

**The Environmental Assessment and Planning in Ontario Project**

Case Report No. 2

**Environmentally Responsible  
Land-Use Planning: Five Initiatives in the  
Regional Municipality of Waterloo**

by  
Alisa Krause

Department of Environment and Resource Studies  
University of Waterloo  
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## 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. *Environmentally Responsible Land-Use Planning: Five Initiatives in the Regional Municipality of Waterloo* 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.

### *This Case Study: Environmentally Responsible Land-Use Planning: Five Initiatives in the Regional Municipality of Waterloo*

Of all the municipalities in Ontario, the Regional Municipality of Waterloo is perhaps the best example of a municipality which has attempted to bring about environmentally responsible land-use planning within its jurisdiction. Many environmental initiatives have been undertaken which help to preserve and enhance the significant environmental features in the region, even though the Region has not always had sufficient authority to do so, by relying upon the good will of citizens, landowners and developers. Thus, the Region serves as an important example of what other provincial municipalities can achieve given the current package of laws and policies that exist in Ontario. This report describes the often intertwined history of five of the Region's most significant environmental initiatives, evaluates their individual and overall effectiveness, fairness and efficiency, and attempts to make some recommendations based on this. The study was completed in May 1994 and does not address more recent developments.

### The Author

This case study was prepared by Alisa Krause, a recent graduate in Environmental Studies at the University of Waterloo. She also has an honours English degree from Wilfrid Laurier University.

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# Environmentally Responsible Land-Use Planning: Five Initiatives in the Regional Municipality of Waterloo

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# **Environmentally Responsible Land-Use Planning: Five Initiatives in the Regional Municipality of Waterloo**

## **Introduction**

### **The Subject of Study**

This case report examines efforts to make land-use planning more environmentally responsible in the Regional Municipality of Waterloo (see map 1). More specifically, the report describes the often intertwined history of five of the Region's most significant environmental initiatives, evaluates their individual and overall effectiveness, fairness and efficiency, and makes some recommendations based on these evaluations.

The five major initiatives reviewed here are as follows:

- the identification and steps to protect Environmentally Significant Policy Areas (ESPAs), which are "natural areas" in the Region "found to contain rare or significant environmental features"<sup>1</sup> (see map 2);
- the Environmental and Ecological Advisory Committee (EEAC), which is responsible for reviewing Environmental Assessments and Environmental Impact Statements for proposals that would affect ESPAs, providing advice concerning environmental policies in the Regional Official Policy Plan (ROPP), and preparing a State of the Environment Report (SOTER) every four or five years;<sup>2</sup>
- Laurel Creek Watershed Planning, which has focused on the need to "...restore, protect or enhance the key watershed functions and features" of Laurel Creek<sup>3</sup> (see map 3);
- State of the Regional Environment Reports, which discuss certain environmental conditions in the Region, and how these trends affect "...regional productivity, economic stability and social satisfaction".<sup>4</sup> The reports are

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<sup>1</sup> Regional Municipality of Waterloo (RMW), 1993A, "Environmentally Sensitive Policy Areas", Internal Document.

<sup>2</sup> RMW, "Ecological and Environmental Advisory Committee: Terms of Reference", Apr. 28, 1983, pp. 1-3.

<sup>3</sup> City of Waterloo, Planning and Development Department, 1992, *The Laurel Creek Watershed Study*, p. 2.

<sup>4</sup> Regions of Waterloo and Hamilton-Wentworth (RHW), 1991A, "State of the Environment Reporting: Background Notes", Dec. 3, 1991, p. 11.

prepared for the purposes of increasing awareness on important environmental issues and initiating environmental action on the part of individual citizens, business, government, and other organisations;<sup>5</sup> and

- the current revision of the *Regional Official Policy Plan (ROPP)* to incorporate the principles of sustainable development.<sup>6</sup>

The Regional Municipality of Waterloo is perhaps Ontario's best example of a municipal government that has worked to improve the environmental responsibility of land-use planning within its jurisdiction. The five initiatives reviewed here have been pursued without much outside guidance and sometimes despite the absence of sufficient formal authority, relying heavily upon the good will of citizens, landowners and developers. While it is possible that the Region could have pressed further and accomplished more, its efforts, especially the five initiatives examined here, stand as an important demonstration of the extent and limitations of what can be achieved by Ontario municipalities given the current package of laws and policies.

The study was completed in May 1994 and does not address more recent developments.

## **Environmental Concern and Land-Use Planning in Ontario**

The essential aim of environmentally responsible land-use planning is to "foster an approach to development that is devoted to the rehabilitation, protection and enhancement of communities and ecosystems."<sup>7</sup> More environmentally responsible land-use planning is clearly needed in Ontario. The province has often failed to preserve valuable components of the environment, let alone rehabilitate what has been damaged and enhance what remains. Increasingly these failures have led to conflicts over the environmental implications of land-use decisions. Over the past few years in southern Ontario, conflicts have arisen over a multitude of development proposals including ones involving further suburban expansion on wetlands and waterfronts in the Lake Simcoe area, transportation and waste disposal projects threatening the Rouge Valley, estate subdivisions on the Oak Ridges Moraine, and land severances in Grey County, to list just a few examples.<sup>8</sup> Such cases are not simply the tail end of a legacy of poor environmental planning in Ontario. Pressure for development at the expense of the environment appears to be a problem which will continue for many years to come.

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<sup>5</sup> Ibid, p. 9.

<sup>6</sup> RMW, 1993B, *Development Strategies: Policy Directions and Settlement Patterns*, Discussion Paper, ROPP, Apr. 1993, p. 13.

<sup>7</sup> Robert B. Gibson, 1992A, "Introductory Considerations for a report on the integration of environmental assessment and land use planning in Ontario", unpublished paper, Sept. 28, 1992, p. 2.

<sup>8</sup> Ibid.



## The Significance of Inadequate Land-Use Planning

A number of problems result from poor land-use planning in Ontario. Many Ontario residents, especially those in rural areas, are experiencing a loss of community identity, as their communities expand rapidly.<sup>9</sup> Jobs and income are also lost as forests and agricultural land are lost to development, and water-bodies which were once fished become polluted with contaminants in the run-off of surrounding development.<sup>10</sup> Although much headway is being made in improving outdoor recreational opportunities such as hiking due to the emphasis being placed on greenways, some areas of recreational importance continue to be lost to development.<sup>11</sup> Even basic necessities such as clean air and water are becoming badly degraded in places.<sup>12</sup> Most sadly, the habitats of many, often unique or endangered species, in Ontario are being, or will be destroyed.<sup>13</sup>

## Towards Improving Land-Use Planning in Ontario

Many important provincial and municipal initiatives are now underway in response to the need to make land-use planning in Ontario more environmentally responsible. As a contribution to these efforts, this report examines what extent solutions can be found within the current legal and institutional framework in Ontario and where this framework presents barriers and disincentives to environmentally responsible land-use planning. Factors affecting land-use planning have not been investigated beyond the provincial level, which means that factors such as federal legislation have been excluded from the study.

Environmentally-responsible planning efforts in the Regional Municipality of Waterloo have been selected for examination because the Region has been Ontario's earliest, boldest and most consistent innovator in environmentally responsible land-use planning. At a time when many other municipalities seem to have not yet recognised the need for more

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<sup>9</sup> See Steve Biancaniello, Judy Walker, Suzanne Winter and Susan Wismer, "Social Economic Impact Assessment of Changes in Postal Services", unpublished paper, Flamborough-Stoney Creek, 1994.

<sup>10</sup> For a discussion of how destruction of natural resources has brought about a loss of jobs, see Armine Yalnian, T. Ran Ide, Arthur J. Cordell, *Shifting Time: Social Policy and the Future of Work*, Toronto: Between the Lines, 1994.

<sup>11</sup> Examples of this are occurring in the Regional Municipality of Waterloo, such as the destruction of most of a 6.1 acre woodlot behind Keatsway Public School which was used by children to play in, as well as learn about plants and animals.

<sup>12</sup> See Martin Mittelstaedt, "Air quality little changed despite cleanup measures", *Globe and Mail*, Apr. 10, 1991; Commission on Planning and Development Reform in Ontario (CPDRO), John Sewell chair, *New Planning for Ontario*, June 1993.

p. 126.

<sup>13</sup> Ontario Ministry of Natural Resources, *Ontario Fish and Wildlife Review*, Endangered Species Issue, 1977.

environmentally responsible approaches, Waterloo Region can point to many years of experience with a variety of different, though interrelated, initiatives.

There is much to learn from Waterloo Region's efforts. Insofar as the Region's initiatives have been successful, they offer direction for other municipalities in Ontario and help reveal what improvements can be achieved under the current package of provincial planning laws, policies and decision making practices. Even the identified limitations of Waterloo Region's initiatives are valuable as indicators of areas where changes are necessary at the provincial level to eliminate barriers and increase incentives for environmentally responsible land-use planning in Ontario municipalities.

## **The Nature and Limitations of Conventional Land-Use Planning in Ontario**

### **Conventional Land-Use Planning In Ontario**

Land-use planning in Ontario is carried out mostly under the Ontario *Planning Act*. Under this act, regional municipalities are legally required to prepare and get approval for a Regional Official Policy Plan, with which all Municipal Official Policy Plans and restricted area bylaws must conform. In designing the Official Plan, the regions are encouraged to respect the guidelines of provincial Policy Statements.<sup>14</sup> The policies outlined in the Regional Official Plan must also be agreed upon by the Regional Council, which is composed of representatives from each of the subject municipalities.

By law, Official Plans must be reviewed every five years, although in practice the reviews are less frequent. Changes in official plans do not have to await the comprehensive reviews, however. At any time, an individual, organisation or government body can request that an Official Plan be changed through an Official Plan Amendment granted at the municipal and regional level. Where amendments are contested, the decision may be appealed to the Ontario Municipal Board (OMB). The OMB makes a ruling based on whether the amendment decision adheres to the planning practices outlined in the *Planning Act* and the appropriate Official Plan.

Land-Use planning is also significantly affected by the *Environmental Assessment Act*. Under this act, public sector projects which may have significant environmental impacts must be assessed in comparison with alternatives to the project. Most municipal undertakings (e.g. road extensions and water supply and treatment facilities) are planned and approved through the streamlined "class assessment" version of the province's environmental assessment process because they "are relatively minor in scale, recur frequently and have a generally predictable range of effects that are likely to cause relatively minor effects in most cases."<sup>15</sup>

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<sup>14</sup> Current Policy Statements include ones on housing and wetland preservation.

<sup>15</sup> Ontario Ministry of the Environment, *General Guidelines for the Preparation of Environmental Assessments* 2nd edition (Toronto: MOE, January 1981), p.17.

## Land-Use Planning Problems and Concerns

Key land-use planning problems and concerns that are common throughout the province include the following:

- opposition to planning controls from property-owners and developers who feel it is their right to use their land as they choose, and who are especially distressed when restrictions on land development are put in place after the land is purchased, or plans have been made to develop it;
- additional pressure from business organisations that seek development to stimulate the economy, as well as occasionally from municipalities that believe development results in the generation of higher revenues from municipal taxes;
- growing demand for suburban and rural residential development to serve a growing population which appears to prefer low-density housing;
- deterioration of urban areas due to a variety of factors including traffic congestion, safety concerns, a lack affordable housing and the loss of urban "greenspace";<sup>16</sup>
- development of rural areas due to widespread immigration from hectic urban areas to more peaceful rural areas;
- the loss of agricultural land as a result of the economic difficulties being experienced by farmers and the high prices being offered by developers for farms;<sup>17</sup>
- ecosystem losses and associated economic costs resulting in inadequate attention to environmental factors in planning decisions, including failures to consider the cumulative impacts of groups of related projects (e.g. of overall effects of constructing a number of separately approved housing developments in a single watershed);<sup>18</sup> and
- growing pressure to protect and improve ecosystems since environmental awareness is increasing.

Not surprisingly, one result has been a large number of expensive and lengthy conflicts in many parts of the province between and among developers, provincial and municipal

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<sup>16</sup> CPDRO, 1993, p. 2.

<sup>17</sup> Ibid, p. 2.

<sup>18</sup> Robert B. Gibson, 1992B, "The New Canadian Environmental Assessment Act: Possible Responses to its Main Deficiencies", *Journal of Environmental Law and Practice*, v. 2:3 (1992) pp. 223-285, p. 227.

government agencies, non-government organisations and local citizens over land-use proposals and decisions.

The Regional Municipality of Waterloo has experienced many of the land-use planning problems and concerns discussed above, including a loss of agricultural land, a growing population and an increasing demand for low density housing. However, the Region is also facing a number of particular problems and concerns, including the following:

- Reliance on limited underground sources for water constrains the Region's ability to provide sufficient, high quality water beyond current consumption levels to service new residents and industries. This problem is exacerbated by conventional developments that result in a decrease in the recharge of aquifers and disturb the regular flow of water into the Grand River. When vegetation is removed and the ground is covered with hard surfaces, such as roads, less water is absorbed into the ground and run-off is more rapid (see figure 1). Development also increases the amount of industrial, commercial and residential effluent, such as hazardous waste, sewage and soil particulate, which could filter down into, and contaminate water supplies.
- More rapid run-off adds to flood control problems in the Grand River watershed.
- The rolling and fairly sandy lands in the Region tend to erode easily and erosion problems are increased by the growing of annual crops, such as corn, and the mining of aggregates, which leaves large quantities of sand and gravel exposed.<sup>19</sup>
- There have been pressure for better waste management due to increasing quantities of waste, concerns about pollution from leechate, and the decreasing popularity of exporting waste to other municipalities.
- Many residents in the Region, particularly those living in rural areas, have begun to express opposition to negative effects of development on the "way of life."<sup>20</sup> This is especially true for many Old Order Mennonites, some of whom, in response to increased development in the rural areas, have left the Region and moved to farms in other areas.<sup>21</sup>
- Losses of local heritage also stir concern partly since tourism plays an important role in the local economy. For instance, many local residents and tourists visit the farmers markets in the region, and visit the unique shops in St. Jacobs and Elora.

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<sup>19</sup> RMW, 1991A, *State of the Environment Report*, Final Report, p. 54, p. 38.

<sup>20</sup> RMW. 1991B. *State of the Environment Report*. Background Report No. 3. Report of the Citizens Advisory Committee on the Quality of Life.

<sup>21</sup> Marg Kasstan, 1990, "Woolwich urged to halt loss of farmland to developers," *Kitchener-Waterloo Record*, February 28.

- Protection of natural heritage is complicated by the unusual diversity resulting from the Region's "location within the transition zone between the Carolinian and Great Lakes - St. Lawrence Forest zones and its varied post-glacial topography."<sup>22</sup>

Despite these unique problems and concerns Waterloo Region still serves as a valid focus for a case study of the successes and limitations of environmentally responsible land-use planning initiatives in the province. Waterloo Region has faced its particular and typical planning challenges within the same framework of Ontario laws and policies that guides and limits other regions and municipalities. Moreover, Waterloo Region has become a vigorous "testing ground" of sorts for determining what degree of environmentally responsible land-use planning can be achieved within this framework.

## **Responses to Land-Use Planning Problems**

Both provincial and municipal governments have been struggling for a number of years to make land-use planning more environmentally responsible. Many constructive ideas have been put forward which could help in evaluating the success of the Region's initiatives. In fact, many of the Region's own initiatives can help provide a definition of environmentally responsible land-use planning which can be used in evaluating other regional initiatives. These ideas can be classified according to three main headings: effectiveness, fairness, and efficiency.

### Improving Effectiveness

A definition of effective land-use planning that has been emerging in this province stresses integration of environmental, social and economic issues. This was emphasised by the federal-provincial Crombie Commission, whose study completed in 1991 assessed means of improving planning and environmental quality on the Toronto waterfront.<sup>23</sup> The commission referred to the desired type of planning as an "ecosystem approach". The ecosystem approach was later stressed by the 1993 Sewell Commission, which recommended that the *Planning Act* and its implementation be changed in a manner that "fosters economic, environmental, cultural, physical and social well-being...".<sup>24</sup>

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<sup>22</sup> RMW, 1991A, *State of the Environment Report*, Final Report, p. 50.

<sup>23</sup> Royal Commission on the Future of the Toronto Waterfront (RCFTW), 1991, David Crombie, Commissioner, *Regeneration - Toronto's Waterfront and the Sustainable City: Final Report*, December 1991.

<sup>24</sup> CPDRO, 1993, p. 134.

The ecosystem approach has also been stressed in the Ministry of Municipal Affairs' response to the Sewell Commission, which proposed a number of policies dealing with natural environment, social and economic concerns. The emphasis on integrating these concerns is particularly evident in proposed policy B.4, which states, "To enhance job opportunities and to broaden the economic base of communities, the development and implementation of community economic development strategies are encouraged, which link social, economic and environmental objectives".<sup>25</sup> Unfortunately, this policy emphasises an ecosystem approach for economic reasons, which suggests that this policy would give priority to meeting economic, rather than environmental or social objectives.

A similar version of "ecosystem planning" has been emphasised by Waterloo Region in the review of the *Regional Official Policy Plan* in 1992 (see figure 2). Even earlier, an ecosystem approach was sought by the Region in the mid-1970s, when it identified and took steps to protect ESPAs. Ecosystem planning is meant to achieve a better balance between the economic and social concerns, which had been the focus of attention in the past, and natural environment concerns, which have received less attention.

In order to give adequate attention to the natural environment, it is being realised that land-use planning must be done according to *ecosystem boundaries*, rather than standard jurisdictional divisions. This view was reflected in the work of the Crombie Commission, which defined the boundaries of the Greater Toronto Bioregion bounded geographically by the Niagara Escarpment, the Oak Ridges Moraine, and Lake Ontario since "Lands and waters in this bioregion share climatic and many ecological similarities, and the 60 or so watersheds all drain into Lake Ontario" where the Toronto Waterfront is situated.<sup>26</sup> More recently, an area municipality within the Region has emphasised ecosystem, rather than political, boundaries by conducting the Laurel Creek Watershed Study. This study, completed in 1992, spans several municipalities in which the watershed is located.<sup>27</sup> Watershed planning should become more common as both the Sewell Commission and the Ministry of Municipal Affairs have proposed to include a number of policies under the *Planning Act* which would restrict development along waterways.<sup>28</sup>

Effective land-use planning involves measures which will not only preserve, but also rehabilitate and enhance the ecosystem. This step was encouraged by the Crombie Commission, which stated,

There is an urgent need for *regeneration* of the entire Greater Toronto Bioregion to remediate environmental problems caused by past activities, to prevent further degradation, and to ensure that all future activities result in a *net improvement* in the environmental health.<sup>29</sup>

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<sup>25</sup> Ministry of Municipal Affairs (MMA), 1993, "A New Approach to Land Use Planning", Dec., p. 9.

<sup>26</sup> RCFTW, *Regeneration*, 1992, p. 41.

<sup>27</sup> City of Waterloo, 1992, p. 2.

<sup>28</sup> CPDRO, 1993, p. 30; MMA, 1993, p. 7.

<sup>29</sup> RC, 1991, p. 11 [my italics].

The importance of proactive planning is also being recognised in Waterloo Region. For instance, the Laurel Creek Watershed Study emphasised the need for "protecting, enhancing and rehabilitating the natural environment".<sup>30</sup>

Most significantly, the importance of proactive planning was recognised in several of the Sewell Commission's specific policy recommendations, such as A.11, which states,

In decisions regarding development, every opportunity will be taken to: *improve* the quality of air, land, water, and biota; maintain and *enhance* biodiversity compatible with indigenous natural systems; and protect, *restore*, and *establish* natural links and corridors.<sup>31</sup>

A similar policy statement was proposed by the Ministry of Municipal Affairs in policy A.1.6, except that improving these features and systems was merely encouraged.<sup>32</sup> Other policies which deal with environmental restoration and enhancement and improvement include the Sewell Commission's policies A.10 and F.5;<sup>33</sup> and the Ministry of Municipal Affairs' policies A.2.3, A.2.4 and F.4.<sup>34</sup>

Although the Sewell Commission and the Ministry of Municipal Affairs have mostly proposed policy changes, rather than amendments to the planning law, to address these matters, the new policies would be more binding than current policies if the Sewell Commission's and the Ministry of Municipal Affairs' proposal to revise s.3(5) of the *Planning Act* is adopted. The revision would require that planning decisions be "consistent with" provincial policies statements,<sup>35</sup> rather than simply requiring planning authorities to "have regard to" provincial policy statements, as they are currently required to do.<sup>36</sup>

### Incorporating Fairness

The need for fairness - or listening and responding to the concerns of all interests, not just those with traditional political and economic advantages - when working towards environmentally responsible land-use planning, is becoming more important. The Sewell Commission sought "the widest possible public participation - from as many people as possible"<sup>37</sup> and the Ministry of Municipal Affairs allowed opportunities for public comment on their response paper for three months. In Waterloo Region, an extraordinary

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<sup>30</sup> City of Waterloo, 1992, p.2.

<sup>31</sup> CPDRO, 1993, p. 137 [my italics].

<sup>32</sup> MMA, 1993, p. 7.

<sup>33</sup> CPDRO, 1993, p. 137, p. 141.

<sup>34</sup> MMA, 1993, p. 8, p. 14.

<sup>35</sup> MMA, 1993, p. 3; CPDRO, 1993, p. 15.

<sup>36</sup> MMA, 1993, p. 3.

<sup>37</sup> CPDRO, 1993, p. 5.



effort to elicit public views and concerns was made through the Citizens Advisory Committee on the Quality of Life (CACQL).

