

Assessing the Potential Value of Landscape Character Assessment in Improving the Lake Planning Process

A Masters Report for the Degree of Masters of Planning (M.PL.)
School of Urban and Regional Planning, Queen's University

Student: Mike Hendren
Supervisor: Dr. Graham Whitelaw

Executive Summary

In recent decades, significant development on lakes and related water-bodies has occurred in Southern and Central Ontario. Not only has this development encompassed greater 'cottage' density, but includes year-round homes, condominium 'fractional' ownership and increased commercial ventures of significant scale in relation to traditional dwellings. Further, this trend has been accelerated by increased wealth transfer in real estate to many lake environments due to the baby-boom demographic. This population cohort is selling homes in the inflated real estate markets of urban centers, providing increased purchasing power in rural and lakefront areas. Many of these individuals are turning waterfront recreational properties into permanent or part-time homes and may have expectations of amenities equated with urban living. In some cases, the increase in demand has driven waterfront property values and their accompanied tax assessments up by as much as 100% over 5 years by some estimates (Wraft, 2008). This transformation can be described as rural gentrification and creates rapid changes upon existing community and physical character.

Landscape character assessment (LCA) is a broad way of understanding values, describing physical elements and preferences of a defined area. LCA is often referred to as 'landscape character assessment', 'landscape appraisal' or 'cultural landscape assessment' -varied terminologies that are interchangeable. Understanding character can amount to an overall experience or 'sense of place.' In urban environments, character is often manifested in forms of architecture, the respect and relation of the public-private realm, as well as the integration of the natural environment with built form. Lakes are unique planning domains and instill values from the experience gained the 'public' lake, as well as private and public property tenure. Increasingly, the importance of finding tools to translate values intrinsic upon users, property owners and other stakeholders of lakes has led to a discussion regarding the importance of recognizing character.

Whereas in urban environments the necessity for protecting and mitigating aspects that are intrinsically valued has been realized for decades (i.e. Heritage Conservation Districts), lake 'communities' have only recently been met with these challenges, as increased recreation and full-time inhabitation and 'urbanization' continues to degrade the natural 'characteristics' of lake environment(s).

Research Purpose and Method

This report is based on applied research, considering prior awareness to the issues and necessity for improved procedures such as LCA within the lake planning process. The intent of this report is to determine whether LCA has been applied in recent lake planning initiatives and to identify the value that LCA may potentially bring to lake planning initiatives. To explore this, a review of documents including academic literature, consultant and grey literature in the areas of environmental planning, design and

landscape planning, as well as community based lakes were reviewed. From this review, a number of themes were described and applied to a content review of four existing recent lake plans from Ontario, to determine whether LCA was used in their plan formulation. Consideration was also given to the question of whether certain community values, policy vision(s), and ends goals are being missed in the current municipal planning and lake planning process. This knowledge may assist the lake planning practitioner/consultant, user(s) and property or community level stakeholders in the lake planning process, towards looking at different ways to approach the issues surrounding lake environmental protection.

Finally, a case study LCA of Clear-Stoney-White Lakes (s) using the British model outlined in *Landscape Character Assessment Guidance for England and Scotland, 2005*, (Appendix A) was completed. The British model of LCA is being employed as it represents the most practiced and structured approach to LCA.

Key Observations

Uncovered is the reality that character speaks to the values intrinsic to many lake users, stewards and regulators in ways that other assessment and monitoring programs do not. For example, the Ontario Ministry of the Environment's '*Lake-Partner Program*' and '*Lake Capacity*' model is focused on water quality and falls short on overall 'lakescape' environmental protection.

There are many reasons to endorse a framework such as LCA that can integrate complex scientific and environmental needs with socio-economic realities at a landscape scale. According to academic literature, landscapes are constantly evolving and must be understood as a connected story rather than fragmented individual parts (Yahner et al., 1997). This is why it is important to study their changing interactions and external forces in order to facilitate appropriate policy and protection.

Cultural landscape and character studies reviewed in method 1 (literature review) address many landscape issues and judgments similar to LCA; however, miss a standardized structure, considered a shortcoming. Similarly, each of the lake plans reviewed in Method 2 include elements of LCA, such as identifying the value of character and landscape assessment in planning judgments of sensitivity and capacity. The plans reviewed to date appear to be an expression of traditional environmental conservation-oriented stakeholders concerned with the unbridled development on lakes. Seemingly absent from the literature is value phrases such as 'the ability to do 60 mph+ in my Scarab' or 'room to build my 6000 square foot four-season dream home with full urban services and covered boathouse for when the family visits.' These values, though not identified in the lake plans reviewed, are illustrated by the activities of many waterfront land and 'lake' users.

The lake planning process reviewed indicates a variety of values that concerned citizens believe are being eroded. Changing economic forces land use controls and complex multiple government

jurisdictions upon lakes and watersheds, make it difficult to achieve and enact measures for overall environmental character protection. For example, mitigation through regulation of the level of horsepower for power boats in certain areas (as done in some provincial parks) or necessity for new structures to be masked from the lake by vegetated cover involves complex technical guidelines and inadequate governance structures.

