

Town of Huntsville Official Plan Review - POLICY BACKGROUND PAPER

Sustainable Natural Environment – Buffers/Re-naturalization of Shorelines

BACKGROUND:

- The areas adjacent the shorelines are the most productive, as they are the intersection between land and water and support a complex web of life. A diverse plant community supports a high invertebrate production, while fish and invertebrates support birds and mammals. They also function as a connector for habitats – providing travel corridors, feeding areas, basking areas, breeding habitat and nursery habitat.
- The Shoreline buffer is the vegetative strip of land adjacent to lakes, rivers and stream. Vegetation in this area prevents soil erosion, reduces runoff, shades and cools shallow water and provides food and shelter for wildlife. Shore lands often referred to as “the Ribbon of Life” because 90% of all lake and river life is born, raised and fed in this area.
- Shoreline re-naturalization and the maintenance of sufficient buffers between development and the waterbody are an important factor in maintaining and improving water quality and the character of the area.
- Naturalized shorelines help prevent erosion and filter runoff generated by surrounding land uses, while vegetative buffers help to minimize sedimentation in sensitive shoreline habitat and mitigation of nutrients like phosphorous. Shoreline vegetation also protects the land from erosion caused by waves and ice.
- The Muskoka Watershed Council conducted a [scientific evaluation](#) of the health of the water, land, and wetlands in Muskoka. Although the overall environment is relatively healthy, one area of concern is the impact from a reduction in shoreline buffers. Higher total phosphorus concentrations in waterbodies, degradation of aquatic habitat and biodiversity are all potential results of a reduction in shoreline buffers.

POLICY CONTEXT:

Provincial Policy Statement (2014):

2.1 Natural Heritage

2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term *ecological function* and biodiversity of *natural heritage systems*, should be maintained, restored or, where possible, improved, recognizing linkages between and among *natural heritage features and areas, surface water features and ground water features*.

2.2 Water

- 2.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water by:
- a. using the watershed as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development;
 - b. minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;

- c. identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed;
- d. maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas;

Muskoka Official Plan:

- F.3 Maintain and enhance the quality of Muskoka's natural resources.
- F.9 Encourage the maintenance of ground and vegetative cover and the natural landscape, to preserve the natural appearance and aesthetics and provide a natural buffer particularly in the Waterfront designation; and restore and preserve natural habitat where it has been artificially altered.
- F.11 The enhancement and preservation of the natural environment shall be incorporated within any development or redevelopment proposal.
- F.21 The role of natural vegetated shorelines in buffering waterbodies from erosion, siltation and nutrient migration adjacent to the sensitive littoral zone is critical to the protection of water quality. Preservation and restoration, where appropriate, of shoreline buffers is therefore required, with targets of 15m in depth across 75 linear lot frontage.
- F.22 A minimum 30 metre setback from any shoreline will be required for leaching beds.
- F.23 A minimum 20 metre setback from any shoreline will be required for all development, excluding shoreline structures.

Muskoka Policy Directions (OPA#45 – Lake System Health):

The Lake System Health Program was described in the Water Quality Policy Background Paper. A review of the recreational water quality model has identified changing environmental factors and trends. In considering how to implement the updated water quality model, a need to develop a consistent, simplified and scientifically defensible planning policy approach to protect water quality has been identified. Through Muskoka Official Plan Amendment #45, District staff is recommending that planning policies provide for a standard level of protection on all lakes to address the multiple environmental stressors through a set of Best Management Practices (BMPs) for all new development or redevelopment of shoreline lots. In addition, they indicate that phosphorous should remain as a key indicator of water quality and that the water quality monitoring program data continue to be collected and tracked to identify trends on each lake.

First Draft of Muskoka Official Plan

- F1.1 Protect and enhance the natural environment
- I4 In the Waterfront designation, encourage the conservation of the overall landscape, tree cover and vegetation in order to preserve the overall natural appearance of the Waterfront Area. Maintenance of

the shoreline of lakes and rivers through retention of tree cover, vegetation and other natural features are encouraged to uphold the visual and environmental integrity as well as to preserve the quality of the natural and cultural heritage.