Moreover, there is an emerging recognition of the need to overcome barriers impeding public participation. For instance, CACQL, in commenting on the process of writing their report, stated,

What was particularly disheartening to the CACQL was the *silence*. Groups and individuals we thought would have much to say about quality of life issues simply did not come forward.<sup>38</sup>

The Sewell Commission also recognised the need to overcome barriers to public participation, and offered a partial solution by recommending that the *Planning Act* be amended so that the public would be ensured of access to information<sup>39</sup> and the Ontario Municipal Board could award the public with intervenor funding in cases of conflict over planning issues.<sup>40</sup> Unfortunately, the Ministry of Municipal Affairs has so far only proposed that the public be involved in preparing guidelines to assist planning jurisdictions in implementing policy statements.<sup>41</sup>

### Increasing Efficiency

As a result of the growing complexity of the processes and issues involved with land-use planning, more emphasis is being placed on making it more efficient. This was a key issue for the Sewell Commission, which offered a series of recommendations to improve the speed of decision making.<sup>42</sup> In addition, increased emphasis is being placed on ensuring that land-use planning is economical. For instance, the Sewell Commission recommended studies be undertaken to determine whether certain development forms, such as medium-density projects, are more cost effective than conventionally favoured approaches such as low-density projects.<sup>43</sup>

To make land-use planning more efficient, it is increasingly being recognised that government agencies need to coordinate their efforts to eliminate duplication of services and conflicting agendas. This was a particularly important issue for the Crombie Commission since four levels of government have jurisdiction in the Toronto region, and more than 100 agencies exercise responsibility with little cooperation among them.<sup>44</sup> The

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<sup>38</sup> RMW, 1991B, *State of the Environment Report*, Background Report No. 3, Report of the Citizens Advisory Committee on the Quality of Life, Department of Planning and Development, Apr. 11, 1991, p. 5.

<sup>39</sup> CPDRO, 1993, p. 106.

<sup>40</sup> *Ibid*, p. 120.

<sup>41</sup> MMA, 1993, p. 16.

<sup>42</sup> CPDRO, 1993, p. 5.

<sup>43</sup> *Ibid*, p. 21.

<sup>44</sup> RCFTW, 1992, p. xxi-xxii.

Commission recommended that the province examine ways to assist with cooperative initiatives, especially amongst conservation authorities and provincial government agencies.<sup>45</sup>

The Sewell Commission also recognised the need to coordinate the planning of municipalities which share common concerns, such as water bodies which span across several municipal boundaries. It recommended that the *Planning Act* be amended so that municipalities which are unable to agree on joint-planning can apply to the OMB for mediation.<sup>46</sup> Unfortunately, no such recommendation was included in the Ministry of Municipal Affairs' response paper.<sup>47</sup>

The Region of Waterloo is considering several policies to improve inter-governmental coordination, such as by working with the Ontario Ministry of Agriculture and Food and the Waterloo Federation of Agriculture to assist individual farmers in developing individual Environmental Farm Plans for better management of non-point sources of pollution.<sup>48</sup>

It is also being recognised that improving efficiency requires clear guidelines to facilitate quick decision making. The Sewell Commission, for instance, has recommended that

Provincial policies will set a general framework and direction for planning decisions, so there will be a clear basis for determining what is "good planning"

and

Legislative requirements spell out issues to be addressed in the municipal plan, so municipalities will plan in advance rather than decide on larger issues on a case-by-case basis.<sup>49</sup>

Similarly, the Ministry of Municipal Affairs has recommended that guidelines be prepared to assist planning jurisdictions in implementing policy statements.<sup>50</sup>

Finally, efficient decision making requires avoiding lengthy disputes over land-use planning issues. The Sewell Commission recommended that

mediation and programs which help different interests listen to each other be part of the planning process, and that municipalities consider techniques to encourage dispute resolution prior to council decisions.<sup>51</sup>

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<sup>45</sup> Ibid, p. 94.

<sup>46</sup> CPDRO, 1993, p. 82.

<sup>47</sup> MMA, 1993.

<sup>48</sup> RMW, *Draft Plan*, ROPP, March 1994, p. 5-11.

<sup>49</sup> CPDRO, 1993, p. 127.

<sup>50</sup> MMA, 1993, p. 16.

<sup>51</sup> CPDRO, 1993, pp. 113f.

The Region of Waterloo has adopted a consultative approach with the public in designing policies for the new Official Policy Plan in hopes that this will minimise later conflicts.

## **Environmentally Responsible Land-Use Planning Initiatives in the Regional Municipality of Waterloo**

The five main environmentally-responsible land-use planning initiatives in Waterloo Region have been those concerning Environmentally Sensitive Policy Areas, the Environmental and Ecological Advisory Committee, State of the Environment Reporting, the Official Policy Plan review, and the City of Waterloo's Laurel Creek Watershed Study. Although it is the combination of these initiatives that has affected planning in Waterloo Region, each is significant on its own.

The following section provides an overview of the objectives and characteristics of each of the five initiatives, and the history of why and how they evolved and affected regional planning. Each is examined to reveal how effective, fair and efficient it has been in contributing to environmentally responsible land-use planning. Finally, the initiatives are compared in order to identify any similarities and differences which have contributed to their strengths and weaknesses.

### **Chronology**

Since the histories of the five initiatives are closely intertwined, the following brief chronology may be helpful.

1973 - the Regional Municipality of Waterloo is formed<sup>52</sup>

1973 - EEAC is established to help in the development of the *Regional Official Policy Plan*<sup>53</sup>

1974 - identification of ESPAs in the Region begins

1975 - the Region drafts a policy in 1975, later incorporated into ROPP, that EEAC is responsible for the reviewing of Environmental Impact Statements dealing with ESPAs<sup>54</sup>

1976 - the Region's first *Official Plan* is approved<sup>55</sup>

1976 - the Region officially designates 69 areas as ESPAs<sup>56</sup>

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<sup>52</sup> Brian A. Hunsberger, *Political Responses to Rural-Urban Planning Problems: A Case Study of Woolwich Township and the Region of Waterloo*, 1980, p. 119.

<sup>53</sup> Karen McCulloch, *The Evolution and Implementation of Policies for Environmentally Sensitive Areas in the Regional Municipality of Waterloo, Ontario*, 1982, p. 115.

<sup>54</sup> *Ibid*, p. 194.

<sup>55</sup> *Ibid*, p. iv.

<sup>56</sup> RMW, 1991A, p. 50.

1988 - terms of reference for SOTER are drafted

1991 - the Region designates ten more areas as ESPAs

October 1991 - ROPP revision begins

December 1991 - the *Final SOTER* is completed

January 1991 - *Laurel Creek Watershed Study* is initiated<sup>57</sup>

January 1993 - *Laurel Creek Watershed Study* is completed

August 1994? - the review of ROPP is scheduled for completion

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<sup>57</sup> City of Waterloo, 1992, p. 1.

## Environmentally Sensitive Policy Areas

### **Description**

Environmentally Sensitive Policy Areas (ESPAs) are natural areas that municipal authorities have identified for special consideration because they contain rare or significant environmental features. In Waterloo Region, a total of 79 areas have been designated as ESPAs (see map 2). Although the ESPA designations have done much to help protect the identified pieces of natural environment in the region, this protection has been limited. Not all environmentally special areas have been designated and some of the designated ESPAs have been degraded. This section will describe the basic components, strengths and weaknesses of the ESPA initiative, and identify some of the reasons for the limitations in hopes of revealing ways of ensuring better protection.

According to the existing *Regional Official Policy Plan (ROPP)*, ESPAs must meet one or more of the following criteria:

- 1) the occurrence of significant, rare or endangered indigenous species within the designated area;
- 2) the identification of plant and/or animal associations and/or landforms which are unusual or of high quality Regionally, provincially or nationally;
- 3) the classification of the area as one that is large and undisturbed, thereby affording habitat to species which are intolerant of human presence;
- 4) the classification of the area as one which is unique with limited representation in the Region or a small remnant of once larger habitats which have virtually disappeared;
- 5) the classification of the area as one containing an unusual diversity of plant and animal communities due to a variety of geomorphological features, soils, water and micro-climate effects;
- 6) the identification of the area as one which provides a linking system of undisturbed forest or other natural vegetation for the movement of wildlife over a considerable distance;
- 7) the performance of a vital ecological function such as maintaining the hydrogeological balance over a widespread area by acting as a natural water storage or recharge area; or
- 8) the recognition of the area as one demonstrating any of the above quantities but suffering from a minor reduction of its uniqueness or rareness by intrusion of human activities.<sup>58</sup>

Since many of the ESPAs are privately owned, the following uses have been permitted to continue within and contiguous to them:

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<sup>58</sup> RMW, *Regional Official Policies Plan*, 1986, policy 7.11, pp. 7-5f.

- 1) farming operations and the expansion of same under approved Area Municipal Official Plans and Zoning By-laws and policies and regulations of other government agencies;
- 2) management and the harvest of timber in a woodlot under agreement pursuant to the provincial *Woodland Improvement Act* and the *Forestry Act* or by other means in accordance with sound forest management practices;
- 3) use of wood and the harvest of timber in conformity to the *Regional Tree Cutting By-law* for the owner's personal use;
- 4) construction or expansion of a residence on a legally separated parcel of land existing on December 7, 1976 subject to other policies in the Regional Official Plans and Zoning By-laws, and policies and regulations of other government agencies, and a site plan indicating the location of the residence on the legally separated parcel;
- 5) construction or expansion of a building on existing cleared land so long as it does not physically and biologically affect the *Environmentally Sensitive Policy Area* and is in conformity to the Regional Official Policy Plan, Area Municipal Official Plans and Zoning By-laws, and policies and regulations of other government agencies;
- 6) the main use of the area as a private garden or a private woodlot ancillary to the main use;
- 7) the use of the area as a private garden or a private woodlot ancillary to the main use;
- 8) the existing use of the area for public recreational purposes; or
- 9) legal non-conforming uses.<sup>59</sup>

Land uses prohibited in an ESPA include

- 1) a pit or quarry or wayside pit or quarry
- 2) a new trunk sewer or watermain on a new right-of-way or easement;
- 3) a sanitary landfill site;
- 4) a ground water-taking project (public well) likely to adversely impact an ESPA.<sup>60</sup>

The current *ROPP* calls for special review of all proposals to change the legal use of land within or adjacent to an ESPA. The *ROPP* also calls for special review of minor realignments and widening of provincial, regional and municipal roads, as well as "hydro-electric power lines, oil lines, gas lines, lines conveying other materials, inter-regional and/or interprovincial communication lines" that may affect an ESPA.<sup>61</sup> However, the Region has no legal jurisdiction over senior government agencies. The existing *ROPP* simply states that the Region should "strive diligently to gain the *full cooperation* of senior agencies not to expand, or develop new, public works projects within ESPAs".<sup>62</sup>

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<sup>59</sup> Ibid, policy 7.14, pp. 7-6f.

<sup>60</sup> Ibid, policy 7.21, p. 7-11.

<sup>61</sup> McCulloch, 1982, pp. 254f.

<sup>62</sup> Ibid, p. 255.

Officially, the *ROPP* requires that proposals to change a land-use within or adjacent to an ESPA, which are expected to have a major impact on the ESPA, undergo special review by having the proponent prepare an Environmental Impact Statement, which consists of

- (a) a description of the purpose of the undertaking;
- (b) a description of and a statement of the rationale for:
  - (i) the undertaking
  - (ii) the alternative methods of carrying out the undertaking; and
  - (iii) the alternatives to the undertaking;
- (c) a description of:
  - (i) the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly;
  - (ii) the effects that will be caused or that might reasonably be expected to be caused to the environment; and,
  - (iii) the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment by the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking;
- (d) an evaluation of the advantages and disadvantages to the environment of the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking.<sup>63</sup>

An Environment Impact Statement does not have to be prepared, however, where the Ecological and Environmental Advisory Committee (EEAC), or Regional Council, after consulting with EEAC, has determined that the "proposal is of such a minor nature" that preparation of an Environmental Impact Statement would serve no useful purpose for the protection of the area.<sup>64</sup> In these cases, the proponent would simply have to prepare an environmental analysis report consisting of the main impacts on the ESPA expected to be caused by the development.<sup>65</sup>

In reality, however, planning staff in the Planning and Culture Department can decide to waive the review altogether, if after conducting a site visit they conclude that the effects will be minimal.<sup>66</sup> Although a review may be required for a development proposal adjacent to an ESPA, discretion is used: "A development proposal which is near the boundary of an ESPA designation would only be subject to the requirements of the *ROPP* where it is likely to *adversely* affect the significant natural features of the particular ESPA".<sup>67</sup> This would include proposed development that was expected to introduce major changes in natural conditions (e.g. stormwater discharge, extensive land clearing).<sup>68</sup> Usually, if an Environmental Impact Statement is conducted, its scope is narrowed down

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<sup>63</sup> RMW, 1986, policy 7.15 , p. 7-8.

<sup>64</sup> Ibid, policy 7.17.2, pp. 7-10.

<sup>65</sup> Ibid, policy 7.17.1, pp. 7-9f.

<sup>66</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>67</sup> RMW, 1993A.

<sup>68</sup> Ibid.



by the environmental planning staff to focus on the particularly important impacts of the project.<sup>69</sup>

If an Environmental Impact Statement is prepared, it is reviewed by EEAC, which forwards its recommendations to the Planning and Development Committee (see below). The Planning and Development Committee can then prepare its own recommendations, based on the input from EEAC, the regional planners, and possibly other agencies and public meetings. It forwards these recommendations to Regional Council, which decides whether to refuse or approve the proposed development. An approval may be subject to specified conditions.

Council can also choose to modify the boundaries of the ESPA<sup>70</sup> or remove the ESPA designation entirely to allow a land use not permitted on the ESPA.<sup>71</sup> To prevent the development from going ahead the Region can, but rarely does, acquire the lands.<sup>72</sup> Any decisions regarding land use made by the Region can be challenged by the proponent or concerned citizens who may bring the case to the Ontario Municipal Board (OMB).

## History

The creation of ESPAs in Waterloo Region has its roots in a 1974 Students Working on an Environmental Enhancement Program (SWEEP) summer project for students headed by Professor George Francis of the University of Waterloo. The purpose of the program was to identify and encourage protection of the most important natural areas in the Region.<sup>73</sup>

Information was gathered from the Grand River Conservation Authority (GRCA), the Ontario Ministry of Natural Resources (MNR), and local botanists and naturalists including Craig Campbell, Jean Peebles and Larry Lamb.<sup>74</sup> MNR had already begun identifying environmentally sensitive areas in 1972 as part of its strategic land-use planning program.<sup>75</sup> Information was also gathered from the Kitchener-Waterloo Field Naturalists, who had been gathering data since the 1930's on the best birding and botanical areas.

The natural areas identified by the SWEEP group were incorporated into the October 1974 draft for the *ROPP* due to liaisons with EEAC and what is now called the Planning and Culture Department.<sup>76</sup> The willingness of the Region to do this may have stemmed

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<sup>69</sup> Ibid.

<sup>70</sup> Larry Lamb, personal communication, 1993.

<sup>71</sup> RMW, 1993A.

<sup>72</sup> Suzanne Carrell, 1991, "Environmental Sensitive Policy Areas in the Waterloo Region", Apr. 18, p. 7.

<sup>73</sup> McCulloch, 1982, p. 141.

<sup>74</sup> Ibid, p. 145.

<sup>75</sup> Ibid, p. 143.

<sup>76</sup> Ibid, p. 148.

largely from the fact that the MNR had suggested that municipalities be given the responsibility for designating sensitive areas as special policy areas in official plans.<sup>77</sup>

Additional environmentally sensitive areas were later identified by Craig Campbell, who had become familiar with many natural areas in Waterloo Region through local work for the United Nations' International Biological Program, which was engaged in a global effort to identify valuable natural areas.<sup>78</sup> Campbell was responsible for looking for natural areas in the Region.

The proposed ESPAs were formally reviewed by regional staff, area municipal planners, and experts from the University of Waterloo and Wilfrid Laurier University.<sup>79</sup> The criteria used to determine what areas should be designated as ESPA were developed by Larry Lamb, an expert in ecology at the University of Waterloo, and Jean Paul.<sup>80</sup> Many of the potential ESPAs were eliminated since they did not meet the criteria or their status could not be substantiated by information available at the time.<sup>81</sup>

Some proposed ESPAs were owned by the GRCA or other public bodies, but many were on private lands. In order to get privately owned areas designated as ESPAs, a landowner contact program was conducted, starting in early 1975.<sup>82</sup> Employees in what is now called the Planning Development Department sent landowners letters explaining the proposed policies for ESPAs and inviting them to discuss or ask questions about the policies.<sup>83</sup> The letter contained an offer for an on-site meeting with the individual landowners to discuss their concerns.<sup>84</sup> McCulloch has said that the private meetings were successful in achieving "good public relations without the emotionalism and follow-the-leader syndrome that are often stimulated by mass meetings."<sup>85</sup>

Unfortunately, the time required to conduct these meetings had been underestimated, so not all of the landowners who had expressed concern were visited.<sup>86</sup> Several of the landowners who were missed became angry and concerned about the ESPA designation.<sup>87</sup> To address their concerns, a special meeting had to be held.<sup>88</sup>

Most of the landowners were receptive to having their land designated as an ESPA. This was partly because it would help protect their land from roads, loggers, drainage ditches, hydro lines and other development.<sup>89</sup> Other landowners agreed because the

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<sup>77</sup> Ibid, p. 145.

<sup>78</sup> Ibid, p. 167.

<sup>79</sup> Ibid.

<sup>80</sup> Larry Lamb, personal communication, Fall 1993.

<sup>81</sup> McCulloch, 1982, p. 168.

<sup>82</sup> Ibid, p. 176.

<sup>83</sup> Ibid.

<sup>84</sup> Ibid, p. 178.

<sup>85</sup> Ibid, p. 179.

<sup>86</sup> Ibid, p. 180.

<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

<sup>89</sup> Larry Lamb, personal communication, Fall 1993.

GRCA had already identified their property as being on a flood plain, where development would not be permitted. These landowners decided that since they could not develop their property, they might as well have it designated as an ESPA.<sup>90</sup>

Some landowners were less eager to have their land designated as an ESPA. These landowners included speculators who were hoping to subdivide and develop the land later for a profit, as well as some farmers who did not want to be told how to log their land, or be prohibited from having their land grazed.<sup>91</sup> According to Lamb, some of these landowners were nonetheless convinced to designate their property as an ESPA because they were told that if they did not, they would have to face the protests of local environmental groups.<sup>92</sup> The fact that the proposed ESPAs had been selected by a group of experts strengthened this argument, since environmentalists would be outraged about not getting these regionally significant areas designated as ESPAs.

The groundwater recharge function of many of the ESPAs may have also played a role in getting some ESPAs designated in Wilmot Township.<sup>93</sup> Wilmot Township residents and officials had long been concerned that their groundwater was being diminished because it was being used to supply Kitchener-Waterloo with water.<sup>94</sup>

Landowners who still resisted having their land designated as an ESPA had their lands quietly dropped from the ESPA list. By not designating these lands as ESPAs, the Region was able to avoid having to go to court over the ESPA designation, and thereby avoid setting a precedent that the ESPA designation had no legal standing.<sup>95</sup>

In 1976, when Waterloo Region adopted its Official Plan, it officially designated 69 ESPAs.<sup>96</sup> Since this original designation, some landowners were given an additional incentive to agree to an ESPA designation when the province started allowing full 100% property tax rebates to owners of provincially significant land under the *Conservation Land Act* in 1988.<sup>97</sup> Some ESPAs in the Region are also identified by MNR as Areas of Natural and Scientific Interest (ANSIs) and are eligible for the rebate. If the Region decides to designate some provincially significant wetlands as ESPAs, as proposed in the *Draft Plan*, then these ESPAs will also be eligible for the rebate.<sup>98</sup> Unfortunately, in 1993, tax exemptions for ANSIs and provincially significant wetlands owned by conservation authorities were removed.<sup>99</sup> In addition, from the late 1970s until 1992, property tax rebates of 50% to 100% were allowed for owners of lands subject to

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<sup>90</sup> Ibid.

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

<sup>93</sup> McCulloch, 1982, p. 187, p. 190.

<sup>94</sup> Ibid, pp. 186f.

<sup>95</sup> George Francis, personal communication, May 28, 1994.

<sup>96</sup> RMW, 1991A, p. 50. No information could be obtained on how many ESPAs were originally proposed during the mid-1970 ESPA designations. Determining this would be difficult given the lengthy nomination and evaluation process involving the numerous actors discussed above.

<sup>97</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>98</sup> RMW, 1994, policy 4.1.4.2, p. 4-6.

<sup>99</sup> Chris Gosselin, personal communication, 1993.

Woodlands Management Agreements with the MNR.<sup>100</sup> Finally, since 1987 a land tax rebate of up to 100% has been provided for wetlands under the Ontario Conservation Land Tax Reduction Program.<sup>101</sup>

Efforts began in 1991 to designate more areas as ESPAs. This renewal of attention to ESPAs may be attributed at least in part to the observations of CACQL, which noted in the spring of 1991 that, of all the issues brought before it, "none attracted more public attention than the impacts of human activity on the natural environment".<sup>102</sup> To go about determining which areas should be designated as additional ESPAs, a committee was formed with many of the same people who were responsible for the mid-1970 designations. This helped to ensure that the new ESPAs were designated within the broader context of other ESPAs already in the region.<sup>103</sup> Many of these new ESPAs were areas which had been considered, but not made ESPAs in the mid-1970's.

