

## **EARLY LOCALIZED ISSUES AFFECTING REGIONAL SUSTAINABILITY -- THE CASE OF ONTARIO, CANADA'S NIAGARA ESCARPMENT**

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### **Summary**

The late 1960s initiative of the Government of Ontario to preserve the Niagara Escarpment reverberates well into the twenty-first century. The ensuing Niagara Escarpment Study, coordinated by the author, was the beginning of a process of research, legislation, administration, and planning which placed “the dominant feature of the Southern Ontario landscape” on the path towards environmental sustainability. That feature, extending 725 kilometers from Queenston to Tobermory, is distinguished by its elevation; its forests which include the northern limit of the American Carolinian forest; the headwaters of numerous streams; its ecological diversity; its unique aggregate resources; its scenic beauty; its human settlement history; its attraction for year-round recreation; and its formation as a wooded corridor, important not only for water drainage and aquifer recharge, but for providing continuity of habitat for an impressive array of flora and fauna.

The three decades that followed saw the evolution of a strategy for the protection of the Niagara Escarpment that evolved from Study (1968) to the *Niagara Escarpment Planning and Development Act* (1973) to the Niagara Escarpment Plan (1985) to designation as a UNESCO World Biosphere Reserve (1990). These: Study, Act, Plan and Reserve express individually and together the sustainability credo delineated in *Our Common Future* (1987, World Commission on Environment and Development), namely an assertive environmental ethic, a concern with addressing the encounter of Environment and Development, and institutional innovation for necessary implementing action.

These continuities, stretching from the 1960s into the twenty-first century, give special importance to the original impetus for sustaining the unique environment of the Niagara Escarpment. In that genesis there were three factors of particular importance: the spirit of the times, public participation and initiative, and the role of ideology in the study and planning process.

What is striking in looking back is the importance of the political mood. In the broad process of evolution towards a sustainable Escarpment, there is no doubt that a determined, well-organized, and highly focused voluntary effort was decisive. Ideology came into the process through the commitment of the Study Coordinator and the other researchers to the values of conservation, and the creative potential of an enlightened public sector.

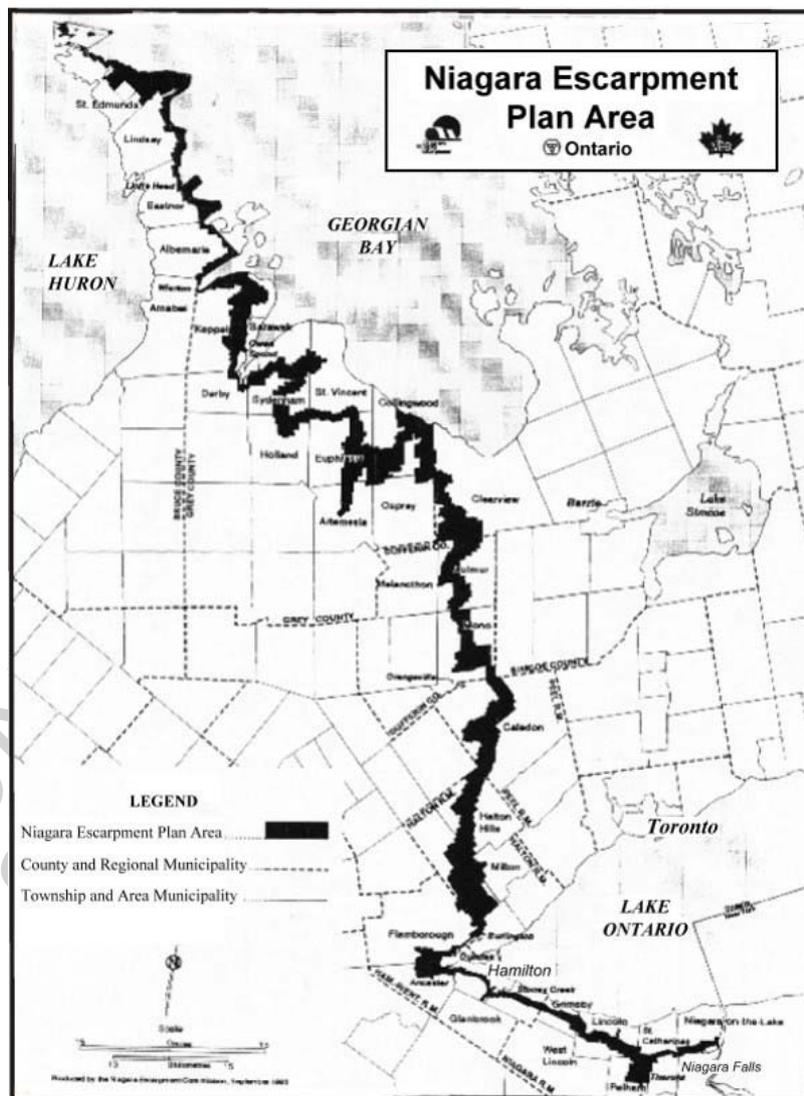


Figure 1: Niagara Escarpment Plan Area

In the period ahead, waging a successful struggle for sustainability will depend on the effectiveness of the Niagara Escarpment Commission in meeting the next major

challenge -- to more fully ground the Niagara Escarpment Plan on the ecology of the Escarpment. This will require going on from the broad brush Plan designations that express the continuities, such as Escarpment Natural, Escarpment Protection, and Escarpment Rural to address the distinctive conditions of the sub-environments, e.g. Niagara Falls in contrast to the Blue Mountain Watershed. This thrust is essential intrinsically -- to fulfill the conservation mandate, but also for the institutional survival of the Niagara Escarpment Commission which is responsible for the processes of planning, development control, and decision-making dedicated to the sustainability of the Niagara Escarpment.

