

Executive Summary

Ontario is blessed with an abundance of high quality water resources. Increasing evidence suggests development pressures and landscape transformation along the shorelines of these resources may cause significant detrimental consequences; increases in the rate and extent of lakeshore development along inland lakes in Ontario are adversely impacting water quality. Despite growing awareness to the pressures of development on water quality, there is a lack of knowledge about the land use policies in place to protect inland lakes in rural Ontario. In order to address this gap, this research evaluated official plans for water quality protection policies for inland lakes in the County of Renfrew, Ontario. Through this research, the following research questions were addressed:

- To what extent are the current land use policies in the County of Renfrew supportive of water quality protection of inland lakes?
- Which land use planning tools are in place in the County of Renfrew to promote water quality protection of inland lakes?

Guided by the research questions, the study used a qualitative case study of the County of Renfrew to evaluate official plans for policies that protect water quality from the pressures of lakeside development. Following a comprehensive literature review that identified the adverse impacts of shoreline development on water quality and links to land use planning policy, an evaluation criteria checklist was created. A policy evaluation of the County of Renfrew, Town of Laurentian Hills, and Township of McNab/Braeside Official Plans was carried out. The findings suggest that individual municipalities implicitly link water quality protection to shoreline development policies in the official plan. However, differences existed among the municipalities and the overall quality and consistency of the policies. The Township of Laurentian Hills satisfied the most criteria of all the Plans evaluated, and employed the greatest use of land use implementation tools for protecting water quality. A common theme throughout the evaluation was the preservation of water quality for human interest and a focus on nutrient loading as the sole impact on water quality. With respect to the use of existing land use planning tools, the plans failed to incorporate innovative methods to protect water quality, primarily relying on vegetated buffer strips.

The report concludes with a reflection on the findings and implications for planning practice and theory derived from the research. A series of recommendations targeted towards the County of Renfrew and individual municipalities are then provided:

- Conduct a cumulative impacts study on the watershed scale;
- Encourage collaboration amongst municipalities when developing shoreline policies;
- Develop a comprehensive shoreline management plan;
- Link land use planning to water quality protection in all official plans;
- Set descriptive, qualitative targets;
- Expand the scope of environmental tools used for shoreline development; and
- Promote effective use of site plan control.