would not be considered in total isolation and opponents could raise issues of cumulative effect. The hearings process for planning disputes should be made more accessible, so that neighbours will be more likely to file an objection and challenge inappropriate development.⁷⁹ Government agencies are extremely reluctant to object to the Ontario Municipal Board, because of the cost and effort involved. Empowering those who will feel the effects of development to have a greater say in the decision making will be a more cost-effective way of ensuring that land use planning is sensitive to the environment.

The resistance to environmental planning experienced in the development and implementation of the NEP could have been reduced in several ways. By providing for a public consultation process in the development of the plan, it is likely that many of the misconceptions of the plan's implications could have been avoided and support for the plan increased.⁸⁰ The plan has not, after all, fulfilled the dire predictions of plan-bashers: you can paint your house any colour you want, and property values have not plummeted. On the contrary, in the escarpment area property values have performed well because buyers know that neighbouring properties are limited in their development potential. The hearings process and the hearing officers appointed for the initial review of the proposed plan were two factors strongly weighted against the plan, and the hearing officers' report provided unjustifiable recommendations gutting the plan, providing yet another unneeded challenge.

Broader political issues will have to be resolved if environmental planning is to succeed. Farmers need to be made allies in the quest for environmentally-based planning. For this they will need a decent return on their labour, and perhaps compensation for foregoing development, through such provisions as the purchase of development rights.

Property speculators serve no societal purpose and often contribute to environmental degradation, but can make tremendous financial gains if the planning instrument is weak. If the financial attractiveness of property speculation were decreased through high tax rates on capital gains on land sales or other such mechanisms, the pressure to weaken planning instruments would be lessened.

⁷⁸ The Canadian Environmental Law Association, Citizens for the Reform of the Ontario Municipal Board, Preservation of Agricultural Lands Society, and Women Plan Toronto are some of the organizations which have advocated such changes.

⁷⁹ There are a number of changes that could be made to the Ontario Municipal Board to make it more accessible. At present the Board has regressive cost guidelines and no provisions for intervenor funding; it can be highly intimidating to those appearing without counsel; in the past appointments have not been very inspiring and board members have displayed blatant disregard for or ignorance of environmental considerations.

⁸⁰ The development of the plan involved the public at many stages, but usually in a commenting or reacting mode. By involving the public in drafting future plans by starting early in the process with agreeing on objectives and principles, the strong backlash experienced by the NEP might be avoided in the future.

Property taxes create a disincentive to allowing land to remain in an undeveloped state, as the landowner must pay for the land while it produces no direct economic return. There is in effect a double disincentive, as the municipality depends on property tax revenues for its funding, so the greater the intensity of development, the greater the perceived tax benefits (although servicing costs may make the net benefit negative). The landowner's dilemma has been partially addressed by the passage of the Ontario Conservation Land Tax Reduction Program, which allows rebates for municipal taxes on property designated Escarpment Natural.

The deteriorated environment in cities creates demand for idyllic escapes within a few hours' driving distance, along with demand for subsidised roads and energy to get to these escapes. If our cities were better able to fulfil the need for contact with nature, there would be less pressure for homes and recreational properties in natural areas.

Municipal politicians have had an unrealistic expectations of the benefits that development brings into an area. Although a development boom can create temporary wealth and jobs, if such development is at the expense of the resource base of the area, and if it causes an inefficient use of municipal services because poor planning was practised, the development boom can create a long term economic and environmental liability. It should also be obvious that the cycle of economic dips followed by desperate promotion of development booms cannot be continued indefinitely, at least not insofar as the "development" entails more intensive land use and more stresses on a vulnerable environment. A more sustainable solution is needed.

The willingness of municipal governments to ignore or modify official plans to encourage development creates a public expectation that planning documents are meant to be changed. This makes the commission's task more difficult. It is seen as inflexible and even dictatorial. Once municipal governments begin to stick by their plans, and it becomes accepted that plans are to be followed, there will be reduced resentment against the NEP or any future such plans.

If provincial planning policy were more environmentally enlightened across the province, there would not be such dramatic differentials in potential development profits between lands regulated by environmental plans such as the NEP and lands regulated by municipal official plans. This would help reduce the landowner's perception that the NEP or similar plans create economic injustice. In addition, if we only achieve a few Niagara Escarpment type plans spread across Ontario, with rampant and inappropriate development in between, we will not have accomplished a significant environmental objective.

More consistent environmental concern in planning would also reduce political disputes. If municipal official plans and provincial planning policies paid greater attention to environmental considerations, local plans would less often conflict with environmentally based plans. Such conflicts give local councillors the argument that their ability to plan is being interfered with as their decisions are frequently overturned or challenged by the higher planning authority.

Alternative means to strengthen and diversify local economies need to be found which complement or do not conflict with environmental planning. The NEC recognized this when it initiated an amendment to the plan to encourage the establishment of bed and breakfast and farm vacation establishments; but more is needed. At the same time, it is important to give due recognition to the benefits, including economic benefits, of environmental protection. While opponents of the NEP often raise the alarm with predictions of increased costs due to the plan, the economic benefits of, for example,

protecting water supplies, wildlife and scenic landscapes, encouraging tourism, and providing for recreation remain unquantified.

The Niagara Escarpment Plan is intended to ensure protection of these benefits, and it does address the issue of cumulative effects which threaten to degrade escarpment values, but with mixed results. At present, cumulative effects are addressed by setting development densities based on environmental criteria, and by providing that the cumulative effects argument may be raised by planning staff, commissioners, opponents or intervenors. This is insufficient. Development limits based on conservatively estimated carrying capacities are required, and these need to be regularly re-examined in light of consistent cumulative effects monitoring. In turn, such monitoring requires more complete and better integrated baseline data than are now available.

While a modified model of the Niagara Escarpment Plan could be used in other areas, proponents of such a planning exercise should be aware that it will take much work over many years, during which time development continues. Once a new plan is in place, some form of continued vigilance is still required to ensure proper implementation.

At present, it appears that provincial and municipal politicians would oppose to such a proposal, based largely on the history of the Niagara Escarpment Plan. This is unfortunate. A second such plan could most definitely be implemented more efficiently with much less public acrimony or political pain. There is now much greater appreciation of the need and urgency for environmental plans. There is also the experience of the Niagara Escarpment Plan to build upon.

In the Niagara Escarpment case, a mere handful of individuals were instrumental in ensuring the plan's implementation. Any area of great environmental significance can surely count on such support. The difficulty is in translating the work of committed individuals into strong public pressure for special planning mechanisms to achieve preservation. Would such energy be better spent seeking other mechanisms to provide for greater environmental protection across the board? The jury is still out. There is no doubt that planning across Ontario needs to become more environmentally enlightened. But nature suggests that a diversity of approaches might offer the most chances of success. Whether the preferred approaches include adoption of Niagara Escarpment type plans for special areas, or rest on amendments and other reforms to create an environmentally-enlightened *Planning Act*, the case of the Niagara Escarpment Plan offers a wealth of useful lessons.