As during the mid-1970 process, ESPA designations on private property were voluntary. In order to encourage the landowners to agree, the Planning and Culture Department attempted to meet with landowners on a one-to-one basis as was done before, but again there was insufficient time to meet with all of them. Getting developers to agree to the designation may have been easier the second time since apparently homeowners had become more willing to pay more for lots adjacent to an ESPA.<sup>104</sup>

In November 1991, the Region designated ten new ESPAs.<sup>105</sup> The number of ESPAs may however change slightly if the Region adopts the policy in the *Draft Plan* which states that, to qualify for designation, the natural area must meet at least two criteria.<sup>106</sup> Currently, an areas that meets just one of the criteria can be designated as an ESPA.<sup>107</sup> The proposed criteria are basically the same as the existing criteria, with the exception of two new criteria. The first states that an ESPA can "provide habitat for organisms indigenous to the region recognised as rare, vulnerable, threatened, or endangered provincially or nationally, or significant within the region" and the second states an ESPA can contain "landforms deemed unusual or particularly representative regionally or provincially."<sup>108</sup>

The *Draft Plan* provides examples of habitats which have virtually disappeared, such as Carolinian forest, prairie-savannah, bogs, fens, marl meadows, and cold water streams, are provided.<sup>109</sup> Unfortunately, the document does not include a criterion similar to criterion no. eight in the existing *ROPP*, which allows for ESPA designation of an area that meets

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<sup>100</sup> Robert Jolette, personal communication, Fall 1993.

<sup>101</sup> Ibid.

<sup>102</sup> RMW, 1991B, p. 27.

<sup>103</sup> Larry Lamb, personal communication, Fall 1993.

<sup>104</sup> No evidence could be found to support or refute this theory.

<sup>105</sup> RMW, 1991A, p. 52.

<sup>106</sup> RMW, 1994, policy 4.1.4.2, p. 4-6.

<sup>107</sup> RMW, 1986, policy 7.11, pp. 7-5f.

<sup>108</sup> RMW, 1994, p. 4-6.

<sup>109</sup> Ibid.

all of the other criteria, but which is "suffering from a minor reduction of its uniqueness or rareness by intrusion of human activities."<sup>110</sup>

The *Draft Plan* also proposes that an ESPA can be an area which has been "...identified by the Province as a Provincially Significant Area of Natural and Scientific Interest or a provincially Significant Wetland".<sup>111</sup> This may partly be a response to the *Final SOTER*, which criticised Regional policies that only apply to officially designated "islands of green" including Regional ESPAs, observing that "[o]ther natural areas which may be very important in the context of the overall landscape have traditionally been given much less protection."<sup>112</sup>

The *Final SOTER* also noted the need to develop policies to protect linkages between natural areas.<sup>113</sup> To accomplish this, the *Draft Plan* recommended the creation of a "Natural Habitat Network" connecting natural areas with natural corridors.<sup>114</sup> It remains to be seen whether these linkages will actually be established since the area municipalities have concerns about regional involvement in a "Natural Habitat Network".<sup>115</sup> The Region is currently in the process of convincing municipal planners that the ecological corridors in the Natural Habitat Network are a matter of "regional interest."<sup>116</sup>

Another recommendation included in the *Final SOTER* was that the boundaries of ESPAs should be revised to take into account up-to-date ecological information.<sup>117</sup> In response, the *Draft Plan* recommended more precisely defining the boundaries of ESPAs whose boundaries have not yet been accurately defined.<sup>118</sup>

Additional concerns were raised in the *Final SOTER* about how the existing ESPAs were being degraded despite the Official Plan requirement that a proposal to change the legal use of land in and adjacent to an ESPA must go through special review (see above). The requirements for Environmental Impact Statements are particularly thorough, being based roughly upon the methodology for environmental assessment outlined in the *Environmental Assessment Act* of 1975.<sup>119</sup> Nonetheless, the *Final SOTER* noted that ESPAs are being degraded mostly by littering and rubbish dumping, removal small animals and wildflowers, predation by cats and dogs, the introduction of alien species, interference with natural successional processes and trampling.<sup>120</sup>

The *Draft Plan* addresses this problem to a minor degree by including a policy which encourages area municipalities to develop partnerships with property owners and

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<sup>110</sup> Ibid.

<sup>111</sup> Ibid.

<sup>112</sup> RMW, 1991A, p. 60.

<sup>113</sup> Ibid, p. 105.

<sup>114</sup> RMW, 1994, policy 4.2.1, p. 4-13f.

<sup>115</sup> Clark Reichert, personal communication, Fall 1993.

<sup>116</sup> Clark Reichert, personal communication, May 31, 1994.

<sup>117</sup> RMW, 1991A, p. 105.

<sup>118</sup> RMW, 1994, policy 4.1.4.7, p. 4-8.

<sup>119</sup> McCulloch, 1982, p. 261.

<sup>120</sup> RMW, 1991A, p. 60.

community organisations for the purposes of creating and maintaining recreational trails on rural lands. It is hoped that provision of additional recreational trails would help relieve pressures on ESPAs. The partnerships would involve developing an information and education contact program which would focus on encouraging non-farm recreationalists to respect the rights of farmers participating in the trail network.<sup>121</sup>

Excessive logging damage was listed in the *Final SOTER* as another major cause of ESPA degradation.<sup>122</sup> The *Draft Plan* addresses this concern to a certain extent with a number of policies, including one which encourages MNR and the owners of woodlands within ESPAs to consider the significant features and ecosystem functions of those woodlands in the development of forest management plans.<sup>123</sup> In addition, the *Draft Plan* contains a policy which includes, as an objective for managing Regional Agreement Forests, "conservation or enhancement of significant natural features and functions particularly where Regional Agreement Forests lie within Natural Core Areas of the Natural Habitat network or exhibit 'Carolinian forest' attributes."<sup>124</sup> The policy, however, still allows for the removal of trees and other vegetation in order to produce timber and create trails.<sup>125</sup>

The *Final SOTER* stated that "substantial impacts from development have been limited to a few cases" involving "major road widenings (ESPAs 26 and 29) or extensions (ESPA 27), a landfill (ESPA 15), sedimentation from an adjoining development (ESPAs 40 and 59) and a proposed trunk sewer (ESPA 59)".<sup>126</sup> The views expressed in the *Final SOTER* concerning these developmental impacts on ESPAs reflect the responses to the questionnaire sent out for *SOTER's* Background Report No. 2, "Environmental Issues: Survey Questionnaire and Newspaper Content Analysis". The survey revealed that citizens of the Region perceived "encroachments onto forest land and Environmentally Sensitive Areas by new developments" to be an important issue, but not as significant as water quality and rapid residential development concerns.<sup>127</sup>

The priority of concerns expressed by the respondents paralleled the extent of media attention to the various environmental issues in the region. The analysis contained in Background Report No. 2 of environmental news items in the *Kitchener-Waterloo Record* during the years 1973, 1981 and 1988 revealed that issues concerning regional forests received considerably less coverage than other "hot" topics including growth and development, water resources, pollution and waste management.<sup>128</sup>

*SOTER* Background Report No. 3 also identified a need for land-use planning in the region, and for area municipal planning departments to assess the cumulative effects of

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<sup>121</sup> RMW, 1994, policy 5.7.3, p. 5-11.

<sup>122</sup> RMW, 1991A, p. 60.

<sup>123</sup> RMW, 1994, policy 5.4.4, p. 5-9.

<sup>124</sup> Ibid, policy 5.4.6(a), p. 5-9.

<sup>125</sup> Ibid, policy 5.4.6, p. 5-9.

<sup>126</sup> RMW, 1991A, p. 60.

<sup>127</sup> RMW, 1991C, *State of the Environment Report*, Background Report No. 2, Survey Questionnaire and Newspaper Content Analysis, July 10, 1991, p. 9.

<sup>128</sup> Ibid, p. 35.

development on natural ecosystems, including ESPAs.<sup>129</sup> Unfortunately, assessing the cumulative effects is difficult since little information has been collected on ESPAs. The original assessments of the ESPAs have only been updated with whatever information has been gathered by the Kitchener-Waterloo Field Naturalists and data from any Environmental Impact Statements which have been prepared.<sup>130</sup> Recognition of this problem may have encouraged the Region to include in the *Draft Plan* a policy for the creation and maintenance of integrated region-wide databases which would contain information on land use changes affecting the Natural Habitat Network of which ESPAs would be a part (see below).<sup>131</sup>

Although such a policy is not yet adopted, the Region's ability to predict the impacts of development on ESPAs has already improved since the Planning and Culture Department hired environmental planning staff in the summer of 1989. The process of reviewing proposals for land use changes within and/or adjacent to an ESPA has been strengthened because the staff do certain tasks previously left up to the proponent. For instance, now the environmental planning staff conduct the site visit to decide whether to waive the review of an ESPA, rather than deciding solely on the basis of information provided by the proponent, who has an incentive to understate potential problems that might pose a barrier to project approval.<sup>132</sup> In addition, the environmental planning staff, not the proponent, now decide how the scope of an Environmental Impact Statement should be narrowed.<sup>133</sup>

## **Analysis**

### Effectiveness

Although some areas considered to be suitable ESPAs have not been designated due to the protests of landowners or lack of regional funds, an impressive 79 areas have been designated as ESPAs. Unfortunately, according to Lamb, areas which should be ESPAs are not being designated. He points out that, initially, much emphasis was placed on rare species and unusual habitats. Less consideration was given to areas which performed vital ecological functions such as groundwater recharge, partly because it was difficult to quantify ecological functioning. In addition, he says that landforms should have been taken into better consideration when designating ESPAs. Lastly, because of the focus on

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<sup>129</sup> RMW, 1991B, pp. 13, 30.

<sup>130</sup> Sann McKay, personal communication, Oct. 1993.

<sup>131</sup> RMW, 1994, policy 12.3.3, p. 12-9.

<sup>132</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>133</sup> Ibid.

uniqueness, too few ESPAs were designated with "representative habitat", such as excellent maple-beech forests.<sup>134</sup>

Lamb has also claimed the ESPA designation process is flawed because areas with provincially unique species are not being designated as ANSIs;<sup>135</sup> Priddle states, however, that an ANSI designation currently fails to afford these provincially significant lands greater protection.<sup>136</sup> Such a designation could only help the lands receive greater recognition in terms of their scientific importance.

Some ESPAs have gone through ecological succession, and thus no longer possess the characteristics for which they were originally designated. Others have become climax communities (i.e. maple-beech forests), so that other native species cannot move in to inhabit the ESPA.<sup>137</sup> This is reducing the biodiversity of species in the region.

Encroaching development has caused many ESPAs to become what is popularly called dwindling "islands of green". Building has been permitted on lots that were legally severed from the main property and had plans approved before the ESPA was designated. The destruction of natural areas around the ESPAs has made it difficult for species to travel outside of the ESPAs, and the laying down of hard surfaces, such as paved roads, adjacent to the ESPAs, has caused stormwater to be discharged into the ESPAs, disrupting existing ecological systems (see figure 1).

A number of daily human activities are also having a particularly negative impact on ESPAs, including trampling of vegetation, grazing cattle in woodlots, picking wildflowers, littering, and dumping.<sup>138</sup> Some logging operations are being permitted under the Provincial Woodlands Management Agreement.<sup>139</sup>

## Fairness

The ESPA designation process has been fair insofar as protecting the quality of the environment is a public good for the present and future generations. Designating areas as ESPAs is also "fair" for the many species which lived in these areas.

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<sup>134</sup> Larry Lamb, personal communication, Fall 1993.

<sup>135</sup> Ibid.

<sup>136</sup> George Priddle, personal communication, Fall 1994.

<sup>137</sup> Larry Lamb, personal communication, Fall 1993.

<sup>138</sup> RMW, 1991A, p. 53.

<sup>139</sup> A number of studies have been conducted evaluating the effectiveness of the ESPA designation which could not be reviewed due to time constraints. See Anne Anderson, Deborah McCarthy and Alice McKay, "The Role of the Ecological and Environmental Advisory Committee with Reference to Environmentally Sensitive Areas", Unpublished Paper, Environmental Studies Department, University of Waterloo, Apr. 4, 1977; Regional Municipality of Waterloo, *Field Studies on the Implementation of Environmentally Sensitive Areas Policy*, Department of Planning and Development, March 1984; and Paule Ouellet, *An Assessment of the Effectiveness of Environmentally Sensitive Policy Areas in the Regional Municipality of Waterloo: 1978-1990*, School of Urban and Regional Planning, University of Waterloo, 1993.



The owners of ESPAs have been treated equitably in that they have always had a choice of whether to have their land designated as an ESPA. Of course, it could be argued that landowners have been to some extent coerced into letting their land be designated as ESPAs since they were, according to Lamb, concerned about the reaction of local environmentalists.<sup>140</sup> The introduction of tax rebates on ESPAs provided landowners with some compensation for allowing the designation. Unfortunately, many of the rebates no longer exist. Moreover, as pointed out by Gosselin, the amount of tax exacted on ESPAs is not significant, so the rebates have not provided much compensation.<sup>141</sup>

### Efficiency

Creating ESPAs in Waterloo Region has proven to be extremely affordable since the many landowners have volunteered their lands for ESPA designation. However, the program would have been more efficient if all landowners had been contacted, since then no time would have been wasted having to deal with those landowners who became angry as a result of not being contacted.

Collecting information on ESPAs has also been affordable since it has mostly been done by the Kitchener-Waterloo Field Naturalists, university professors and students, and Craig Campbell, while he was working for the United Nations' International Biological Programme.

## **Recommendations**

### Region

Waterloo Region should continue in its efforts to reduce the impact of human activity on ESPAs. In particular, the Region should adopt the policies proposed in the *Draft Plan* to help address the degradation of ESPAs caused by logging damage, and human carelessness such as by littering (see above). However, the proposed policy, which would require that an education program be conducted promoting responsible use of community trails on privately owned lands,<sup>142</sup> should be modified somewhat to include a requirement that the Region work towards promoting responsible use of trails on publicly owned lands as well.

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<sup>140</sup> Larry Lamb, personal communication, Fall 1993.

<sup>141</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>142</sup> RMW, 1994, policy 5.7, p. 5-11f.

The policy proposed in the *Draft Plan* which recommends the creation of a "Natural Habitat Network" should also be adopted so that species can more easily travel between ESPAs, despite encroaching development.

The policies discussed above dealing with the collection of information on the "Natural Habitat Network", of which ESPAs will be a part, should also be adopted.<sup>143</sup> This will help make it possible to assess the cumulative impacts of development on the ESPAs.

The Region should adopt the policy proposed in the *Draft Plan* which requires that field studies of ESPAs be conducted occasionally to determine whether the areas still fulfil criteria necessary for designation, as this should help address how some ESPAs have gone through ecological succession or have been degraded somewhat through human activity. This is more reasonable than the existing policy which requires studies of all the ESPAs to be conducted every five years.<sup>144</sup>

The policy should, however, include a requirement that another ESPA be designated if an area is to lose its ESPA designation.<sup>145</sup> Since a number of ESPAs could lose their designation, having been degraded by human activity or undergone ecological succession, this amendment will help ensure that a number of ESPAs still exist in the Region.

All of the criteria for ESPAs proposed in the *Draft Plan* should be adopted. However, criterion no. 8 in the existing *ROPP*, allowing ESPA designation to certain areas which meet any of the other criteria, but which have been somewhat degraded due to human activity, should be kept. This criterion helps to address how some ESPAs have been degraded by human activity, but may still be regionally significant.

When the Region attempts to designate further private lands as ESPAs, ideally all the landowners should be met with privately on a one-to-one basis with a regional employee knowledgeable of regional ecology, and the benefits of having the land designated as an ESPA. So that landowners will be more willing to have their land designated as an ESPA, the Region should continue lobbying to get the *Income Tax Act* amended to allow tax deductions for the full value of lands donated to the Region for designation as an ESPA.<sup>146</sup> In addition, the Region should continue investigating the possibility of getting the *Heritage Act* amended so that a "Land Trust" can be created, whereby the Region can purchase either the land or the development rights for ESPA lands for a low price.<sup>147</sup>

Lastly, ESPAs and other regional lands containing provincially significant species should also be designated as ANSIs so as to help afford them greater scientific recognition.

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<sup>143</sup> Ibid, policy 12.3.3, p. 12-9.

<sup>144</sup> RMW, 1994, policy 7.26, p. 7-12.

<sup>145</sup> Ibid, policy 4.1.4.13, p. 4-9.

<sup>146</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>147</sup> Ibid.

## Area Municipalities

The area municipalities should support the Region's efforts to protect ESPAs, including the proposed revision of ROPP to include the creation of a "Natural Habitat Network" connecting natural areas with natural corridors.

## Other Provincial Municipalities

Given the success of the ESPA initiatives in Waterloo Region, other interested municipalities which have not already started an ESPA program should attempt to do so. Although the Region provides a good model for starting up an ESPA program, exactly how a municipality goes about creating and protecting ESPAs will largely depend on the existence of significant natural features and functions in the given municipality; the desire on the part of developers, landowners and local citizens to develop or preserve these areas; the presence of experts knowledgeable on local natural areas and ecological issues; and the willingness of these experts to volunteer their time to determine which areas should receive designation and how these areas should be protected. To avoid the problems experienced by Waterloo Region, municipalities should consider the various recommendations discussed above.

## Province

So that Waterloo Region and other provincial municipalities can have the authority to protect ESPAs from development, the province should revise the *Planning Act* to ban development which adversely affects the integrity of natural features or ecological functions in significant natural areas, including significant woodlots, ravines, river, stream, and natural corridors, and in the habitat of endangered, threatened and vulnerable species.

Such a policy has been proposed by the Sewell Commission, but, unfortunately, it includes a section which bans development only in "...significant woodlots south of the northern boundaries of the District Municipality of Muskoka, and the counties of Haliburton, Hastings, Lennox and Addington, Frontenac, and Lanark".<sup>148</sup> A similar policy has been proposed by the Ministry of Municipal Affairs which unfortunately prohibits development only in significant woodlands south and east of the Canadian Shield.<sup>149</sup> The effectiveness of both these policies is further reduced since they state that new infrastructure will "be located outside these significant features unless it is demonstrated that there is no reasonable alternative".<sup>150</sup>

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<sup>148</sup> CPDRO, 1993, policy A.2, p. 29.

<sup>149</sup> MMA, 1993, policy A.1.2, p. 7.

<sup>150</sup> CPDO, 1993, p. 30; MMA, 1993, p. 7.

The conflict between the demand for new infrastructure and the desire to protect significant environmental features can be reduced by better defining what is meant by "significant". The Ministry of Municipal Affairs vaguely defines "significant" as follows:

in regard to natural features and functions, ecologically important to the natural environment in terms of amount, content, representation, or effect and contributing to the quality and integrity of an identifiable ecological region or natural heritage system; in regard to matters other than natural features and functions, important in terms of amount, content, representation, or effect.<sup>151</sup>

The definition provided by the Sewell Commission is equally vague, being worded basically the same with the omission of the words "natural heritage system".<sup>152</sup> By providing a clearer definition of what is meant by "significant", the province can ensure that the most ecologically and culturally significant areas are protected from development, while leaving less important areas open for development. The province could draw upon the criteria which the Region uses in defining ESPAs and some of the new criteria proposed in the Region's *Draft Plan*.<sup>153</sup>

So that municipalities in Waterloo Region and throughout the province are willing to establish natural habitat networks, the province should revise the *Planning Act* to require the protection, improvement and enhancement of natural links and corridors, as proposed by the Sewell Commission.<sup>154</sup> The Ministry of Municipal Affairs' policy A.1.6 merely encourage that this be done.<sup>155</sup> This is insufficient as demonstrated by the fact that many municipalities in Waterloo Region are hesitant to help create natural habitat network. Only by requiring the creation of natural links and corridors will upper-tier municipalities be assured of the authority to create natural habitat networks.

The policies put forward by the Sewell Commission and Ministry of Municipal Affairs which would require that the overall natural environment be protected and enhanced should also be included under the *Planning Act*. Improving the natural environment surrounding ESPAs helps address how they are diminishing "islands of green", and should reduce any cumulative impacts which are affecting them (e.g. air pollution, increased runoff). In particular, the province should adopt the Sewell Commission's policy A.11 which requires that every opportunity should be taken to "improve the quality of air, land, water and biota" as well as "maintain and enhance biodiversity compatible with indigenous natural links and corridors".<sup>156</sup> Although the Ministry of Municipal Affairs put forward a similar policy, it requires that these environmental components be

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<sup>151</sup> MMA, 1993, p. 22.

<sup>152</sup> CPDRO, 1993, p. 38.

<sup>153</sup> For further suggestions on determining which natural areas should be designated as "significant", see Carol Anne Hrabí, Ron Diebolt, Heather Kyle, "Priority Ranking of Environmentally Sensitive Areas", Unpublished Paper, Environmental Studies Department, University of Waterloo, 1979.

<sup>154</sup> CPDRO, 1993, policy A.11, p. 30.

<sup>155</sup> MMA, 1993, p. 7.

<sup>156</sup> CPDRO, 1993, p. 30.

maintained, not improved.<sup>157</sup> The Ministry's policy which permits development on lands adjacent to waterways only if it does not adversely affect water quality, shoreline vegetation, bank stability, and wildlife habitat, should, however, be adopted.<sup>158</sup>

The province should also investigate ways to provide more generous tax exemptions for owners of ESPAs to make the designation more fair. Municipalities cannot provide these exemptions as it is prohibited by law to do so.

Lastly, while it would be impractical for the province to ban logging operations under the Provincial Woodlands Management Agreements for privately owned ESPA lands, perhaps the province should investigate amending the *Woodlands Management Act* to permit greater constraints on logging in certain ESPAs and areas of ESPAs. Alternatively, the *Planning Act* could be amended to permit municipalities to regulate tree-cutting and vegetation removal, as proposed by the Sewell Commission.<sup>159</sup> To help make the regulations fair, the *Planning Act* should be amended as proposed by the Sewell Commission to provide opportunities for public debate and reconsideration of interim controls put in place by the municipality.<sup>160</sup> Similar requirements could be included under the *Woodlands Management Act*.

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<sup>157</sup> MMA, 1993, policy A.1.6, p. 7.

<sup>158</sup> Ibid, policy A.1.4.

<sup>159</sup> CPDRO, 1993, p. 99.

<sup>160</sup> Ibid.

