BRIEFING NOTE WALTER & DUNCAN GORDON FOUNDATION

The Role of the Ecosystem Approach in Ontario's Land Use Planning Regime

ISSUE

For much of the 20th century, conventional land use practices in Ontario as in the rest of North America encouraged environmentally harmful activities. Planning choices actively promoted urban sprawl, mining, deforestation, and industrial activities all resulting in environmental degradation. While many possible responses to this situation have been suggested, the key strategy for curbing and possibly reversing this trend lies in the adoption and integration of the ecosystem approach.

BACKGROUND

Government support for the adoption of the ecosystem approach in natural resource management has existed in Ontario for over 25 years. In fact, great support for the implementation of this approach came in a flurry of reports and recommendations by committees, commissions and councils in the 1980s and 90s. The Ministry of the Environment and Energy, as it then was, specifically advocated for its application in land use planning in a 1994 policy document. Given the ministerial support and the importance of planning for environmental health, the author chose to review this particular subject at the legislative level and in its local implementations to determine the extent of the integration of this ecosystem approach in Ontario's environmental management.

The 12 principles of the ecosystem approach established by the United Nation's *Convention on Biological Diversity* provided the background against which to evaluate the planning regime. For the sake of ease, the 12 principles were organized into five thematic categories, as inspired by the Ministry's 1994 policy report. The assessment included an evaluation of Ontario's most important regulatory tools, the *Planning Act* and the 2005 *Provincial Policy Statement*, as well as the official plans of the Cities of Belleville, Welland and Timmins. These cities were selected for a variety of reasons, most importantly between of their similar size and diverse representation of Ontario's economy, geography and municipal tier designation. The five thematic categories are as follows:

- 1. **Regulatory boundaries:** Three separate boundaries are covered by this category: a) biophysical boundaries, the most pertinent being the watershed; b) temporal boundaries, particularly long-term perspectives which privilege ecological health over political timetables; and c) administrative boundaries, favouring the devolution of management to the lowest appropriate level.
- 2. **Environmental objectives and targets:** This category covers a disparate set of principles. One involves a process for establishing environmental objectives, which must include stakeholder involvement. Another requires the establishment

of certain fundamental objectives, such as environmental sustainability and ecosystem services maintenance). The final principle includes the core strategies for reaching these targets.

- 3. **Assessment of cumulative environmental effects**: Although single land use changes will likely not be enough to undermine the ecosystem's resiliency, planning decisions can collectively cause death by a thousand cuts. The key to restoring the ecosystem and preventing future harm is to assess the cumulative environmental effects of land use decisions.
- 4. Information collection and management: In order to make appropriate planning decisions, one must possess a wide knowledge base. The ecosystem approach advocates that all forms of relevant information be considered, including local, scientific, academic and traditional Indigenous knowledge. Resource management requires making appropriate and sustainable choices based on a deep understanding of the ecosystem.
- 5. **Monitoring**: The first steps in understanding ecological change requires the establishment of baseline information. Once this has been done, careful environmental monitoring is crucial to recognizing the emergence of problems and to allow for adaptive management.

KEY CONSIDERATIONS

Many strategies exist for incorporating the ecosystem approach principles and they can be applied with varying degrees of rigour and efficiency. Bearing this in mind, this assessment did not yield simple yes and no answers. The points sketched below are summaries of the most problematic components of the land use planning regime in the context of the ecosystem approach.

- Municipal borders remain the functional unit for planning. Administrative boundaries are not meaningful for ecosystems. The watershed should serve as the ecosystem scale of choice for planning.
- The Provincial Policy Statement claims that the policies listed are not prioritized.
 The language throughout the policy, however, reveals that priorities do in fact
 exist. Short-term economic development in the form of infrastructure
 development and aggregate mining, for example, can trump long-term ecological
 interests.
- Market distortions often favour sprawl and development as opposed to environmental protection. Although the *Provincial Policy Statement* requires municipalities to establish intensification and redevelopment targets, it establishes no specific percentage. Sprawl remains a significant threat to the watershed and environment.

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- The process for designating significant environmental areas, such as wetlands and endangered and threatened species' habitat, includes weaknesses at several levels that undermine this important environmental protection strategy. Some parts of the province, for example, have been neglected for political or financial reasons, resulting in very few designations. Even when designation has occurred one finds additional hurdles. The definition of "development" and "site alteration", which are restricted activities restricted in designated areas, exclude harmful undertakings such as infrastructure development and aggregate mining.
- Institutionalized resistance to public involvement and adaptive management is pervasive. The Ministry of Municipal and Housing Affairs has denied all Environmental Bill of Rights applications concerning the Provincial Policy Statement over the last decade, many of which concerned environmental protection shortfalls in the planning regime.
- The necessary baseline data are not being collected in order to effectively monitor environmental change. The first draft of performance indicators, as required by the *Provincial Policy Statement*, is currently going through the review process for approval. Not only is it long overdue, but it is also criticized as being superficial in that it focuses primarily on whether official plans are consistent with the policy as opposed to whether the desired ecological protection is occurring.
- No reference to the need to incorporate traditional Aboriginal knowledge is made in the *Planning Act* or the *Provincial Policy Statement*.

CONCLUSIONS/RECOMMENDATIONS

The analysis undertaken in this study reveals that while meaningful strides have been made in recognizing the important role land use planning plays in environmental protection, the conventional growth paradigm remains largely unchanged. To bring the planning system into full conformity with the ecosystem approach would require a complete overhaul of the current regime. In the interim, smaller-scale reforms that promote awareness of the need to consider ecosystem health, and ultimately human health, are incredibly important and useful.

Implementing the ecosystem approach is a difficult undertaking as there are so many variables and steps. The flexibility and adaptability so central to the ecosystem approach, allowing for local interpretations and manifestations of the 12 principles, make implementation efforts even more uncertain. Meaningful and accurate evaluations of the efforts to implement the ecosystem approach are equally complex; equally difficult is trying to ascertain whether these efforts are having the desired ecological results. Nevertheless, this review of the planning regime reveals the gaps where the ecosystem approach principles have not yet been adopted or implemented. Here, at least, is a place work can begin.