Further findings uncovered that the British model of LCA is both the most prevalent and well developed model available at this time. The process involves objective characterization and classification through background research and field study. This information is then synthesized through making judgments, applications to planning, conservation and landscape management. Objective classification and judgments towards policy are underlying goals, but are constrained by current planning implementation.

Recommendations

Lake landscapes, including those of the 'Lakeshed' environment represent a landscape-based domain. Though they are bounded in part by multi-jurisdictional governance, protection of their integrity should be treated as unique organisms. Lake planning professionals and volunteers agree that LCA or 'architectural surveys' have the potential to act as an interpretive tool of environmental quality, that integrates aesthetics, cultural and natural landscapes. LCA can assist in harmonizing planning paradigms, assisting in the emerging lake planning process. The recommendations attained from an LCA transcend wildlife, water quality, fish habitat, cultural and historic elements, targets for open 'green' space and the importance of landscape character and scenic qualities. For these aspects, recommendations can be substantiated regarding greater stewardship, shoreline naturalization and the necessity for land acquisition and varying land tenures by conservation organizations.

Recommendations were drawn primarily from review of the four (4) lake plans and LCA of C-S-W lakes and overall knowledge gained of lake planning and the lake planning process. Information uncovered through research is supported by principles and themes established in the literature review.

Recommendations established from review of 4 lake plans:

- LCA should be integrated into the lake planning process as it includes an ability to synthesize existing information pertaining to the entire landscape for use by policy makers, community and other stakeholders.
- Integration of LCA should be considered for integration into the scoping and development of planning policies, community visioning, and targets for ecological and landscape design.

- LCA should be considered for use as a component in monitoring of landscape and environmental change.
- LCA should be considered as an interpretative tool in engagement and public participation in lake planning.
- Current lake plans are unique from one another in structure and inputs though often, have similar findings and recommendations. The LCA process can provide structure that may assist in enhancing the legitimacy and pertinence to municipal land use planning of community-driven lake plans, mitigating bias and overstated issues illustrated in some plans.

Recommendations established from C-S-W LCA:

- Large portion of the C-S-W lakescape were found to be within the ‘scenic zone’ in CORTS (1973) document, based on the LCA field study findings. Large setbacks which are much greater than many pre-existing structures should be imposed for reasons including visual and landscape character quality, water quality and wildlife impacts (20-30 meter setback minimum recommended in CORTS, 1973, C-S-W lake plan, 2008 respectively).
- Fish spawning areas of the C-S-W lake(s) are under intense pressure from seasonal shoreline development, reconstruction and other human interference, therefore fish sanctuaries are needed to maintain adequate spawning areas
- C-S-W lakescape is entering a character transition, exhibited by extensive estate-type development and landscape (site) alteration and vegetation (tree) removal. More consideration to the litany of long term impacts associated with this reality is necessary.
- The C-S-W area should be regarded as a heritage route, open space and scenic corridor or extended-use Park, to complement existing protected areas in the surrounding lakescape.

Areas for Further Study

Based on the discussion found above and consideration of the opportunities for LCA, further areas of study have been identified including:

LCA and Natural Heritage System Planning

An opportunity may exist to integrate the British model LCA into Natural Heritage System (NHS) planning in Ontario. In many cases, municipal land use practices are partnering with natural heritage expertise of conservation authority partners in Ontario and completing NHS land use planning strategies as permitted under the Ontario Planning Act. Municipalities with lakescape environments may wish to initiate NHS planning to protect environmental integrity of lakescape environments.

Completing a community driven LCA

The British model LCA, as well as the literature reviewed illustrates that public participation in LCA can be key to success towards policy implementation. Although public consultation was beyond the scope of the completed C-S-W lakes(s) LCA, it is suggested that lake planning groups complete an open, publicly-involved LCA process before or after lake planning processes are completed. The value of this activity may best lie in the easy interpretation for public audiences involved.

LCA and Legal Planning Framework

An assessment is needed of the applicability of the British model LCA to Ontario's legal and planning framework with respect to the outputs derived from an LCA. For instance, literature reviewed speaks to the value of LCA in getting information associated to the Planning Policy Guidance (PPG) (Natural England, 2005). The PPG is a legal policy guiding document similar to Ontario's Provincial Policy Statement. Greater understanding of the link between LCA outputs and Ontario's planning system would be beneficial in appreciating the value of LCA in lakescape and other environments.

Landscape Character Assessment in assisting environment assessment activity

An opportunity may exist in the findings and output of LCA for use in Environmental Assessment. An appreciation of the impact on cultural/community and environmental values derived from impacts to sensitive and significant landscape change may assist both the scoping and or impact/benefit agreements often associated with the environmental assessment process.

Assessment of the impact of Lake Planning on planning and management

Finally, the actual value of each lake plan in terms of planning and management activity is unknown at this time, as they are relatively new. An assessment, therefore, of whether they are affecting change in planning policy and other activity was not conducted. Further research into the current and future ability of plans in this regard is required to assess their value.