## Environmental and Ecological Advisory Committee

### **Description**

The Environmental and Ecological Advisory Committee (EEAC), has a variety of duties. One of its responsibilities involves reviewing environmental analyses and Environmental Impact Statements for proposals that would affect Environmentally Significant Policy Areas (ESPAs), questioning consultants about the environmental effects of their proposals and, when necessary, urging proponents to make changes.<sup>161</sup> EEAC is also responsible for preparing a State of the Environment Report of the Region every four or five years. Upon request of the Region, it can provide advice and assistance concerning the application of the *Ontario Environmental Assessment Act* and the Federal Environmental Review Process to undertakings in the Region; as well as "matters arising from the implementation of land and resource management measures in the Region by other government bodies...".<sup>162</sup> On its own volition, EEAC can put forward alternatives of an ecological nature which contribute to the "socio-economic stability of the human community".<sup>163</sup> As well, six members of the Committee, called the EEAC Regional Official Policy Plan (ROPP) subcommittee, provide advice concerning environmental policies in the Regional Official Policy Plan.<sup>164</sup>

The committee consists of 12 volunteers who have expertise in various environmental fields. Anyone can apply to be a member of EEAC. The Planning and Culture Department for the Region, and EEAC recommend those individuals they feel are qualified to Regional Council. The council then makes the final decision of whether to appoint these individuals to EEAC.<sup>165</sup> Generally, Regional Council approves those individuals who have been recommended by EEAC and the Planning and Culture Department.<sup>166</sup> The length of an appointment to EEAC is three years.

### **History**

EEAC evolved out of the Area Planning Board Advisory Committee which was formed in June 1970 to provide expertise in environmental planning matters for the Waterloo

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<sup>161</sup> RMW, 1983.

<sup>162</sup> Ibid.

<sup>163</sup> Ibid.

<sup>164</sup> Clark Reichert, personal communication, Fall 1993.

<sup>165</sup> Ibid.

<sup>166</sup> Ibid.

County Area Planning Board.<sup>167</sup> This committee, popularly known as the Environmental and Ecological Advisory Committee, was composed of "representatives from government, academic, private business, and interest group sectors".<sup>168</sup>

The committee was formed largely upon the recommendation of a group of professors and graduate students who undertook an *Ecological Analysis of the Waterloo-South Wellington Region* in the early months of 1970.<sup>169</sup> This recommendation was accepted largely because one of the professors involved in the study was also a member of Waterloo County Area Planning Board.<sup>170</sup>

The committee temporarily disbanded due to conflicts over a proposal for a dam and reservoir and plans in 1972 for the reorganisation of local government.<sup>171</sup> However, a new committee, formally called the Environmental and Ecological Advisory Committee (EEAC), was re-established in 1973 through the efforts of local environmentalists, naturalists and members of the universities, many of whom were members of the former committee.<sup>172</sup> Support was also received from regional politicians and planners, who felt the group could help in the development of the Region's *Official Plan*, which was later approved in 1976.<sup>173</sup>

The Region decided to support the continuation of EEAC past the adoption of the *Official Plan* due to the incorporation of ESPAs in the *Official Plan* in 1974. The Region drafted a policy in 1975, later incorporated into the *Official Plan*, that EEAC would be responsible for the review of environmental impact studies.<sup>174</sup>

The new committee was able to be more effective, since it now served the Region rather than the old Waterloo County Area Planning Board, which had merely advised the area municipalities. The Region possessed political powers to implement policies, and was provided with more funds from the province.<sup>175</sup>

In the beginning, all the members of EEAC had expertise in Regional environmental issues. When necessary, the committee has enlisted the help of the Ministry of the Environment and Region staff. More recently, however, local residents, who lack expertise on ecological issues, have started to be appointed to the committee. According to Priddle, this started happening simply because local residents started applying to the committee, and it was appropriate to appoint them to the committee since they were strongly interested in regional environmental issues.<sup>176</sup>

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<sup>167</sup> McCulloch, 1982, pp. 70f.

<sup>168</sup> Ibid, p. 71

<sup>169</sup> Ibid, pp. 70f.

<sup>170</sup> Ibid, p. 69.

<sup>171</sup> Ibid, p. 73.

<sup>172</sup> Ibid, p. 115.

<sup>173</sup> Ibid.

<sup>174</sup> Ibid, p. 194.

<sup>175</sup> Ibid, p. 193.

<sup>176</sup> George Priddle, personal communication, May 26, 1994.

The recommendations of EEAC regarding ESPAs which are adopted by Regional Council have generally not been challenged in the courts. This is largely due to the expense of going to the Ontario Municipal Board (OMB). However, recently, a developer has appealed to the OMB over an upland knoll located in an ESPA in Cambridge known as Portuguese Swamp. The appeal has not yet reached the OMB, and EEAC is currently in the process of determining whether the knoll needs to be considered as part of the ESPA.<sup>177</sup>

While the decisions made by EEAC have generally been supported by the Region and area municipalities, a significant conflict arose between the City of Kitchener and EEAC in the summer of 1992 over the boundary of ESPA 35, known as Pinnacle Hill. The City had come under the impression that this boundary extended less far outward from the ESPA than believed by the Region and EEAC. Consequently, the City felt that a nearby development proposal would not intrude within the ESPA, whereas the Region and EEAC felt it would.<sup>178</sup> Due to this disagreement, the City of Kitchener was questioning whether EEAC was any longer necessary.<sup>179</sup> In addition, many members of EEAC became frustrated that their recommendations were not being taken seriously.<sup>180</sup>

Fortunately, the problem was solved through a field trip to the ESPA with some of the politicians as well as members of EEAC.<sup>181</sup> The field trip helped improve communication between the politicians and committee members. To help keep the lines of communication open between politicians and EEAC, two Regional Council members were appointed to EEAC. These politicians are expected to inform the other members of Regional Council about what EEAC is doing.

Another conflict arose in the late 1980's between the Region and EEAC over the expansion of Bleam's Road into ESPA 29, known as Steckle's Woods. The City of Kitchener did not bring it to the committee's attention that alternative routes existed and that a pipeline was to be placed under the road. The pipeline was particularly important as it would provide a water supply for further development, which would in turn increase the demand for an already insufficient water supply in the Region, and possibly lead to the building of a water pipeline to the Great Lakes.<sup>182</sup> The fact that pipeline was not brought to the attention of EEAC frustrated and disillusioned some committee members.<sup>183</sup>

Concerns have also been expressed that EEAC has not been adequately involved in protecting components of the regional environment other than ESPAs. In April 1991, CACQL recommended empowering EEAC to screen all proposals and activities that

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<sup>177</sup> Ibid.

<sup>178</sup> Chris Gosselin, personal communication, Fall 1993.

<sup>179</sup> Ibid.

<sup>180</sup> Roger Suffling, personal communication, May 30, 1994.

<sup>181</sup> George Priddle, personal communication, Fall 1993.

<sup>182</sup> Roger Suffling, personal communication, June 2, 1994.

<sup>183</sup> Ibid.



could harm the local environment, not just those proposals which would affect an ESPA.<sup>184</sup> Although no such proposal was included in the "Recommendation Report" for ROPP, the *Draft Plan* proposes to expand the responsibilities of EEAC considerably.

According to the *Draft Plan*, EEAC may, upon request of the Region, review not only policies, as they currently do, but also "development applications, Official Plan Amendments, Area Municipality Implementation Plans, and Watershed studies having implications for environmental issues of Regional interest". In addition to assisting in the review of environmental assessments under the *Environmental Assessment Act* as they currently do, it is proposed that EEAC may participate in reviews under the *Ontario Energy Board Act*, or other similar federal or provincial statutes or regulations. They may also provide advice on matters of general environmental concern, not just those which contribute to the "socio-economic stability of the human community", as the *Official Plan* currently stipulates.<sup>185</sup>

Of course, this policy amendment would only empower EEAC to screen those proposals and activities for which the Region requests a review, but it would nonetheless expand EEAC's responsibilities considerably. In addition, it would appear that EEAC's responsibilities have already increased since, according to Priddle, EEAC is already moving from addressing only "site-specific" issues such as how an ESPA would be affected by a development proposal, to larger issues such as considering the effects of making railway linkages into recreational trails or recommending changes in agricultural practices to protect water quality.<sup>186</sup>

## **Evaluation**

### Effectiveness

EEAC has been effective in that, up until now, the recommendations it has made have been accepted by Regional Council and have gone unchallenged by the OMB. However, this may change if the developer who wants to develop in the upland knoll in Portuguese Swamp succeeds in his appeal.<sup>187</sup>

According to McCulloch, EEAC could be more effective if it reviewed the Environmental Impact Statements more extensively.<sup>188</sup> Yet, Priddle claims that EEAC

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<sup>184</sup> RMW, 1991B, pp. 18-19.

<sup>185</sup> RMW, 1994, policy 3.3.1, pp. 3-6.

<sup>186</sup> George Priddle, personal communication, Fall 1993.

<sup>187</sup> Ibid, May 26, 1994.

<sup>188</sup> McCulloch, 1982, p. 266.

does sometimes find problems with the Environmental Impact Statements and comes up with useful solutions to help preserve the natural environment. He also points out that EEAC is able to enlist the help of the Ministry of the Environment and Regional staff when necessary.<sup>189</sup>

At the same time, the effectiveness of decisions made by EEAC are seriously reduced when the committee is not made aware of all pertinent information, as in the case of the Bleam's road widening into Steckle's Woods. In the long term, additional situations of this kind could seriously undermine the credibility of the decision-making process with regard to ESPAs and other environmental matters. This in turn could possibly affect the willingness of landowners and developers to accept the decisions made by the Region regarding ESPAs.

The turnover of members appointed to the committee may also affect the quality of decisions made by EEAC. According to Lamb, not having individuals on the committee over the long term has resulted in decisions being made with regard to certain ESPAs which do not adequately take into consideration the other ESPAs in the Region. Lamb also says there may be problems with allowing consultants onto EEAC, since they may nominate some ESPAs in order to please the developers for whom they work.

Lamb has questioned having interested local residents on the committee, since they may lack the expertise to make the proper decisions regarding ESPAs.<sup>190</sup> Conversely, Priddle argues that these members are able to help provide practical solutions to problems faced by the committee.<sup>191</sup> For instance, in order to solve the problem of getting cattle out of the river, some local residents on the committee suggested that fencing be subsidised.

Lamb has also questioned the appointment of two Regional Council members to the committee, fearing this could result in political issues affecting the decisions of the Committee;<sup>192</sup> however, Priddle says that the appointment of council members has improved the potential effectiveness of EEAC, because the council members could help make Regional Council more receptive to the decisions of the committee.

Lastly, some concern has been expressed that EEAC is not involved extensively enough with other environmental issues in the Region. This is changing, however, since EEAC will soon be involved in evaluating other environmental issues.

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<sup>189</sup> George Priddle, personal communication, Fall 1993.

<sup>190</sup> Larry Lamb, personal communication, Fall 1993.

<sup>191</sup> George Priddle, personal communication, Fall 1993.

<sup>192</sup> Larry Lamb, personal communication, Fall 1993.

## Fairness

According to both Priddle and Suffling, the decisions made by EEAC have been fair. Priddle claims the appointing of Regional Council members has not affected the fairness of decisions made by the committee, as the council members usually do not contribute a great deal during committee discussions, and help mostly with the wording of various documents produced by the committee to make them more understandable to Regional Council.<sup>193</sup> In addition, appointing interested local residents to the committee has helped to clarify what issues are important to the community, and thus ensure that these issues are addressed.

## Efficiency

EEAC has proven to be extremely cost-effective since the members are willing to volunteer their time. The only costs to the Region are members' travelling expenses, which many of the members do not even bother to record.<sup>194</sup>

Priddle says appointing Council members to EEAC should help save time since they can reveal what issues council would take seriously and deserve attention. Thus, the committee could avoid spending time on issues not considered by Council to be important. This in turn should help maintain the willingness of EEAC members to volunteer their time, since they will feel their decisions are being taken more seriously, and not going to waste.

Since the creation of EEAC for Waterloo Region, "EEAC" type committees have been set up in some of the area municipalities. According to Priddle, the activities of these committees do not significantly conflict with the activities of the Region's EEAC since they are involved in other issues. The committees in Kitchener and Cambridge focus on environmental issues which include social and economic concerns, unlike the Region's which deals with mainly biophysical issues. In Woolwich, a very specialised committee has been set up which deals with the groundwater contamination caused by the Uniroyal lands contamination.

Priddle admits, however, that it has been difficult to keep track of what these committees are doing. Communication between the Cambridge and Region EEACs has improved over the past two years after each committee designated a liaison person whom the other committee can contact. These two committees have also been sending each other copies of their minutes. Priddle says that communication still needs to be improved with the Kitchener committee, but claims there is no need to improve communication with the Wilmot committee since it has such a limited mandate.

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<sup>193</sup> George Priddle, personal communication, May 26, 1994.

<sup>194</sup> Ibid, Fall 1993.

## Recommendations

### Region

The mandate of EEAC should be expanded as proposed in the *Draft Plan* (see above), so that EEAC can play a "watch-dog" role for a greater range of environmental issues. The Region should also work to ensure that all pertinent information is brought to the attention of EEAC regarding decisions affecting ESPAs or other environmental issues so as to help the committee make sound decisions and avoid disillusioning committee members.

To reduce conflicts over ESPA boundaries similar to the dispute over the boundary of Pinnacle Hill, an effort should be made to more clearly define the boundaries of ESPAs. In part, the Region should adopt the policy proposed in the *Draft Plan* which states that more precisely interpreting the boundaries of ESPAs, prior to approving changes in land use, may be necessary by conducting an Environmental Impact Statement.<sup>195</sup> Perhaps the Region should also set out to more precisely define ESPA boundaries in areas slated for development.

EEAC should still have interested local residents as members since they have been able to contribute practical solutions to problems faced by EEAC, and clarify what issues are important to the community. Appointments should also still be given to two Regional Council members since they help to focus the efforts of the committee towards issues that Council considers important, and make EEAC's recommendations more acceptable to Council.

A sufficient number of individuals knowledgeable in the ecology of the Region should be on EEAC. This helps to ensure that the areas which best deserve ESPA designation are chosen, the potential impacts of land-use changes on ESPAs are properly assessed, and that the public and government bodies perceive the recommendations made by the committee as being credible. This is important since landowners who are requested to allow their lands to be designated as ESPAs, or who are asked to manage their lands in a certain way so as to protect ESPAs, will more readily cooperate if they believe that the areas selected for designation deserve protection.

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<sup>195</sup> RMW, 1994, policy 4.1.4.7, p. 4-8.

To help ensure that the correct mix of individuals are appointed to EEAC, a selection model for the committee could be developed which requires that a certain number of politicians, interested local residents, biologists, botanists, geologists and so on are appointed to the committee.

An attempt should also be made to extend the appointment period enough to ensure that decisions affecting ESPAs are made within the context of an understanding of the other ESPAs already existing in the Region.<sup>196</sup>

Lastly, communication should be improved between the Region's EEAC and the committee in Kitchener. This could possibly be done by sending each other copies of minutes and establishing a liaison person on each committee, as has been done for the committee in Cambridge.<sup>197</sup>

### Area Municipalities

Area municipalities should work to ensure that all pertinent information is brought to the attention of EEAC regarding decisions affecting ESPAs or other environmental issues so as to help the committee make sound decisions. In addition, communication should be improved between the EEAC type committee in Kitchener and the Region's EEAC.

### Other Provincial Municipalities

Given the success of Waterloo Region's EEAC, other provincial municipalities should strongly consider starting up "EEAC" type committees to help advise them on various environmental issues. Waterloo Region's EEAC has played an invaluable role in revealing the impacts of development on ESPAs. Moreover, the recommendations of the Region's EEAC have generally been supported by Regional Council, and those recommendations adopted by Regional Council have yet to be overruled by the OMB.

Municipalities with a sufficient number of interested and qualified citizens should particularly consider starting an EEAC committee, such as might be the case in a municipality with a university or college with an Environmental Studies or Science Department, or a citizenry which is extremely active and concerned about environmental issues. The type of issues which this committee would be capable of handling would largely depend on the expertise of its members. So that the EEAC committee can be more

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<sup>196</sup> Larry Lamb, personal communication, Fall 1993.

<sup>197</sup> For further recommendations regarding EEAC, see Anne Anderson, Deborah McCarthy and Alice McKay, "The Role of the Ecological and Environmental Advisory Committee with Reference to Environmentally Sensitive Areas", Unpublished Paper, Environmental Studies Department, University of Waterloo, Apr. 4, 1977.

effective, other municipalities are encouraged to adopt the recommendations discussed above.

## **Laurel Creek Watershed Study**

### **Description**

The overall purpose of the Laurel Creek Watershed Study was to conduct a comprehensive assessment of both the natural resource features within the watershed, including surface and groundwater, woodlot and fisheries, and the functions they perform as part of the overall watershed ecosystem. This information was meant to provide guidance to the City of Waterloo and Waterloo Region in planning land use development, as well as protecting, enhancing and rehabilitating the natural environment.<sup>198</sup>

The study was unique in the province for taking an "ecosystem approach". Even other watershed studies conducted in Waterloo Region, such as Devil's Creek in Cambridge, Strasburg Creek in Kitchener and Moffat Creek in Cambridge, have focused more on drainage problems.<sup>199</sup>

The Waterloo study encompassed mainly the west side of the municipality of Waterloo, but also the townships of Wellesley, Wilmot and Woolwich, and even a small portion of Kitchener. In addition, the study involved the Region, the Grand River Conservation Authority (GRCA), the Ministry of Natural Resources(MNR) and the Ministry of the Environment. Consultants, public servants, politicians, developers, interest groups and concerned citizens also participated in its deliberations.<sup>200</sup>

As a result of the study, the watershed was divided into Constraint Areas 1,2 and 3 (see map 3). In Constraint Areas 1, the form of the landscape (e.g. forest) must be maintained, and thus development cannot occur. In Constraint Areas 2, the function of the landscape, such as groundwater recharge, must be maintained, meaning that certain types of development can occur. In Constraint Areas 3, development may be permitted, but only under certain conditions.

### **History**

In January 1991, the Laurel Creek Watershed Study was initiated partly due to concerns that downstream flooding would result due to subdivision construction and stormwater management activity.<sup>201</sup> Downtown Waterloo is in a flood plain and is vulnerable to

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<sup>198</sup> City of Waterloo, 1992, p. 1.

<sup>199</sup> Brian Trushinski, personal communication, Oct. 1993.

<sup>200</sup> RMW, 1991A, p. 71.

<sup>201</sup> City of Waterloo, 1992, p. 1.

flooding in the 100 year storm. It was also felt that the numerous wetlands and woodlots in Waterloo west must be protected to slow runoff and prevent flooding since, no matter how many reservoirs were built and how extensively the creek was straightened and lined with cement, it would not be enough to prevent flooding if these woodlots and wetlands were not protected.<sup>202</sup>

In addition, the City, like the rest of Waterloo Region, had a long history of water shortage problems. Traditionally, the Region had relied heavily on the Mainheim aquifer in Wilmot township for water. However, residents of the township resented this, feeling that it lowered the water table and water levels in their wells.<sup>203</sup> If the population grew, as was expected, the demand for water would increase and the water table would be affected even more.<sup>204</sup> As a solution to this problem, the Region was planning to start getting water from the Grand River in the spring of 1992.<sup>205</sup> The Laurel Creek Watershed Study would help maintain groundwater supplies as well as maintain the quality of the Grand River to which Laurel Creek was a tributary.

Lastly, there are a number of municipal Environmentally Sensitive Areas and Regional Environmentally Significant Policy Areas (ESPAs) in the west-side of Waterloo which the environmentalists wanted protected.<sup>206</sup>

Many of these concerns came out at a public meeting held by Waterloo Region on October 26, 1988 with respect to the extension of Settlement Policy Area A located in Waterloo west. The main concerns expressed at the meeting centred on rapid growth and protection of the environment. Many citizens were concerned how growth would affect the many environmentally sensitive areas located in Waterloo west. Issues of water supply and quality and proper waste disposal were also raised. As a result of this meeting, the Region postponed considering whether to allow development in Waterloo West. Instead, it requested that the City review and consider the issues raised at this meeting regarding development in that area.<sup>207</sup>

That same year, Brian Turnbull was elected as the new mayor of Waterloo on an environmental platform.<sup>208</sup> Following through on this environmental campaign, City Council adopted a number of "Environment First" Strategies in October 1989 with regard to creeks and storm water management, flood plain management, environmentally important areas, urban vegetation and parks, open space development, increasing public awareness about the environment and taking environmental concerns into account when making planning decisions.<sup>209</sup>

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<sup>202</sup> Brian Trushinski, personal communication, Oct. 1993.

<sup>203</sup> Brian A. Hunsberger, 1980, p. 120.

<sup>204</sup> RMW, 1991A, p. 27.

<sup>205</sup> Ibid, p. 70.

<sup>206</sup> Brian Trushinski, personal communication, Oct. 1993.

<sup>207</sup> Lora Flaherty, "Study of the Laurel Creek Watershed Study", unpublished study, 1993.

<sup>208</sup> Ibid.

<sup>209</sup> City of Waterloo, 1989, "Environmental Think Tank: Environment First Strategies", pp. 4-6.



Ken Thompson, assistant general manager of the GRCA, attended one of the earlier meetings in which "Environment First" strategies were discussed and spoke in favour of encouraging cooperation between the municipalities and conservation authorities.<sup>210</sup> In late 1989, the GRCA introduced the idea of a Laurel Creek Watershed Study to Waterloo City Council.<sup>211</sup> The City had already been thinking of conducting a watershed study, so the idea was readily accepted.