Town Strategic Documents:

Strategic Plan

Natural Environment and Sustainability

Goal #1: Demonstrate the Town's commitment to protecting the quality and character of the natural environment.

Goal #2: Integrate sustainability principles into planning and development policies and processes.

Unity Plan

Goal #5 Land Use Planning: Huntsville will become a model of sustainable community development, by incorporating the principles of smart growth, sustainable design and green buildings into all land use planning decisions. This will include a commitment to the protection and maintenance of Huntsville's rural small town character and vibrant downtown, both of which are valued by the community.

Huntsville Official Plan:

Environment:

- 3.2.1 Regeneration or restoration of tree cover or the restoration of a buffer using native species will be encouraged.
- 3.2.2 Where a natural vegetative buffer is required, removal of vegetation (including ground, shrub or canopy layers) or the disruption of the natural landform or soil mantle will be restricted.
- 3.3.4 Development and site alteration will be setback from watercourses to protect natural features and functions and provide riparian habitat.
- 3.5 Recreational Water Quality - Policies in this section establish buffers and regulate development to ensure there is no negative impact on overall water quality of the waterbody.
- 3.7 Fish Habitat - Protection and ensuring integrity of fish habitat is maintained through natural vegetative buffering along shoreline.

Urban/Hidden Valley

4.3.3, 4.3.4, 5.4.5, 5.4.6, 7.2.5, 7.2.6, 7.2.7, 8.2.10: All note that naturalized shorelines will be substantially maintained and re-naturalization promoted, with shoreline restoration and setbacks used to protect the riparian and littoral zones and minimize the environmental and visual impact of development.

Waterfront

8.3.3 Ribbon of Life – preserve lake health – limit development at shoreline.

8.3.4 Limit shoreline development – balance between natural shoreline and built form.

8.3.8 Restoration/retention of natural shoreline.

8.8.2.5 Retention of vegetation, maintain natural integrity of shoreline, soften visual impact of development.

Revegetation of Shoreline Buffers Policy:

This [policy](#) (available on the Town of Huntsville website) was adopted by Council in 2015 and sets out minimum requirements for landscape restoration of the shoreline buffer.

CONSIDERATIONS:

- A broad corridor of undisturbed vegetation should be maintained along all waterbodies, buffer limits need to be established that recognize the environmental benefits of the vegetation, while at the same time also meet the needs for water access and views.
- Existing policies only speak to “encourage” and “should”.
- In regards to stormwater management, if runoff from a site can be minimized or delayed it will control erosion, and help improve how the soil and vegetation filter nutrients from entering our lakes and rivers.
- Muskoka OPA#45 concerning lake system health suggests that best practices for the maintenance and improvement of water quality include maintaining and restoring vegetative buffers along shoreline.
- Existing policies encourage a vegetative buffer adjacent to shorelines of a minimum depth of 15m across 75% of the frontage of a lot, however the Muskoka Watershed Council has noted that in general there should be a minimum 30m buffer for cottage lots.
- According to the United Nations Office for Disaster Risk Reduction, one of the [ten essentials](#) for making cities resilient in responding and adapting to climate change, is the protection of ecosystems and natural buffers.

SUMMARY:

A review of best practices from other municipalities across Muskoka has revealed that the following policy approaches may assist in addressing some of the considerations:

- Revise the policy requiring the retention of natural vegetated buffers adjacent to shorelines to protect fish habitat – to include all watercourses and waterbodies, with specific buffer distances: 30m for cold water; 15m for warm water, 20m cool water.
- Update policies to address shoreline disturbance; retention of vegetation and restoration of vegetative buffers to all be in one section of the Official Plan.
- Use more definitive wording (“shall”).
- Existing policies establish the need for buffers and detail minimum requirements; however, additional policy to enable requiring construction mitigation and stormwater management plans should be included.
- Site plan policy/guidelines can be updated to include best management practises for shoreline development.