## **1. The Niagara Escarpment Study - Precursor of Sustainability**

When the *Niagara Escarpment Study* (1969) was initiated by Ontario Premier John Robarts in the summer of 1967, “sustainable development” had not yet emerged as the rallying call of environmentalists around the world. But the motivating values of sustainability were unmistakable in his public announcement of “a wide-ranging study of the Niagara Escarpment with a view to preserving its entire length as a recreation area for the people of Ontario”.

When, not long after the Premier’s declaration, the author was invited to serve as Coordinator of the Study, the terms of reference he was given encompassed recreation within a broad environmental framework. The Study was asked to *delineate the lands* to be preserved for their recreational and environmental value; to *determine the means* of preservation; and to *establish priorities* for action on preservation. In addition, the interdepartmental committee set up to assist the Study suggested that *estimation of costs* of the recommended program be included.

The issues that generated what, in retrospect, was a very bold initiative, were the types of issues which twenty years later led to Brundtland’s call for global sustainability. These were the issues of development-environment encounter, involving considerations of land use, landscape, ecology and natural resources that arise when a unique natural environment lies in the path of major growth forces.

## **2. The Niagara Escarpment - a Strategic and Vulnerable Environment**

The Niagara Escarpment has been described as “the dominant feature of the southern Ontario landscape”. It is a 725 kilometer wooded landscape, a high limestone ridge, a “cuesta”, which rises high above the surrounding countryside, extending from Queenston near Niagara Falls to Tobermory on the northern shores of the Bruce Peninsula (see accompanying map on Niagara Escarpment Plan Area). It is a multi-dimensional environment embodying values that are ecological, recreational, geological, hydrological, agricultural, historical, and economic.

It is a landscape, one has the feeling, that Nature created and placed with a superb sense of irony -- and not a little of the temptations of Eve’s apple. Its very proximity to enveloping farms, country estates; to industries, towns and cities; and to diggers for sand, clay, gravel and stone, makes its distinguishing features all the more precious and appreciated. These include:

- two prominent forest zones: in the southern part, a Carolinian forest of sugar and black maple, oak, and the relatively rare in Canada tulip and cucumber trees; and in the north, the typical species: beach, maple, oak, white birch and pine combinations of the Great Lakes-St. Lawrence forest region;
- the headwaters of many streams, like the spectacular Forks of the Credit;
- the lady's slipper orchids in the undisturbed white cedar pines of the Bruce;
- the breath-taking panorama of Beaver Valley as one enters from the south, just past Eugenia Falls;
- the sense of early industrial history in the surviving grey limestone shells of old mills at the sites of the numerous falls on the fast-running Escarpment streams;
- certain aggregate resources for building which are economically accessible only within the Escarpment region, such as the Whirlpool sandstone formation between Milton and Inglewood; and the dolomite building stone, near Queenston and Niagara Falls;
- areas of attraction, highly accessible to city people, like the Kelso Conservation Area: parkland, lake and ski/snowboard hills, overlooked by Milton Heights and visible from Highway 401; and
- altogether, a substantial natural, wooded corridor, critical for water drainage and aquifer recharge, and providing continuity of habitat for an impressive array of flora, and wildlife, including twenty-five "at risk" bird species, such as the bald eagle and the black tern.

The activities at the last-mentioned location, the Milton Heights area, represent a veritable epitome of the encounter of competing land uses that converge on the Niagara Escarpment. The 1968 Study showed that this area had the highest accessibility rating among seven selected recreation areas along the Escarpment.

More people living in centers of 5,000 or more (at the upper end: from Toronto and Hamilton) could reach it within 1, 2, and 3 hours traveling time than any of the other points.

The same accessibility, in terms of time-distance-cost, has made the area attractive for residences, and, given the resources of limestone, shale, sand and gravel, for the largest concentration of extractive industry in the entire Escarpment corridor. It is the resolution of such contending forces in favor of the protection and conservation of the intrinsic Escarpment that was the paramount purpose of the Niagara Escarpment Plan approved by the Ontario Cabinet in June 1985, and subsequently endorsed by all parties in the Legislature.

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### **Biographical Sketch**

**Len Gertler** is a Distinguished Professor Emeritus, University of Waterloo and formerly (1990-2001) a Vice Chair, Environmental Review Tribunal, Ontario. He was founding Director of the School of Urban and Regional Planning, University of Waterloo (1969); and, in his professional practice, has held the positions of Director, Edmonton District Planning Commission in Alberta; Deputy Commissioner of Planning, City of Toronto, Ontario; and Director General, Research, Ministry of State for Urban Affairs, Canada. His research undertakings have included: Coordinator, Niagara Escarpment Study for the Government of Ontario; the Mactaquac Regional Development Plan, New Brunswick; and Coordinator, Technological Change and Human Settlements for Canada Mortgage and Housing Corporation. His international work, in the fields of regional planning and environmental management, extending intermittently from the mid-1970s to the mid-1990s, has included assignments in West Java, Bali, Yogyakarta and Sulawesi in Indonesia; Jamaica; Japan; and Uzbekistan. He is the author of books and chapters in books on the themes of Cities, in Canada and internationally; Planning, Urban and Regional; Environment and Development; Information Technology and Human Settlements; Habitat and Land; and Cultural Heritage and Tourism.