In January 8, 1991, *The Challenge Paper* of the Ontario Round Table on Environment and Economy recommended that the Region pursue funding from the Ministry of Municipal Affairs to assist in undertaking and implementing watershed management studies.<sup>212</sup> According to Trushinski, a senior planner for the City of Waterloo, the paper provided the City reassurance that it should do a watershed study.<sup>213</sup> This was important since the watershed study was predicted to cost \$800,000, and the City did not want to waste this money.<sup>214</sup> In June 4, 1991, the Region authorised staff to pursue funding from the Ministry of Municipal Affairs to assist in the Laurel Creek Watershed Study.<sup>215</sup>

Some money was saved since a substantial amount of the necessary information already existed. MOE had collected a great deal of data on groundwater and sediment layers in the watershed from well drillers, and University of Waterloo researchers had already done considerable mapping of forests and wetlands.<sup>216</sup> The City was also able to enlist the help of the Region, the GRCA and MNR since, unlike many other municipalities, it had been able to maintain a good relationship with these government bodies.<sup>217</sup> In addition, MNR and MOE agreed to do monitoring, since the study would provide them with an opportunity to exercise their already existing decision making authority over provincial wetlands, water quality and water taking.<sup>218</sup>

The final cost of the study was \$836,000, excluding the cost of staff from the City, Region, GRCA and MNR, who worked overtime to ensure the study was completed on time.<sup>219</sup> This sum also excludes any overtime put in by consultants.

Part of the reason for the high cost of the study was that approximately \$90 000 was spent on public consultation during the entire process. According to Trushinski, the City felt extensive public consultation was necessary due to already expressed public concern and expected controversies over development proposals. Thus, the City hired the consultants who had the best public consultation process, and modified it somewhat.

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<sup>210</sup> Ibid., p. 2.

<sup>211</sup> Brian Trushinski, personal communication, Fall 1993.

<sup>212</sup> RMW, 1991D, "Response to the *Challenge Paper* of the *Ontario Round Table on Environment and Economy*", p. 1.

<sup>213</sup> Brian Trushinski, personal communication, Oct. 1993.

<sup>214</sup> Ibid.

<sup>215</sup> RMW, 1991D, p. 1.

<sup>216</sup> Brian Trushinski, personal communication, Oct. 1993.

<sup>217</sup> Ibid.

<sup>218</sup> Ibid.

<sup>219</sup> Ibid, May 30, 1994.

This included having citizen workshops, a 24-hour hot-line where people could call and ask questions, displays in malls, television advertising and consultants to meet with special interest groups.

In addition, a roundtable was formed, composed of representatives from the GRCA, MNR, MOE, developers and interested residents to make recommendations on controversial issues such as how development should be restricted within the watershed.<sup>220</sup> The committee was not responsible for technical matters since MNR, MOE and the Groundwater Research Institute at the University of Waterloo provided this information. The City felt that a roundtable would be a good way to reach decisions on these controversial issues, as it had frequently used roundtables in the past to resolve concerns over issues such as student housing.<sup>221</sup> In fact, roundtables were being used by the City of Waterloo even before they were adopted by the province for inquiries such as the Crombie Commission.

The members of the Laurel Creek roundtable met for two and a half years, during which time they acted as liaisons with the organisations and interest groups with which they were associated. In this way, the roundtable was linked with those who had an interest in the study, while remaining small enough so that meetings could be manageable.

The study was conducted more quickly than originally planned partly because the Crombie Commission, the Sewell Commission and MNR had started becoming interested in the results of the study. More importantly, Trillium Estates, a real estate development company seeking subdivision approval, took the City to the OMB to speed up the decision-making process. Trillium Estates had wanted to develop subdivisions on their lands in Waterloo west since the mid 1980s. In September 1992, the OMB ruled that the City and Trillium Estates had until April 1993 to reach an agreement before it would make a ruling. So that subdivision plans acceptable to the city could be formulated before that time, the study was completed in January 1993.

The final recommendations of the study involved not only protecting the creek, but also enhancing and rehabilitating it. Trushinski says this was largely due to increasing recognition that flooding could be controlled through methods which also improved the quality of the creek.<sup>222</sup> For instance, maintaining a 30 metre vegetative buffer along either side of the creek would soak up water during rainstorms as well as cover the soil, thereby reducing the erosion of soil into the creek. Local environmentalists who strongly advocated improving the quality of the creek were supported by developers, who felt it would help them market their property since home-buyers had become increasingly concerned about the environmental impacts of development.<sup>223</sup>

Developers also agreed to not develop within Constraint Areas 1, and only develop in ways which would preserve the function of Constraint Areas 2, despite the fact that the

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<sup>220</sup> Ibid, Oct. 1993.

<sup>221</sup> Ibid.

<sup>222</sup> Ibid.

<sup>223</sup> Ibid.

City lacked clear authority to impose such requirements. To a certain extent, developers agreed due to concerns about what would happen if they challenged the City at the OMB, given pending legislation, including the release of a policy involving provincially significant wetlands, the Grand River Conservation Authority's Floodplain Policies, the provincial policy statement concerning floodplains, as well as modifications to obligations under the *Federal Fisheries Act*.<sup>224</sup>

More importantly, developers had for years been asking for clearly stated rules and guidelines regarding development so that they could avoid making substantial investments of time and money into a development project, only to have it quashed due to objections from the community or environmentalists. By respecting the constraints placed on development in Constraint Areas 1 and 2, developers could demonstrate that they would support any efforts to provide clear guidelines as to where and how development should proceed.<sup>225</sup>

Even though the study is completed, and many of its recommendations have been agreed upon, a great deal of work still needs to be done. In the Laurel Creek Watershed, sub-watershed studies still need to be conducted by developers in areas where they plan to develop. The government actors involved in the original study plan to work with these developers on the sub-watershed studies.

The City would like to take further measures along the settled area of the creek to improve the watershed; however, it is predicted that this will be more difficult. Some property owners are expected to resist developing 30 metre vegetative buffers in the established areas of the creek.<sup>226</sup>

In addition, the City wants to create wetlands and/or grassy meadows to replace some of the larger, artificial water bodies along the creek. This could potentially occur in the Laurel Creek Reservoir due to cooperation from the GRCA. Unfortunately, according to Trushinski, many citizens are opposed to altering Silver Lake in Waterloo Park since it invokes a "sense of place" for them. Similarly, it is uncertain whether changes will be made to Columbia Lake since it is on the University of Waterloo's property. A "grandfather clause" exists between the University of Waterloo and the City whereby the University can govern development along the portions of Laurel Creek where it owns property, provided that the regulations of the GRCA are followed, which restricts development in floodplain areas.<sup>227</sup>

Lastly, it appears that watershed planning may start to be conducted throughout all of Waterloo Region. The 1994 *Draft Plan* encourages municipalities to require watershed studies, which have been prioritised for funding, to be completed prior to processing development applications.<sup>228</sup> The criteria for determining which watershed studies

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<sup>224</sup> Brian Trushinski, personal communication, June 8, 1994.

<sup>225</sup> Ibid.

<sup>226</sup> Ibid.

<sup>227</sup> Ibid.

<sup>228</sup> RMW, 1994, policy 3.1.2, p. 3-2.

should be given priority for public funding would include priorities for development within various planning documents, the significance and sensitivity of the environmental issues at stake, and the availability of funds.<sup>229</sup> The recommendation may have been put forward partly in response to the Citizens Advisory Committee for the Quality of Life, which recommended planning on a watershed basis,<sup>230</sup> as well as the *Final SOTER*, (State of the Environment Report) which recommended that a watershed study be conducted for every major watercourse in the Region.<sup>231</sup>

Moreover, the Region may begin to place a greater emphasis on protecting water quality and quantity, since the *Draft Plan* includes a number of policies designed to bring this about. Of particular importance is the proposal for the implementation of a water resources protection strategy which would define the location, nature and extent of water resources, identify potential threats to water quality, and develop policies and programs to eliminate these threats.<sup>232</sup> The recommendation may partly be a response to the *Final SOTER*, which recommended that the Region work with area municipalities to strengthen settlement policies in the Region's and area municipalities' *Official Plans* to protect future groundwater supplies.<sup>233</sup>

## **Evaluation**

### Effectiveness

Overall, the study was extremely effective in helping to address both socio-economic and biophysical issues. It provided a vehicle for considering citizens' concerns about how development would affect ESPAs and water supplies, and it should help to protect the natural environment since recognition was given to the fact that the creek is part of a larger ecosystem, intricately connected with the forests and wetlands. The study was also valuable in that it took a proactive approach, striving not only to protect the watershed, but enhance and rehabilitate it.<sup>234</sup> Moreover, according to Trushinski, the results of the Laurel Creek Watershed Study were not seriously affected even though it had to be rushed.<sup>235</sup>

Furthermore, the study was effective in getting the developers to respect development restrictions in Constraint Areas 1 and 2, and establish 30 metre vegetative buffers on

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<sup>229</sup> Ibid, policy 3.1.1, p. 3-2.

<sup>230</sup> RMW, 1991B, p. 99.

<sup>231</sup> RMW, 1991A, p. 103.

<sup>232</sup> RMW, 1994, policy 5.2.1, p. 5-2.

<sup>233</sup> RMW, 1991A, p. 103.

<sup>234</sup> City of Waterloo, 1992, p. 2.

<sup>235</sup> Brian Trushinski, personal communication, Oct. 1993.

either side of the creek, even though neither of these practices is currently required by law.<sup>236</sup> It remains to be determined, however, whether the City will be successful in introducing a 30 metre buffer in the already settled areas of the municipality, and creating wetlands or grassy meadows in some of the larger, artificial water bodies along the creek.

It also remains to be seen whether conflict will arise over what development can be permitted in Constraint Areas 2 where the function of the area must be maintained. It may turn out that little development will be compatible with maintaining the functions (e.g. groundwater recharge) of these areas. For instance, building a golf-course in a previously forested area may not allow for adequate groundwater recharge as there would not be the same amount of vegetation to absorb precipitation (see figure. 1).

Unfortunately, some lands included in the study have already received planning approvals. While the City could attempt to reverse these approvals, such action would likely be overturned by the OMB. As a result, some development will be occurring in Constraint Areas 1 and 2. This could reduce the effectiveness of Laurel Creek watershed planning in preventing flooding, reducing erosion and ensuring groundwater recharge.

Despite these problems and uncertainties, the Laurel Creek Watershed Study has largely been viewed as effective way of protecting the watershed. Perhaps the best indicator of this is how the consultants involved in the study were able to help to shape some of the recommendations and policies made by the Sewell Commission on watershed planning.<sup>237</sup>

Waterloo Region's proposal to have watershed studies conducted prior to major development should be somewhat effective in protecting other watersheds in the region from further degradation. However, it is unfortunate that similar studies cannot be conducted on all watersheds in the region, including ones already degraded and requiring rehabilitation. Such studies would be useful for identifying the rehabilitation needs and options of these watersheds.

### Fairness

The study was conducted in an extremely fair manner in that developers, the public and other interest groups were consulted and provided with information in a variety of ways. Some methods, such as displays in malls and TV advertising helped to reach those individuals who were not heavily involved in the process. Other methods, such as community workshops and the roundtable, provided an opportunity for others to become directly involved. Moreover, public consultation was carried out throughout the entire study. The round table, for instance, met for two and a half years and because of its diverse membership was able to offer both technical advice and input on broader questions such as whether to create three types of constraint areas.

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<sup>236</sup> Ibid.

<sup>237</sup> Ibid, May 30, 1994.

## Efficiency

A great deal of time and money was invested in the watershed study. The overall cost of the project was \$836,000, excluding the cost of government staff and overtime put in by consultants.<sup>238</sup> However, in the long term, time and money will likely be saved. Sixteen pages of policies were introduced into the City's Official Plan, and no one took the city to the OMB for a lengthy and costly court battle.<sup>239</sup>

Waterloo Region will be spending money judiciously by only requiring future watershed studies along watersheds subject to development pressure since, according to Reichert, the Region lacks the financial resources to conduct a watershed study along each of its watersheds and sub-watersheds.<sup>240</sup>

## **Recommendations**

### Region

At this time it is difficult to make firm recommendations because the Laurel Creek Watershed Study has only recently been completed. However, the Laurel Creek Watershed Study revealed that a municipality does not necessarily need clear legal authority to succeed in implementing measures to protect and enhance a watershed. A great deal can be achieved if developers are eager to respect development constraints in certain environmentally significant areas out of a desire to show support for efforts to provide clear rules for where and how development should proceed. (It also helps for developers to anticipate benefits by impressing buyers concerned about the environmental impacts of development.)

Consequently, Waterloo Region should go forward with its proposal to require under its *Official Plan* that priorities for public funding of watershed studies be determined, and that municipalities be encouraged to require that prioritised watershed studies be completed before development decisions are made. Given the high cost of conducting the Laurel Creek Watershed Study, it would be unreasonable to require municipalities to conduct watershed studies, let alone stipulate that a watershed study be conducted for every watershed in the Region.

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<sup>238</sup> Ibid.

<sup>239</sup> Ibid.

<sup>240</sup> Clark Reichert, personal communication, Fall 1993.

In addition the Region should go ahead with its proposal to implement a water resources protection strategy. It should also adopt the various recommendations discussed above to protect and enhance ESPAs, since vegetation serves to slow down run-off and thereby can help to improve water quality and recharge groundwater.

### Area Municipalities

The area municipalities should not approve further development on any watershed prioritised for study until the study has been completed. At the same time, an effort should be made to accommodate the concerns of developers by conducting the study in a timely manner, and establishing roundtables and conducting workshops to solicit their concerns.<sup>241</sup> Emphasis should also be placed on encouraging public involvement so as to ensure that their concerns are met. For future watershed studies, however, consideration should be given to the existing planning status of lands to determine how lands are expected to be developed. Otherwise, the watershed planning may not be as effective in preventing flooding, ensuring groundwater recharge and so on.

To help reduce the costs of conducting the watershed studies, the area municipalities, particularly the City of Waterloo, should consider innovative ways of involving local citizens. The municipalities could appeal to the University of Waterloo's Environmental Studies Faculty to have students explore ways to both improve the watershed, such as by putting a wetland or grassland in the reservoirs, and get the university, community groups and individual citizens to help implement these proposals. Many local citizens were involved in the Laurel Creek Watershed Study, and would likely be willing to help implement these mediation projects.

### Other Provincial Municipalities

Other provincial municipalities should strongly consider conducting watershed studies, particularly if local developers are interested in supporting the initiative, for reasons discussed above. The watershed study should be based on a model similar to the Laurel Creek Watershed Study, with the exception that consideration should be given to the existing planning status of lands. Consideration should also be given to prioritising watershed studies and implementing a water resources protection strategy.

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<sup>241</sup> See Lora Flaherty's *Study of the Laurel Creek Watershed Study* for further details regarding the importance of negotiation and compromise during that watershed study.

## Province

Although the City of Waterloo succeeded in implementing many of the recommendations which arose from the Laurel Creek Watershed Study, the province should still consider giving municipalities the authority to undertake planning which preserves and enhances watersheds. As demonstrated by the Laurel Creek Watershed Study, the City of Waterloo lacks the authority to protect significant environmental features (e.g. woodlots) or features (e.g. groundwater recharge) in privately owned lands, even though the protection of these features is necessary to preserve and enhance the watershed. At the same time, developers are willing to constrain development in certain environmentally significant areas so as to avoid investing substantial amounts of time and money in development projects, only to abandon the projects due to protests from community members and environmentalists.

Consequently, the province should consider adopting, under the *Planning Act*, some of the policies put forward by the Sewell Commission and Ministry of Municipal Affairs designed to protect and enhance significant environmental features and functions of watersheds.<sup>242</sup> To ensure that municipalities have the authority to bring this about, the province should adopt only those policies which require, not encourage, that this be done.

This means that the portions of the Sewell Commission's and Ministry of Municipal Affairs' policies A.2 and A.1.4 respectively, which state that new infrastructure will be located outside significant features "unless it is demonstrated that there is no reasonable alternative", should be removed, as this renders the policies ineffective in terms of protecting the significant features along watersheds.<sup>243</sup> The conflict between the demand for new infrastructure and the desire to protect significant waterways can be reduced by better defining what is meant by "significant" in the policies proposed to be implemented under the *Planning Act*.

The province should also adopt policies which require not only the protection, but the improvement of watershed features and functions. As pointed out by Trushinski, it is increasingly being recognised that flooding can be controlled through methods which also improve water quality. Moreover, much of the natural environment is already degraded, and requires improving, such as was revealed to be the case along the Laurel Creek Watershed.

Since the improvement of watershed features and functions helps create fish habitat, neither the Ministry of Municipal Affairs' policy A.1.5, which simply encourages the creation of fish habitat, nor the Sewell Commission's policy A.6, which does not even

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<sup>242</sup> See CPDRO, 1993, policies A.1, A.4, A.5, A.8, A.10, A.11, p. 29f; and MMA, 1993, policies A.1.1, A.1.3, A.1.4, p.6f.

<sup>243</sup> CPDRO, 1993, policy A.2, p. 29; MMA, 1993, policy A.1.4, p. 7.



encourage the creation of fish habitat, is satisfactory.<sup>244</sup> Rather, a policy should be adopted which requires that measures be taken to create fish habitat.

Furthermore, the province should adopt the Sewell Commission's policy A.11 which partly requires that, "In decisions regarding development, every opportunity will be taken to improve the quality of air, land, water and biota".<sup>245</sup> The Ministry of Municipal Affairs put forward a similar policy which merely encourages that this be done.<sup>246</sup> Protecting water quality necessitates protecting the quality of air and land, since cross-media contamination from the air and land often pollutes the water.

The province should ensure that the impact of these policy changes is strengthened by revising s. 3(5) of the *Planning Act* to require that planning decisions "be consistent with" provincial policy statements.

In order for these policy changes to be more effective, municipalities need to be given the authority to carry out remediation measures, such as creating vegetative strips along waterways. A lack of municipal authority to do this is currently preventing the City of Waterloo from requiring property owners along the settled areas from planting vegetation strips along their property. Of course, it should be emphasised that municipalities should first attempt to get citizens and developers to voluntarily help to improve the watershed, as this should help reduce conflict and has proven effective in getting developers to agree to planting a 30 metre vegetative strip along the Laurel Creek Watershed.

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<sup>244</sup> CPDRO, 1993, policy A.6, p. 30; MMA, 1993, policy A.1.5, p. 7.

<sup>245</sup> CPDRO, 1993, policy A.11, p. 30.

<sup>246</sup> MMA, 1993, policy 1.6, p. 7.

## State of the Environment Reports

### **Description**

The 1991 *State of the Environment Report* (SOTER) prepared in Waterloo Region discussed certain environmental conditions in the region, and how these trends would affect "...regional productivity, economic stability, and social satisfaction".<sup>247</sup> The report was prepared for the purposes of increasing awareness of important environmental issues and encouraging environmental action on the part of individual citizens, business, government, and other organisations.<sup>248</sup> The preparation of *SOTER* was mandated by the Terms of Reference of the Environmental and Ecological Advisory Committee (EEAC), which stipulate:

The EEAC will prepare a periodic "State of the Regional Environment" report on a 4 to 5 year recurring basis to include the parameters of water quality and quantity, effectiveness of pollution abatement, waste management, agricultural land management, forest land management, ESPA management, aggregate extraction and rehabilitation, recreation and tourism, as these affect both the productivity of the urban and rural environment and the associated socio-economic stability and quality of life for the Region.<sup>249</sup>

Like other SOTERs prepared in the province, the Region's included information on human activities, such as land conversion and the human population; environmental assets such as woodlots or wetlands; and environmental quality as indicated by air, water and soil contamination.<sup>250</sup> However, unlike these other SOTERs, Waterloo Region's placed much more emphasis on the natural processes of the area, such as ageing forests, changes in habitat or species in ESPAs and hydrogeological studies.<sup>251</sup> Many other SOTERs simply assessed the quantity of environmental assets in the area, such as acreages of greenspace.<sup>252</sup> Furthermore, with the exemption of the City of Toronto, Waterloo Region's *SOTER* is the only one which incorporated socio-economic data.<sup>253</sup> While the socio-economic data collected by the City of Toronto simply included employment data, the Region included information on factory closings, retail studies, regional shopping centres, office space inventory, transportation and recreation/tourism in its report.<sup>254</sup>

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<sup>247</sup> RWHW, 1991A, p. 11.

<sup>248</sup> Ibid, p. 9.

<sup>249</sup> Ibid, p. 10.

<sup>250</sup> Ibid.

<sup>251</sup> Ibid.

<sup>252</sup> Ibid.

<sup>253</sup> Ibid.

<sup>254</sup> Ibid.

## History

The first and only *SOTER* completed as of yet in Waterloo Region was prepared between August 1984 and December 1991 at the initiative of EEAC. In 1984, EEAC and Regional planning staff began preparing the terms of reference for the "State of Environment Report".<sup>255</sup> By December 1989, Background Report No. 1 for *SOTER* was completed.<sup>256</sup> The report provided "a review of the quality of life, sustainable development, and state of the environment reporting concepts and methodology, as well as an annotated bibliography of relevant literature".<sup>257</sup>

On July 10, 1991, Background Report No. 2, "Environmental Issues: Survey Questionnaire and Newspaper Content Analysis" for *SOTER* was released. The results of the survey revealed that the three main public issues in descending order of concern were water supply and quantity; residential development; and encroachment into wooded areas and ESPAs by new developers.<sup>258</sup> There was a relatively good response rate to the questionnaire, with 50 of 124 distributed forms returned fully completed and another 13 partially completed.<sup>259</sup>

The newspaper content analysis revealed that the issues given greatest media attention in the *Kitchener-Waterloo Record* were growth and development, water resources, pollution and waste management.<sup>260</sup> With the exception of pollution and waste management, these coincide closely with the three main concerns expressed by the public in the questionnaire. Either the newspaper significantly influenced the concerns of citizens in the Region about the environment, or the newspaper covered the most important environmental issues in the Region.

The newspaper content analysis also revealed that "the economic downturn of 1982, contrary to expectations, did *not* lead to a decrease in the attention paid to local environmental issues by Regional residents, nor does it appear to be diminishing during the current recession."<sup>261</sup> Thus, the *SOTER* revealed a significant commitment of the residents in the Region to environmental issues.

As well, the newspaper contents underscored the importance of environmental issues in the Region by identifying a dramatic increase in environmental news items in the *Kitchener-Waterloo Record* in 1988 as compared to 1973 and showing that local municipalities were getting increasingly involved in environmental issues.<sup>262</sup> For instance, it was noted that the City of Waterloo introduced a "Environment First" growth

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<sup>255</sup> Clark Reichert, personal communication, Fall 1993.

<sup>256</sup> RWHW, 1991B, p. 10.

<sup>257</sup> RMW, 1991A, p. ii.

<sup>258</sup> RMW, 1991C, p. 9.

<sup>259</sup> *Ibid*, p. 9.

<sup>260</sup> *Ibid*, p. 35.

<sup>261</sup> *Ibid*, p. iii.

<sup>262</sup> *Ibid*, p. 35.

management strategy, and Kitchener put forward an initiative to develop an environmental strategic plan.<sup>263</sup>

On April 11, 1991, Background Report No. 3, "Report of the Citizens Advisory Committee on the Quality of Life" was released. The report was prepared by a nine-member Citizens Advisory Committee (CACQL) formed in November 1989 to listen and review concerns from the public.<sup>264</sup> According to Reichert, the committee was established largely because of the success of EEAC, which was established in 1976. He also says that the establishment of this committee helped to increase communication between the community and the Region, in part because CACQL was the first attempt to develop a wide ranging contact list with groups and agencies in the Region. In addition, the media representatives were more comfortable with reporting the impartial assessments of regional concerns provided by the citizen members of this committee than politicians.<sup>265</sup>

CACQL members came from a variety of backgrounds and were "...selected from different walks of life and from various locations within the Region".<sup>266</sup> Their mandate included regional issues with regard to the general quality of life, growth and development, the planning process, economic concerns, the natural and social environment, agriculture, water resources, waste management, transportation, recreation, cultural and heritage amenities, the health care system and housing.<sup>267</sup>

As part of its research, CACQL held a series of public meetings between January and June 1990. Interested individuals, groups and organisations made verbal presentations at these meetings, and additional written comments were submitted.<sup>268</sup> Unfortunately, no feedback was received from the ageing, fire-fighters, health care, business, labour, street kids and group home residents.<sup>269</sup>

The CACQL report discusses citizens concerns about

- uncontrolled growth, especially in rural areas;<sup>270</sup>
- a lack of commitment by decision makers to Official Plans;<sup>271</sup>
- the inability of the public to get townships and regional councillors to listen to their needs;<sup>272</sup>
- pollution from agriculture and local industry;<sup>273</sup>

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<sup>263</sup> Ibid, p. 41.

<sup>264</sup> Ibid, p. iii.

<sup>265</sup> Clark Reichert, personal communication, Fall 1993.

<sup>266</sup> RMW, 1991B, p. iii.

<sup>267</sup> Ibid, pp. iii-vii.

<sup>268</sup> Ibid, p. iii.

<sup>269</sup> Ibid, pp. 5-6.

<sup>270</sup> Ibid, p. 4.

<sup>271</sup> Ibid, p. 12.

<sup>272</sup> Ibid, p. 4.

<sup>273</sup> Ibid, p. 4.

- the fact that ESPAs are becoming diminishing "islands of green" due to development;<sup>274</sup>
- concern about violations of personal security such as from vandalism or assault;<sup>275</sup>
- the need to provide an affordable and user-friendly public transit system connecting the Region's municipalities<sup>276</sup> which is integrated with all modes of travel, including trains, planes and cars;<sup>277</sup>
- a desire for a linked recreational system;<sup>278</sup> and
- environmental degradation due to uncontrolled economic growth.<sup>279</sup>

By December 1991, the *Final SOTER* was completed. This report was prepared by the Regional Planning and Culture Department under the general oversight of EEAC.<sup>280</sup> This report contained the results of a study which assessed environmental changes in Waterloo Region since 1973, as well as available information on earlier changes, since a SOTER had not been conducted for the Region before.<sup>281</sup> This provided the base from which to project trends with regard to population growth, the number of residents living in housing units, the total area of wetlands and other issues.

The most important recommendation included in the *Final SOTER* was the following:

...as part of the 1991-93 Regional Official Policy Plan review, a thorough study be done of possible population growth paths for the Region over the next fifty years. Any growth scenarios need to go beyond economic and population forecasts to the *essence of sustainable development*, namely:

- (a) the capacity of local physical environments to sustain population at prevailing levels of environmental protection technology and planning;
- (b) the adequacy of water supplies within or imported into the Region; and
- (c) the quality of life of the present and future inhabitants of the Region.<sup>282</sup>

Reichert claims that the incorporation of the principles of sustainable development into *SOTER* was largely influenced by *The Challenge Paper* of the Ontario Round Table on Environment and Economy, which dealt with this subject.<sup>283,284</sup> To a lesser extent, the

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<sup>274</sup> Ibid, p. 5.

<sup>275</sup> Ibid.

<sup>276</sup> Ibid.

<sup>277</sup> Ibid.

<sup>278</sup> Ibid.

<sup>279</sup> Ibid, p. 20.

<sup>280</sup> RMW, 1991A, p. i.

<sup>281</sup> Ibid, p. 15.

<sup>282</sup> Ibid, p. 98 [my italics].

<sup>283</sup> The challenge paper was presented to EEAC and the RMW's Planning and Development staff on January 8, 1991. See RMW, 1991A, pp. 21-3.

<sup>284</sup> RMW, 1991D, p. 2.

emphasis on sustainable development in *SOTER* may have been derived from the Stockholm Declaration (1972), with its emphasis on quality of life and sustainable development; the World Conservation Strategy (1980), which emphasised maintaining ecological processes, preserving genetic diversity and ensuring the sustainable utilisation of species and ecosystems, and the report of World Commission on Environment and Development (1987), commonly known as the Brundtland Report, which emphasised considering the needs of future generations.<sup>285</sup> All of these reports are mentioned in the *Final SOTER* during the discussion of sustainable development.<sup>286</sup>

A number of the *SOTER* recommendations on bringing about sustainable development in the Region later appear in the "Recommendation Report" for the review of the *Regional Official Policy Plan* (See Appendix). Some of the recommendations contained in *SOTER*, but not included in the "Recommendation Report", eventually find their way into the *Draft Plan*. This includes a proposal to expand the scope of issues reviewed by EEAC, as well as a proposal to require that area municipalities establish policies in their Official Plans which achieve a "mix of residential, employment... institutional and community services uses which enable people to live and work in close proximity".<sup>287</sup>

Upon completion of *SOTER*, the Planning and Culture Department noted that "one of the most frustrating aspects of preparing a State of the Environment Report at this time is the lack of available environmental data".<sup>288</sup> This lack of information was due in part to the failure to complete Background Report No. 4 which was supposed to have included a series of separate reports on the present state and trends of water resources, pollution abatement, waste management, land use, agriculture, forests, environmentally sensitive policy areas and aggregate resources.<sup>289</sup> During the winter of 1992, after the *Final SOTER* had been completed, three papers for Background Report No. 4 were released by the Planning and Culture Department for review by EEAC. The papers covered Waste Management and Air Pollution Abatement, Land Use, and Water Quality. Reichert says EEAC has not yet released a number of these reports to the public since Regional planning staff have been unable to complete them due to other work priorities.

Better information may be available for the preparation of the next *SOTER* if the *Regional Official Policy Plan (ROPP)* is amended to include a proposed policy for the creation and maintenance of integrated region-wide demographic, environmental, economic, land use and social databases. The database would include information on land utilisation; residential density and mix of development occurring within various areas; the number, type, and market values of housing; employment and other pertinent economic data; land use changes affecting resources including Prime Agricultural Lands, surface water, groundwater and recharge areas, and the Natural Habitat Network (see above); per

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<sup>285</sup> RMW, 1991A, pp. 21-23.

<sup>286</sup> Ibid.

<sup>287</sup> RMW, 1994, policy 4.4.1.2, p. 7-21f.

<sup>288</sup> RMW, 1991A, p. 99.

<sup>289</sup> Ibid, p. ii.

capita transit ridership; demographic and migration trends; water and wastewater servicing capacity.<sup>290</sup>

The Region had suggested in the Recommendation Report for *ROPP* that the information from these databases would possibly be placed in a Regional Geographic Information System (GIS), although this policy was not included in the *Draft Plan*.<sup>291</sup> A Geographic Information System would be useful as it would reveal how different forms of land-use would interact and affect each other (i.e. how development affects groundwater recharge). Fortunately, the Region is still in the process of developing a Regional Geographic Information System.<sup>292</sup> Much of the information necessary to create the Geographic Information System has already been taken from MNR's 1:10,000 Ontario Base Maps (OBMs), although a conversion program had to be written since MNR's data were not compatible with the Region's system.<sup>293</sup>

## **Evaluation**

### Effectiveness

The 1991 *SOTER* conducted by Waterloo Region was effective in that it took an "ecosystem approach", assessing both biophysical and socio-economic concerns. Attempts were also made to anticipate future problems in the region by seeking out trends in population growth and other issues.

According to the Planning and Culture Department, however, the report could not be properly prepared due to a lack of pertinent information. Of course, more information was collected because the committee members of CACQL spoke to their peer groups and these dialogues may have also encouraged environmental action on the part of individual citizens, business, government and other organisations.<sup>294</sup> Environmental action may have been further encouraged because the media were more comfortable with talking to the citizen members of CACQL, rather than politicians.<sup>295</sup> It seems logical that this increased the quantity and quality of media attention given to the process of preparing *SOTER* and the issues it addressed.

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<sup>290</sup> RMW, 1994, policy 12.3.3, p. 12-9.

<sup>291</sup> RMW, 1993C, p. 70.

<sup>292</sup> Miranda Tsang, personal communication, May 27, 1994.

<sup>293</sup> Ibid.

<sup>294</sup> RMW, 1991A, p. 11.

<sup>295</sup> Clark Reichert, personal communication, Fall 1993.

## Fairness

According to Reichert, extensive efforts were made to solicit public input for *SOTER* since public cooperation was needed to deal with issues facing the Region, such as water and waste problems.<sup>296</sup> Indeed, it appears that a great deal of public input was gathered from a wide variety of people because the members of CACQL had diverse backgrounds, CACQL held a series of public hearings and accepted written submissions over a prolonged period of time, and *SOTER* included further input solicited from the public through the questionnaire for Background Report No. 2.

The process of preparing *SOTER* could have been fairer if more feedback had been solicited from groups such as the ageing and business, and more, fully-completed questionnaires had been returned.<sup>297</sup> Yet, the public was provided with several opportunities to voice their opinions, and could perhaps have taken greater advantage of these opportunities to express their views.

## Efficiency

The preparation of *SOTER* was less efficient due to the lack of pertinent information, which meant that it took more effort, time, and money to prepare the report. The work done by the citizen volunteers on CACQL, however, did not cost the Region a great deal. The Region only had to pay for the expense of providing CACQL with transportation, facilities in which to work, and materials with which to prepare the report, as well as the time spent by planning staff to help with the final editing of the reports.

According to Reichert, the Region has found that by soliciting public input through *SOTER*, it has avoided some time-consuming and costly conflicts with the public over the *ROPP*. This may be extremely important as the Region faces provincial cutbacks, while being given more responsibility by the province. However, since the revised *ROPP* has not yet been implemented, it is impossible to fully assess how useful the preparation of *SOTER* will be in decreasing conflicts over *ROPP*.<sup>298</sup>

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<sup>296</sup> Ibid.

<sup>297</sup> RMW, 1991C, pp. 5-6.

<sup>298</sup> Clark Reichert, personal communication, June 7, 1994.



## Recommendations

### Region

Because the suggestions from *SOTER* have not yet been incorporated into *ROPP*, firm recommendations may be premature. The difficulty of preparing the 1991 *SOTER* due to a lack of environmental information does suggest, however, that the Region should include in its *Official Plan* the proposed policy for the creation of integrated region-wide demographic, environmental, economic, land use and social databases, as well as continue in its efforts to create a regional GIS.

When the Region prepares future SOTERS, it should make a special effort to solicit feed-back from groups, such as the ageing, which may not respond readily to conventional requests for opinions.

### Other Provincial Municipalities

Other municipalities thinking of preparing a *SOTER* should make a special effort to solicit feed-back from certain groups which may not respond readily to conventional requests for opinions. They should also recognise the difficulty of collecting enough pertinent information and plan accordingly, especially if the *SOTER* is expected to be used for purposes such as the preparation of an Official Plan. For those municipalities which have not as yet created a Geographic Information System, this includes trying to choose software which is compatible with the GIS applications of other municipalities and ministries from which they will be obtaining data.<sup>299</sup>

### Province

To help municipalities which have not yet created a Geographic Information System, the province should provide information on which software is compatible with the applications used by the various ministries and municipalities, and recommend that municipalities purchase this software.<sup>300</sup> Standardising Geographic Information Systems throughout the province can help bring about ecosystem planning, which takes into account the boundaries of ecosystems (e.g. watersheds), since it enables adjoining municipalities to integrate information contained in their Geographic Information Systems.

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<sup>299</sup> Miranda Tsang, personal communication, May 27, 1994.

<sup>300</sup> Ibid.

## **Waterloo Region's Official Policy Plan**

### **Description**

The *Regional Official Policy Plan* (ROPP) is a legal document containing policies mainly on planning issues, but also on social, economic and environmental concerns. The policies contained in Waterloo Region's *ROPP* must be reflected in the policies, by-laws and other planning decisions of the cities of Waterloo, Kitchener, and Cambridge; and the townships of Wellesley, Woolwich, Wilmot and North Dumfries.

The Region's current ROPP review is unique in that an effort is being made to incorporate policies which facilitate "sustainable development". In order to achieve this, an effort has been made to recognise the interdependence between issues, such as by considering how land-use affects water supply and transportation needs.<sup>301</sup> Furthermore, according to Michael Parkinson, a member of Waterloo Public Interest Research Group (WPIRG), a non-government organisation which defends social and environmental causes, the Region is unique in its extensive efforts to solicit public input to help in the ROPP review.<sup>302</sup>

### **History**

The ROPP review began in October 1991. According to Reichert, the ROPP policy planner at the Region, the decision to incorporate the principles of sustainable development into the *Official Plan* was largely in response to the recommendations of *SOTER*. These recommendations were submitted to the Environmental and Ecological Advisory Committee, the Planning and Culture Department and Regional Council for the review of ROPP. Although the *Final SOTER* was completed in December 1991, the Region was influenced by the recommendations of *SOTER* before that time.<sup>303</sup>

Reichert says that from the beginning of the review, emphasis was placed on public participation.<sup>304</sup> This allowed the review to take into account issues that would apply to the non-government sector, such as environmental and economic interest groups. It was

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<sup>301</sup> Clark Reichert, personal communication, Fall 1993.

<sup>302</sup> Michael Parkinson, personal communication, Fall 1993.

<sup>303</sup> Clark Reichert, personal communication, Fall 1993.

<sup>304</sup> Ibid.

even hoped that opening dialogue with these interest groups would encourage them to adopt goals which were consistent with *ROPP* objectives. In addition, it was felt that encouraging public participation would increase public acceptance of the policies incorporated into the final *ROPP*. To facilitate public participation, an effort was made to ensure the reports generated during stages one and two of the *ROPP* review could be understood by the general public by omitting technical and legalistic jargon.

Phase 1 of the revision, conducted between October 1991 and November 1992, involved developing a "vision" of what the Region should be like in the short and long term.<sup>305</sup> In May 1992, the Region produced "Towards 2021: Shaping our Regional Vision Together". In it, three different visions of what the region could be like by the year 2021 were put forward. The Region was not incited to consider alternative "visions" out of any legal concerns about satisfying the provincial *Environmental Assessment Act*, which requires that major undertakings consider the socio-economic and biophysical impacts of alternative ways of responding to an identified purpose.<sup>306</sup>

Vision A involved achieving "social sustainability" and included moderate urban intensification (e.g. more townhouses); water supply and sewage effluent pipelines between the region and one of the Great Lakes; "high end" industries attracted to the region by several economic initiatives; GO train service to Toronto and improved in-city transit; a "recreational Greenbelt" around the urban area; non-farm activity on farms of medium size; a reduction in the use of chemicals resulting in less concern about water contamination; more affordable housing and the creation of human services (i.e. health and education) in conjunction with the growth of the community; and neighbourhood natural areas which local neighbourhood communities manage.<sup>307</sup>

Vision B focused on "economic sustainability" and included low-density development and the separation of land-uses (i.e. residential suburbs, malls) resulting in the development of lands beyond city boundaries, the loss of agricultural land and continued reliance upon the automobile; degradation of soils and contamination of water due to the use of fertilisers and pesticides; a lack of affordable housing and services (e.g. health and education); and the degradation of ESPAs due to a failure to consider the cumulative impacts of development and human carelessness.<sup>308</sup>

Vision C focused on environmental sustainability, and included the concentration of development in nodes, so that the urban boundaries were not expanded beyond the tri-city area and people were encouraged to walk, bike or take transit; the retraining of many workers in programs financed by government and private sector partnerships; the establishment of an "Agricultural Greenbelt" adjacent to the urbanised area within which only agricultural uses are permitted; and a linked system of woodlots, recharge areas,

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<sup>305</sup> RMW, 1993C, p. 2.

<sup>306</sup> Clark Reichert, personal communication, Fall 1993.

<sup>307</sup> RMW, 1992A.

<sup>308</sup> Ibid.

environmentally sensitive areas and greenbelts.<sup>309</sup> According to Reichert, SOTER was particularly influential in the formation of Vision C.<sup>310</sup>

To help generate discussion and gather public input on the visions, the Region held workshops which involved a number of people with different areas of expertise, including business, environment, human services, health, transportation, housing and development. The Region also prepared a public input report and provided a questionnaire for residents to write down which vision they most supported, and an effort was made to make the "visions" more understandable by using lay-person's language and including pictures (see figure 3).<sup>311</sup> Nonetheless, the general public had difficulty evaluating the Vision Principles since they had to think in such broad terms (e.g. about how development would affect the viability of public transportation).<sup>312</sup>

Reichert says that the responses of the public to the visions were largely reflective of the "not-in-my-backyard" syndrome: people did not want things happening in their community, but felt they had to happen somewhere. When the visions were presented to the general public and Regional Council, Reichert says they

liked elements of the environmental sustainability, but didn't want to pursue that particular approach, divorcing it from all the other approaches that we presented. So ultimately what happened is that we took the best elements from the economic sustainability and social sustainability visions and pulled them into the environmental approach.<sup>313</sup>

The integration of environmental, social and economic issues is reflected in the document, "Vision Principles for a New Regional Plan", completed in November 1992, which is the culmination of the first phase of the ROPP review (see figure 2).

Despite the efforts to solicit public input on the Vision Principles, not everyone was pleased with the results. A number of the Vision Principles were not well received by WPIRG for environmental and social reasons. For instance, WPIRG was concerned that the principle calling for "new style suburbs" <sup>314</sup> would mean a continuation of single family enclaves with a few minor changes.<sup>315</sup> WPIRG also argued that "the public [should] be given some form of decision making power" such as by giving a committee of citizens, which had an interest in one area of Regional and/or municipal jurisdiction, the opportunity to provide "real input" into the decision-making process.<sup>316</sup>

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<sup>309</sup> Ibid.

<sup>310</sup> Clark Reichert, personal communication, Fall 1993.

<sup>311</sup> Ibid.

<sup>312</sup> Ibid.

<sup>313</sup> Ibid.

<sup>314</sup> RMW, 1992B, p. 4.

<sup>315</sup> WPIRG, 1993, p. 1.

<sup>316</sup> Ibid, p. 4.

Most notably, WPIRG suggested that although the document advocated achieving sustainability within the Region, it failed to see where sustainable levels had already been exceeded, in terms, for example, of water supplies, as evidenced by the proposal to build a water pipeline from the Great Lakes to the Region.<sup>317</sup> WPIRG went on to argue that the Vision Principles should focus on achieving sustainability beyond the region. They argued, for instance, that the Region should not allow any more wetlands to be destroyed given that MNR had just reported in the summer of 1992 that 80% of the original wetlands had been destroyed southern in Ontario.<sup>318</sup> Similarly, they suggested that consideration should be given to the problem of global climate change caused by the burning of fossil fuels.<sup>319</sup>

Phase 2 of the ROPP review, which lasted between November 1991 to October 1993, involved the development of more specific strategies of how the selected vision would be achieved. A Regional Settlement Pattern Concept was developed which is consistent with the Vision Principles and "...shows the possible settlement boundaries and locations of higher density (nodes)..."<sup>320</sup>

The Region had originally intended to use the accepted vision principles to create a long-range plan which would extend 25 years into the future. The Region may have been encouraged to do this because the Citizens Advisory Committee for the Quality of Life recommended undertaking long-range strategic plan drawing on alternative growth scenarios, based on a vision of what citizens would prefer Region to be like in 20 to 50 years.<sup>321</sup> Unfortunately, the idea of creating a long-range strategic plan was suspended due to budgetary and regulatory constraints. The Ministry of Municipal Affairs prohibits the production of a ROPP that looks at infrastructure and housing beyond 20 and 50 years respectively due to concerns about accurate forecasting.<sup>322</sup>

To gather public input during phase 2, another workshop was held involving many of the same individuals who attended the earlier workshop. Another public input report could not be prepared, however, since council had shortened the time-frame for the ROPP review. In addition, according to Reichert, it was felt that public input report would be largely unnecessary since it would likely contain many of the same ideas which were gathered during the first phase.<sup>323</sup> The comments from the workshop were, however, included in the recommendation paper completed during phase 3.<sup>324</sup>

In April 1993, the Region released a discussion paper on "Development Strategies: Policy Directions and Settlement Patterns", followed in June 1993 by a recommendation

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<sup>317</sup> Ibid, p. 5.

<sup>318</sup> Ibid, p. 1.

<sup>319</sup> Ibid, p. 5.

<sup>320</sup> RMW, 1993C, p. 3.

<sup>321</sup> RMW, 1991B, p. 13.

<sup>322</sup> Clark Reichert, personal communication, Fall 1993.

<sup>323</sup> Ibid.

<sup>324</sup> Ibid.

paper on the same topic. In September 1993, the revised recommendation paper was completed and eventually accepted by Regional Council.

Phase 3, initiated in July 1993 and slated for completion in August 1994, will involve forming detailed policies for the new ROPP. Initially, Regional Council had wanted phase 3 to continue until June 1995, because the Planning and Culture Department felt there were so many issues that had to be resolved.<sup>325</sup> Later on, however, Council instructed staff to finish the ROPP by August 1994, before the upcoming municipal elections.

To meet this deadline, by the end of March 1994, the Planning and Culture Department produced a *Draft Plan* which was presented to the major interest groups. Due to time constraints, no community workshop was held and no public input report was prepared before the completion of the *Draft Plan*. To help in the preparation of the final revised plan, however, a community workshop, again involving many of the earlier participants, was held in May and public input was solicited until June 15.<sup>326</sup> A response paper is slated for completion in early August 1993 since very detailed policies are being discussed during Phase 3, and the Region wants to make sure that the public is provided with an explanation as to why some of their suggestions were or were not incorporated into the revised ROPP.<sup>327</sup> Reichert says this should help increase the political acceptability of the revised ROPP.<sup>328</sup>

Several meetings have already been held with regional and area municipalities, as well as government ministries since January so that they could become more familiar with the issues and comment on the proposed policies. Further meetings have been held with municipal planners and various interest groups including agricultural, environmental, heritage, and business groups as well as consultants and developers. The revised plan is expected to be completed at least by early August.<sup>329</sup>

To help solicit public input on the revised plan, it has been suggested that a second, less technical final revised report be produced.<sup>330</sup> It is still uncertain whether this report will be produced as it might lead to some misinterpretation if people read the less technical report instead of the revised plan. There is also inadequate staff resources to produce this report.

Another public meeting under the *Planning Act* is expected to be held on September 15 to receive comments on the revised plan. Then the plan should be presented to Regional Council for adoption on October 13 and 27. It is expected that the plan should be accepted, as the Region has already discussed the *Draft Plan* with the municipal

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<sup>325</sup> Ibid.

<sup>326</sup> Michael Parkinson, personal communication, May 25, 1994.

<sup>327</sup> Clark Reichert, personal communication, May 27, 1994.

<sup>328</sup> Ibid.

<sup>329</sup> Ibid, June 7, 1994.

<sup>330</sup> Ibid, May 27, 1994.

councillors and planners. After that, the Official Plan will be sent to the Ministry of Municipal Affairs for final approval.<sup>331</sup>

## **Evaluation**

### Effectiveness

Since the revised *ROPP* is not yet approved and being applied, it is impossible to determine how successful it will be in bringing about "sustainable development". However, the review of *ROPP* has been effective in introducing an "ecosystem approach" in which environmental, social and economic concerns have been addressed. WPIRG and other environmental interest groups may find that many of the policies fail to address social and environmental concerns adequately. But social and environmental concerns received more attention than they would have were it not for the community workshops held during phases 1, 2 and 3. According to Reichert, during these workshops, some members of the public found that ideas they had considered "etched in stone" could be re-opened for discussion when confronted with other perspectives.<sup>332</sup>

### Fairness

It cannot be ascertained as of yet how acceptable the decisions made under the revised *ROPP* will be to the public. However, efforts have been, and are expected to continue being made to solicit public opinion by conducting community workshops, public input meetings, questionnaires; preparing public input and response papers; and excluding technical language from reports written during phases one and two. The policies also address issues which are of concern to rural residents, such as "urban sprawl" and the consumption of rural groundwater by urbanites.<sup>333</sup>

Not all of the public's recommendations were incorporated into the *ROPP* review because the review was a political process in which a wide variety of opinions had to be accommodated, and environmental, social and economic concerns had to be incorporated.<sup>334</sup> For instance, a policy allowing "farm-related business activities" was favoured to help meet the needs of farmers and their families who often cannot make enough money simply through farming.<sup>335</sup>

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<sup>331</sup> Ibid.

<sup>332</sup> Ibid, May 31, 1994.

<sup>333</sup> Clark Reichert stated in Fall 1993 that rural concerns are addressed in part because Waterloo Region is comprised of a balance of rural and urban areas.

<sup>334</sup> Clark Reichert, personal communication, Fall 1993.

<sup>335</sup> RMW, 1993C, p. 44.

## Efficiency

According to Reichert, the ROPP review was slowed down since it involved soliciting and incorporating the concerns of a wide variety of political interests.<sup>336</sup> However, time is expected to be saved in the long-run through reduced disagreement about amended ROPP and the decisions made under it, and accordingly there should be fewer costly and time-consuming disputes to be resolved in the future.<sup>337</sup>

## **Recommendations**

### Region

Given the information now available, it appears that Waterloo Region should conduct future ROPP reviews a manner similar to the current review. Despite the fact that the policies expected to be incorporated into the *ROPP* are highly controversial, as they aim to bring about sustainable development, the Region expects that these policies will be largely accepted by area municipalities, government agencies, and the public.

Emphasis should thus again be placed on negotiating with area municipalities, government agencies and the public by conducting a multi-phased review which starts by considering the broader "vision" to be pursued by Region and gradually includes increasingly detailed visions, policies and programs in its reports. Public comment should be solicited through workshops, public input papers, and other techniques. Workshops should particularly be relied upon to help bring divergent interest groups together.

### Other Provincial Municipalities

Given the information now available, it appears that other provincial municipalities should conduct their Official Plan reviews in a manner similar to the Region.

### Province

The fact that concerns over Ontario Municipal Board (OMB) conflicts incited Waterloo Region to solicit public feedback suggests that the OMB should retain its ability to make binding decisions regarding amendments and by-laws under respectively s. 23.6 and s. 34.26 of the *Planning Act*.

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<sup>336</sup> Clark Reichert, personal communication, Fall 1993.

<sup>337</sup> Ibid.



The province should also consider adopting the proposals put forward by the Sewell Commission designed to improve the solicitation of public comment on planning issues,<sup>338</sup> particularly the proposal to require municipalities to seek public input when revising their Official Plans.<sup>339</sup>

The province should perhaps create upper-tier municipalities and counties which are comprised of a balance of urban and rural areas. As noted by Reichert, this has helped ensure that the needs of both rural and urban residents will be addressed in the revised ROPP.<sup>340</sup>

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<sup>338</sup> CPDRO, 1993, pp. 105-112.

<sup>339</sup> Ibid, p. 110.

<sup>340</sup> Ibid.

## **Overall Analysis of the Five Initiatives for Greater Environmental Responsibility in Land-Use Planning**

### **Evaluation**

#### Effectiveness

The land-use planning initiatives have worked effectively together. The preservation of Environmentally Sensitive Policy Areas (ESPAs), with the help of the Environmental and Ecological Advisory Committee (EEAC), made it possible for the Laurel Creek Watershed Study to focus on preserving the environment in order to control flooding. EEAC has played a crucial role in the preparation of the *State of Environment Report* (SOTER), which in turn made a number of recommendations that should help bring about the incorporation of the principles of "sustainable development" in the *Regional Official Policy Plan* (ROPP). Similarly, both the ROPP review and SOTER assessed ways to protect ESPAs (e.g. by creating natural "linkages" between ESPAs) and make EEAC more effective (e.g. by expanding the role of EEAC).

The land-use planning initiatives have also been effective in introducing an "ecosystem approach" which aims to strike a balance between environmental, social and economic concerns. For instance, the ROPP review and SOTER focused on improving the natural and socio-economic environment in the region. The Laurel Creek Watershed Study focused on improving the watershed, as well as working to prevent flooding and provide an adequate water supply for residents. An attempt has been made to preserve the significant environmental features in the region through the designation and protection of ESPAs, while at the same time addressing the economic needs of private owners of ESPAs by allowing activities such as logging on their property.

Despite taking an "ecosystem approach", however, the Region has not always protected the natural environment adequately. ESPAs have been degraded by allowing logging and development in and around them. Furthermore, preventing this logging has been difficult since it is allowed under the provincial *Woodlands Management Act*. Similarly, many of the policies put forward during the ROPP review do not stress protecting the natural environment as some groups, such as the Waterloo Public Interest Research Group (WPIRG), would have liked.

Many of the land-use planning initiatives were also effective in that they attempted to predict problems and issues which would arise in the future. SOTER identified trends with regard to population growth, the number of residents living in housing units, the total area of wetlands and other issues by using information collected as far back as 1973. The Laurel Creek Watershed Study was conducted to find ways to avoid flooding damage

which could occur during the 100 year flood. Similarly, an attempt was made during the ROPP review to create a long-range plan which would extend 25 years into the future, but unfortunately the concept was suspended due to budgetary constraints.

Lastly, many of the initiatives have been effective in that they have managed to overcome jurisdictional or social boundaries in order to recognise the boundaries of ecosystems. The Laurel Creek Watershed Study spanned the Laurel Creek Watershed in the municipalities of Waterloo, Wellesley, Wilmot, Woolwich and Kitchener. The ROPP review has been addressing both rural and urban concerns since the Region has a good balance of rural and urban areas. However, the initiatives could also have been more effective if they had addressed land-use planning needs beyond the boundaries of the region. For instance, as pointed out by WPIRG, the ROPP review should have taken into consideration the loss of wetlands throughout southern Ontario, as well as the problem of global climate change caused by the burning of fossil fuels.<sup>341</sup>

### Fairness

All of the initiatives have been extremely fair in that they relied and responded to the input of regional residents. A roundtable of interested citizens was formed during the Laurel Creek Watershed Study to make decisions on controversial issues; citizen presentations and questionnaires were conducted during the preparation of SOTER; community workshops, public input and response papers, and citizen presentations were all part of the preparation of ROPP; one-to-one meetings were held with owners of lands which the Region wanted to designate as ESPAs; and interested citizens on EEAC bring attention to issues which are important to the community.

Unfortunately, not all viewpoints could be accommodated during the ROPP review since so many interest groups were involved. In addition, the ESPA designations could have been more fair if the province provided better tax rebates for owners of ESPAs

### Efficiency

The land-use planning initiatives were often conducted more efficiently by using information which had been collected during one of the other environmental planning initiatives. The Laurel Creek Watershed Study saved money and time by using information gathered on ESPAs. Similarly, a number of the recommendations made during the preparation of SOTER were adopted during the ROPP review.

The land-use planning initiatives were also efficient in that many relied heavily upon volunteers. Several landowners allowed their lands to be designated as ESPAs; interested citizens have volunteered to serve on EEAC, the Citizens Advisory Committee for the

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<sup>341</sup> WPIRG, 1993, p. 1, p. 5.

Quality of Life, and the roundtable for the Laurel Creek Watershed Study; and several people freely offered their time to attend workshops, make citizen presentations and submit papers to help in the preparation of *SOTER*, the revised ROPP, and the *Laurel Creek Watershed Study*.

Efficiency was often further increased by coordinating the efforts of different organisations. The Laurel Creek Watershed Study gathered information from the Groundwater Research Institute at the University of Waterloo and rallied the support of MNR and MOE in exchange for giving them an opportunity to exercise authority over wetlands, water quality and water taking. Similarly, professors and graduate students from the university played a key role in getting the first 69 ESPAs designated.

## **Overall Recommendations**

### Municipalities

Overall, it would appear that environmentally responsible land-use planning is something which can and should be pursued by municipalities. This is despite the current lack of municipal authority in a number of areas, including the inability to both protect regionally significant natural areas from development if the developer wishes to go to the Ontario Municipal Board, and require that vegetative strips be established in privately owned lands along watersheds. As demonstrated in the Regional Municipality of Waterloo, municipalities can get around this problem to a degree by attempting to working to establish good will with landowners and developers. This can be done by having one-to-one discussions with them, creating roundtables, conducting workshops, preparing public input and response papers, and using various other techniques.

Municipalities which have maintained good relations with adjoining municipalities and other government bodies can coordinate the efforts of these government bodies to implement programs which go outside of their jurisdictional boundaries, such as was done by the City of Waterloo during the Laurel Creek Watershed Study.

Municipalities might eventually be given the authority to bring about even better environmentally responsible land-use planning if the provincial government implements some of the proposals put forward by the Sewell Commission and the Ministry of Municipal Affairs. Thus, even taking the first steps towards environmentally responsible land-use planning (e.g. determining which natural areas should be designated for protection, prioritising funding for watershed studies) should help concerned municipalities get a "head start". Although the government has yet to adopt some of the important recommendations made by the Sewell Commission, the process of development process reform has just begun.

Moreover, the fact that some of proposals put forward by the Sewell Commission and accepted by the Ministry of Municipal Affairs have been influenced by the Laurel Creek Watershed Study (and perhaps other activities in Waterloo Region) suggests that the province is responsive to the activities of municipalities, and may implement laws, policies and programs which encourage environmentally responsible planning if the municipalities show an interest in this sort of planning. In other words, the activities of municipalities can be the catalyst for getting the province to bring about changes which enable municipalities to more fully pursue environmentally responsible planning.

For municipalities interested in initiating more environmentally responsible land-use planning, perhaps the most important rule is that emphasises should be placed on soliciting public input. Doing this helps municipalities make the process fair and avoid expensive, lengthy conflicts at the Ontario Municipal Board. Moreover, as revealed during Waterloo Region's ROPP review, encouraging public dialogue (e.g. through community workshops) can help the community to understand and adopt more "sustainable" philosophies.

Citizens who possess the expertise to solve local environmental problems should particularly be encouraged to provide input, possibly by creating a committee similar to Waterloo Region's EEAC. However, their work should be respected so they feel that their efforts are effective and thus continue to want to volunteer their time.

So that municipalities can make more informed decisions, they should collect information on the environmental resources in their municipality. When doing this, consideration should also be given to recruiting the help of volunteers to reduce costs and provide more people with opportunities for learning and experience. Steps should be taken to coordinate the labours of different organisations to minimise the expenditure of time and money. When conducting a watershed study, for instance, the efforts of municipalities in which the watershed is located, the Ministry of the Environment and the local Conservation Authority could be combined. Similarly, municipalities which are in the process of purchasing GIS software should consider whether the application will be compatible with the GIS applications of other government bodies with which the municipality will be exchanging information.

Lastly, careful consideration should be given to allotting a sufficient length of time to collect this information; careful work such as that required for the Laurel Creek Watershed Study can take a great deal of time.

## Province

Given the various difficulties encountered in Waterloo Region with pursuing environmentally responsible land-use planning, the province should work to make it easier for this sort of planning to be achieved. This includes adopting the various legislative and policy changes put forward by the Sewell Commission and the Ministry of

Municipal Affairs designed to enable municipalities to protect and enhance significant environmental features and functions within their area. Making these changes should also encourage action by municipalities which have not yet started to pursue environmentally responsible land-use planning.

The province should consider providing better tax breaks for owners of ESPAs, amending the *Woodlands Management Act* or *Planning Act* at least to restrict logging in certain areas of ESPAs, and redefining the boundaries of area and regional municipalities so that there is a good balance of rural and urban areas within them.

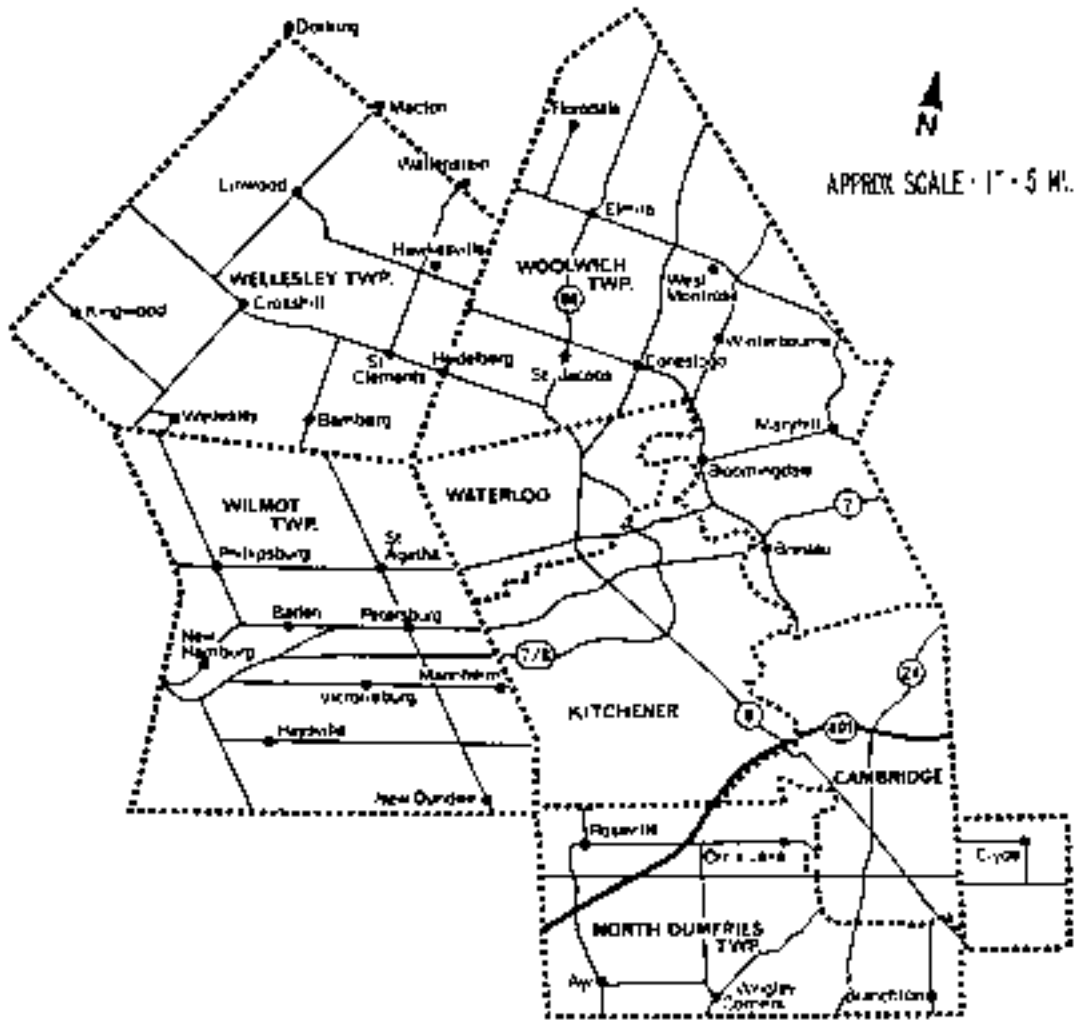
The province should require municipalities under the *Planning Act* to seek public input when revising an Official Plan, as this can help save time and money by avoiding disputes over land-use planning. This is particularly important since, at least in Waterloo Region, and probably across the entire province, municipal employees are being asked to do more with less money.

The OMB should retain its ability to make binding decisions regarding amendments and by-laws under respectively s. 23.6 and s. 34.26 of the *Planning Act* since concerns over OMB conflicts have incited the Region and the City of Waterloo to solicit public feedback. Although decisions made by the Region regarding ESPAs can be overturned at the OMB, the OMB has not done so as of yet.

To enable municipalities to make effective land-use planning decisions, they should be provided with the resources to collect and analyse environmental data. Inadequate environmental information made it difficult for Waterloo Region to prepare its *SOTER*, which was used to help incorporate the principles of sustainable development into the revised ROPP. Without this sort of information, municipalities will find it difficult, if not impossible, to act in ways which are "consistent with" those policy statements proposed by the Sewell Commission and the Ministry of Municipal Affairs to help bring about environmentally responsible land-use planning.

Maps and Figures

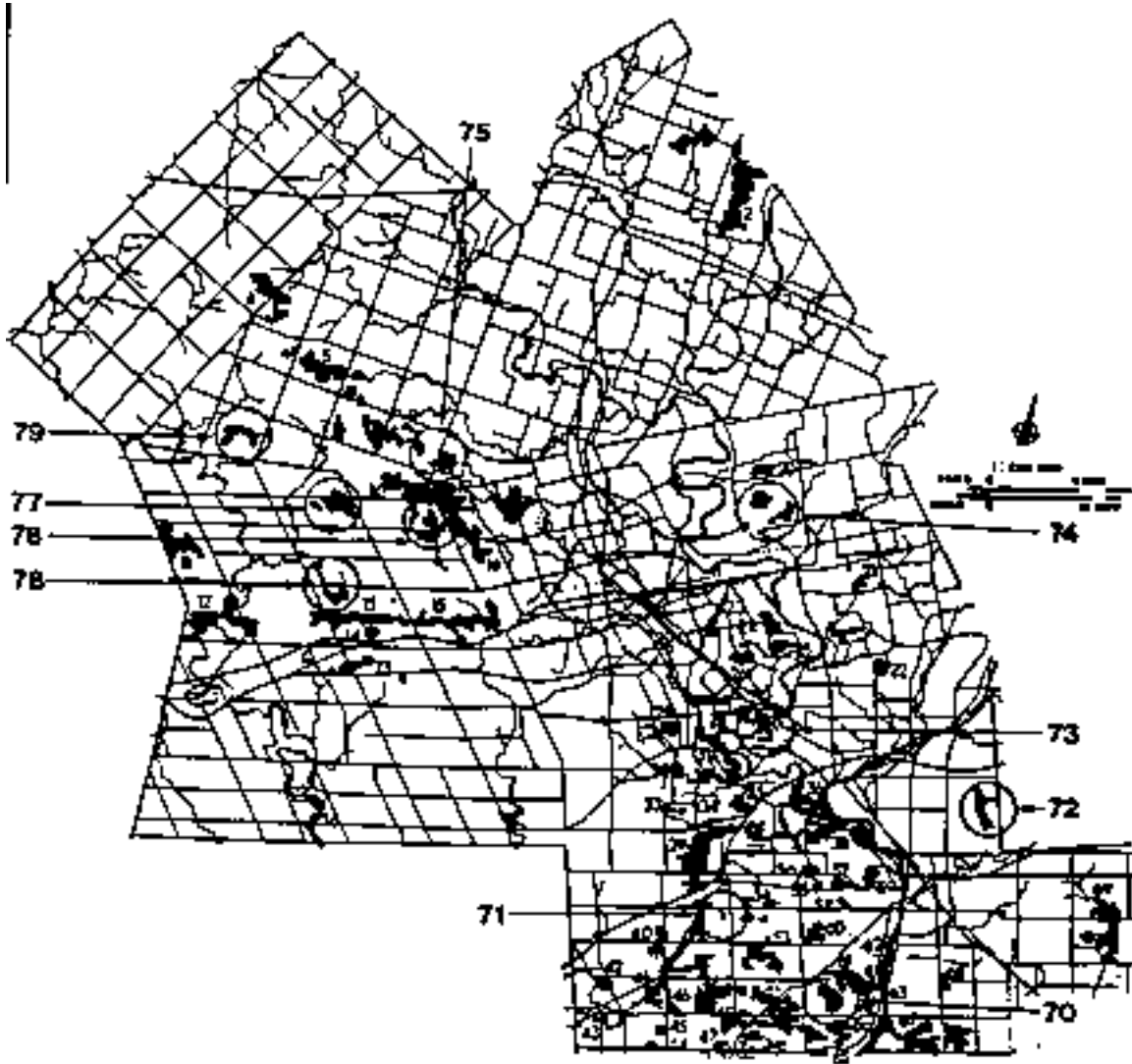
**Map 1: The Regional Municipality of Waterloo<sup>1,2</sup>**



**THE REGIONAL MUNICIPALITY OF WATERLOO**

342 RMW, 1991B.

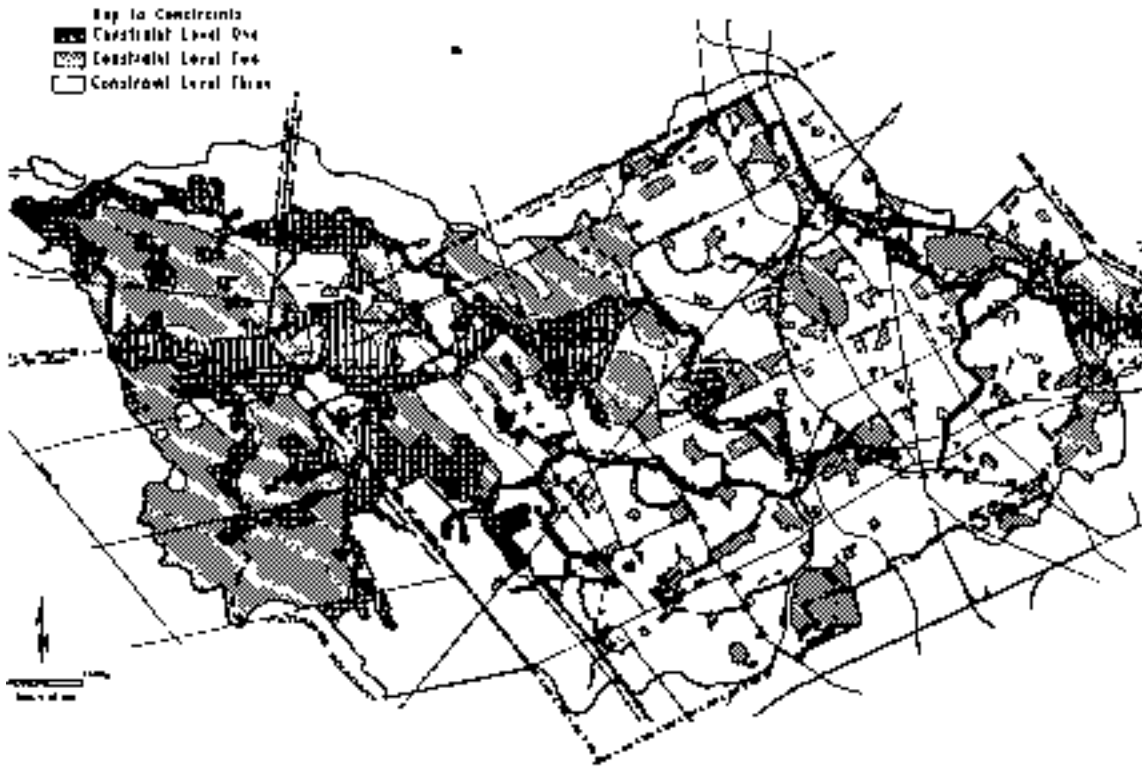
**Map 2: Environmentally Significant Policy Areas in the Region**



source: RMW, 1991A, p.51.

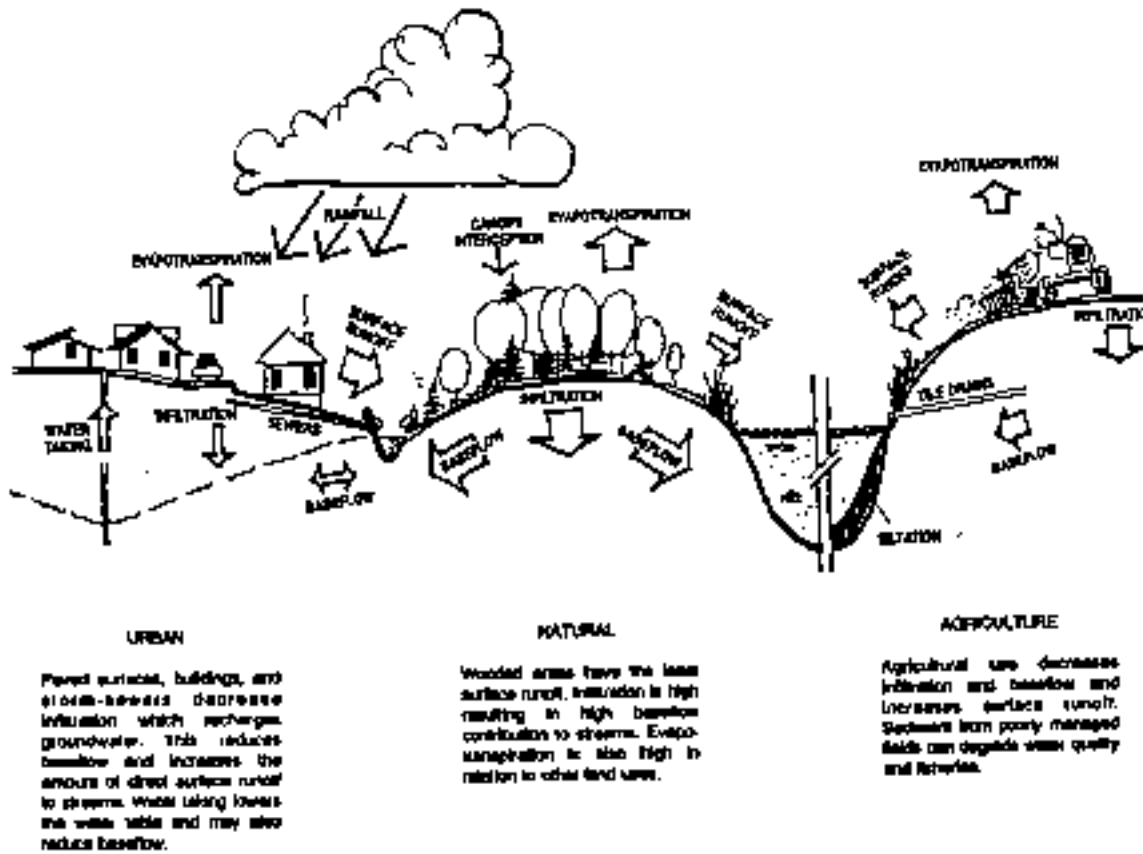


**Map 3: Laurel Creek Watershed Study Area Constraint Map**



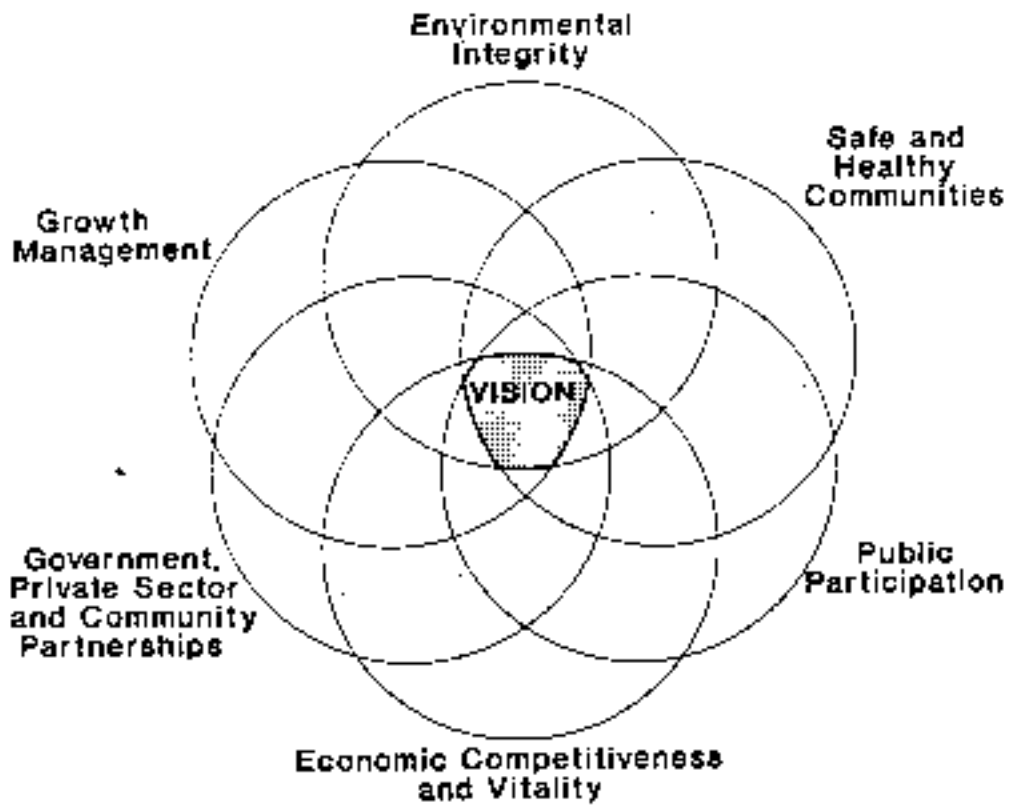
source: City of Waterloo, 1992.

**Figure 1: Effects of Land Use on Water Resources**



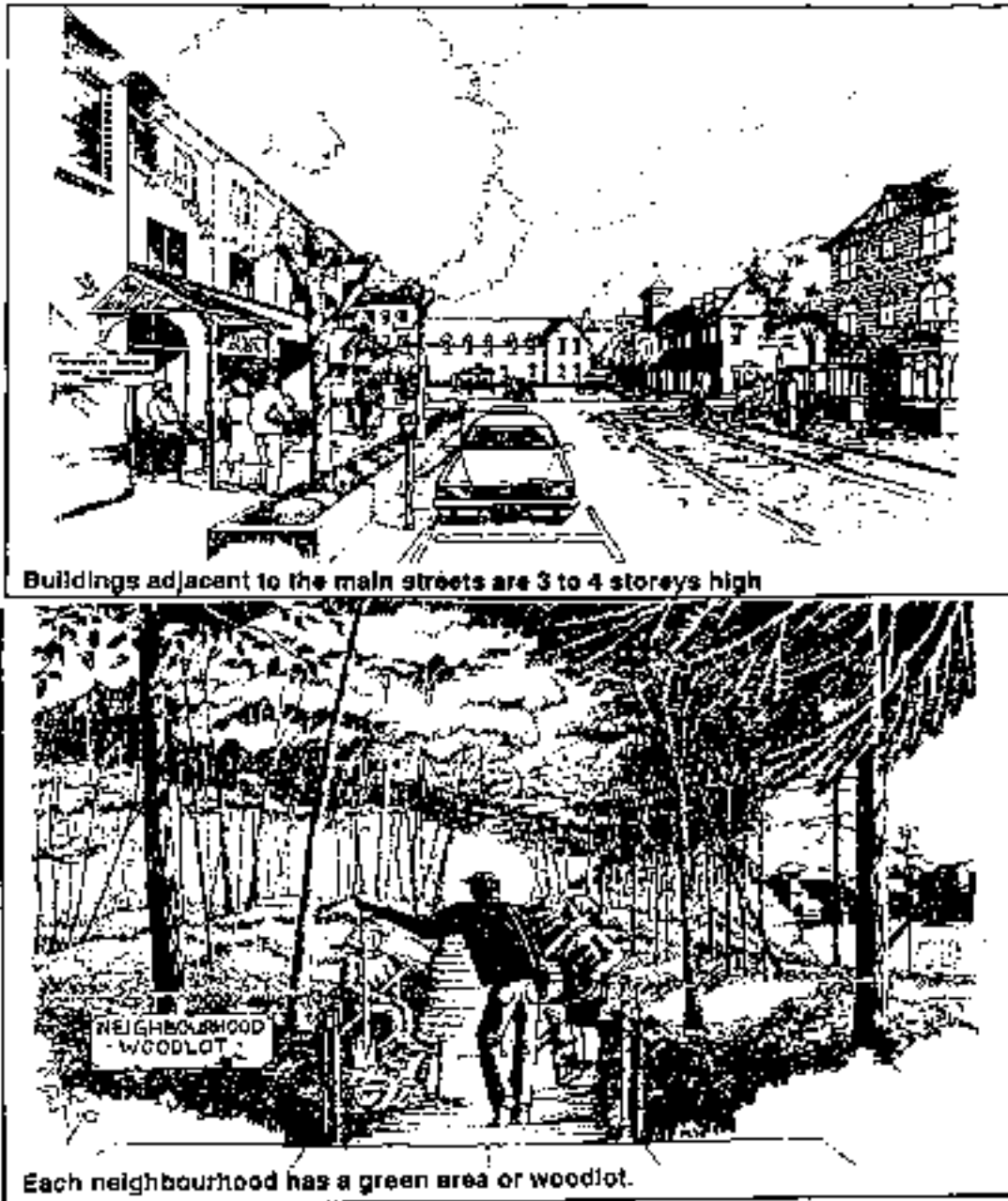
source: RMW, 1991, p.63.

**Figure 2: Waterloo Region View of Sustainable Community**



source: RMW, 1992B, p.3.

**Figure 3: Illustrated Regional Visions of a Sustainable Community**



source: RMW, 1992A

## **Appendix: Recommendations of SOTER and the ROPP Review**

The following is a comparison of some of the policies recommended by CACQL, the Final SOTER and the Official Policy Plan Review.

### **Government Cooperation**

CACQL made many recommendations regarding improving cooperation between RMW and other government agencies. This was later reflected in the Recommendation Report for the review of the *Regional Official Policy Plan* (ROPP), which recommended that "policies must recognise the partnerships that must be formed with the private sector, Area Municipalities, Regional agencies, other levels of government and the community to pro-actively deal with the rapidly changing environment around us".

### **Agriculture**

CACQL recommended that the RMW and the Province "...examine the possibility of stabilising the agricultural land base to moderate the climate of speculation by purchasing from willing sellers...". Similarly, the results of the questionnaire conducted for Background Report Number 2 indicated that priority should be given to policy and planning issues, principally as they relate to farmland preservation. The ROPP review seems to have responded to these suggestions by recommending to "increase the minimum farm size which can be created through a severance to 40 hectares...from the present 35 hectares in order to further limit farm fragmentation", "eliminate policies in the Regional Plan which permit non-farm severances" and "eliminate policies in the current Regional Plan which permit surplus farm-related residential units to be severed when farms are merged".

CACQL also recommended that the RMW should "vigorously enforce pollution control legislation in rural areas". ROPP took a less forceful approach, recommending that specific policy directions should include "working with the agricultural industry to improve agricultural operations and practices". Perhaps a less forceful approach might be all that is necessary, since the "Recommendation Report" addressed other areas of concern for some farmers. For instance, the Report contained policies to help in the protection of agricultural land, such as not designating additional lands for growth outside the municipal corporate boundaries "even if it is shown in this ROPP review that an Area municipality does not have a 20 year supply of land for growth within its municipal corporate boundaries".

Farm debt was also recognised as important concern in the results of the questionnaire discussed in Report No. Two. This was reflected in the Recommendation Report for the

ROPP review, which contained a policy which would permit farm-related business activities to occur on farms, subject to certain criteria.

## **Water Resources**

In general, CACQL recommended "...taking a proactive approach to the management and protection of our valuable groundwater...". This was also reflected in ROPP, which recommends a number of policies to protect the quality and quantity of water resources in the area. In addition, CACQL suggested planning on a watershed basis. The Final Report of SOTER went even further to recommend that a watershed study be conducted for every major watercourse in the region. The Recommendation Report for the ROPP review made more a conservative proposal, recommending instead that watershed plans be completed prior to processing major development applications.

## **Waste**

CACQL made a number of innovative recommendations directed towards the reduction of waste. The Final Report of SOTER also emphasised waste reduction, recommending that the Region evaluate its waste management programs, expand recycling programs and encourage the development of markets for recycled materials. The Recommendation Report for the ROPP review also stressed waste reduction, putting forward a policy "...to [continue to] support Regional initiatives that will encourage solid waste reduction and recycling options and promote development of these options by the public and private sectors".

## **Development**

CACQL recommended that "the zoning by-laws of the Area Municipalities be relaxed to allow for a greater number of non-residential land uses to locate in residential areas, such as small grocery stores, cleaners and other compatible residential services, reducing the need for long-distance car travel". This is reflected somewhat in Recommendation Report for the ROPP review by asking Area Municipalities to "recognise that mixed land use and increased density of development improve efficiency of transit service". Unfortunately, the Recommendation Report only asked Area Municipalities to recognise the impacts of mixed land development.

## **Transportation**

A number of recommendations put forward by CACQL with regard to transportation were found in the Recommendation Report for the ROPP Review. These include the recommendation to integrate trains and buses and promote the bicycle. CACQL's recommendation to relax zoning by-laws to allow for greater mixed land use would

subsequently decrease car travel. As already noted, this recommendation was reflected somewhat in Recommendation Report for the ROPP review (see above "Development"). CACQL also recommended that a transit corridor be established for future Regional rapid transit, between Cambridge, Kitchener and Waterloo. The Recommendation Report for the ROPP review recommended that the feasibility of this plan be assessed.

## **EEAC**

See main text.

## **ESPAs**

See main text.

## **Public Representation**

CACQL recommended having the public directly elect representatives to sit on Regional Council to improve public input. Unfortunately, the Final SOTER made no recommendations directed towards improving public input. The Recommendation Report for the ROPP review put forward a number of policies designed to increase communication between the RMW and the public. However, it made no recommendation to have the public directly elect representatives to sit on Regional Council.

## **Information**

See main text.

## **Cumulative effects**

CACQL recommended assessing cumulative effects at the regional level. To deal with this problem, CACQL recommended empowering EEAC to address cumulative impacts of development decisions. The Final Report of SOTER similarly recommended that a joint report be produced each year summarising the Cumulative Environmental Effects sections of all Planning and Development and Engineering reports. No specific policy or guideline was in the Recommendation Report for the Official Policy Plan Review which addressed the problem of cumulative effects. It did, however, recommend creating a region-wide, integrated database which would include information on land-uses affecting

environmental resources. This on-going monitoring would help to reveal the cumulative effects of activities in the area.



## **Abbreviations**

ANSIs - Areas of Natural and Scientific Interest

CACQL - Citizens Advisory Committee for the Quality of Life

EEAC - Environmental and Ecological Advisory Committee

GIS - Geographical Information System

GRCA - Grand River Conservation Authority

MNR - Ministry of Natural Resources

ESPAs - Environmentally Sensitive Policy Areas

MNR - Ministry of Natural Resources

MOE - Ministry of the Environment

OMB - Ontario Municipal Board

RC - Royal Commission

ROPP - Regional Official Policy Plan

RWHW - Regions of Waterloo and Hamilton-Wentworth

SWEEP - Students Working on an Environmental Enhancement Program

SOTER - State of the Environment Report

WPIRG - Waterloo Public Interest Research Group (an organisation, based at the University of Waterloo, which addresses social and environmental issues)

## **Glossary**

Waterloo County Area Planning Board - A board set up in late 1965 as the single coordinating planning body for the fifteen municipalities of Waterloo County. These municipalities included the Village of Ayr, Village of Bridgeport, Town of Elmira, City of Galt, Town of Hespeler, City of Kitchener, Town of New Hamburg, Township of North Dumfries, Town of Preston, City of Waterloo, Township of Waterloo, Township of Wellesley, Village of Wellesley, Township of Wilmot, and Township of Woolwich.

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## **Interviewees**

Francis, George. professor, Department of Environment and Resource Studies, University of Waterloo.

Gosselin, Chris. Department of Planning and Culture, Regional Municipality of Waterloo.

Jollette, Robert. area technician, Ontario Ministry of Natural Resources.

Lamb, Larry. Faculty of Environmental Studies, University of Waterloo.

Lamondin, Brian. cartographer, Regional Municipality of Waterloo.

McKay, Samm. Kitchener-Waterloo Field Naturalists.

Parkinson, Michael. Waterloo Public Interest Research Group.

Priddle, George. professor, Department of Environment and Resource Studies, University of Waterloo, and member of EEAC.

Reichert, Clark. ROPP Policy Planner, Regional Municipality of Waterloo.

Suffling, Roger. professor, School of Urban and Regional Planning, University of Waterloo, and former member of EEAC.

Trushinski, Brian. senior planner, City of Waterloo,

Tsang, Miranda. programmer/GIS analyst, Department of Planning and Culture, Regional Municipality of Waterloo.