

## Chapter 4 - Guidelines for the Evaluation of River Flooding and Erosion Hazards for Residential Subdivisions

### A. Introduction

#### i. Revision of the April 27, 1994 Guidelines

These guidelines replace and update the April 27, 1994 *Interim Guidelines for the Subdivision of Land in Areas Adversely Affected by River Flooding and Erosion*. Numerous changes have been necessary to recognize the provisions of the new *Municipal Government Act* and associated *Subdivision and Development Regulation* that have replaced the *Planning Act* and *Subdivision Regulation*. However, it will be observed that the technical aspects of the 1994 guidelines relating to the evaluation of river flooding and erosion have not been changed substantially.

#### ii. Focus of these Guidelines

These guidelines help to establish whether each proposed serviced or unserviced residential lot has a Suitable Development Area (Glossary) especially with respect to the potential for river flooding and erosion to damage or destroy a lot and its development, or cause loss of life.

- A site and its development may be threatened by inundation and saturation, displacement of structures by swiftly flowing flood waters, deposition of silt and other flood debris, channel shifting, and bank erosion, saturation and collapse.

These guidelines present measures that a subdivision authority may take to avoid or mitigate flooding and erosion problems within the Proposed Subdivision Area and associated Titled Area.

- Problems may be reduced or eliminated by modifying the subdivision lot design, or under some circumstances, requiring floodproofing within individual lots.
- Undevelopable land within the Proposed Subdivision Area and associated Titled Area may be set aside as either part of the remnant of the Titled Area, an Environmental Reserve, an Environmental Reserve Easement (Appendix A, Section K.) or a Conservation Easement (Appendix F).

These guidelines also help to protect the environment.

- Development within a flood risk area may promote local bank erosion and collapse by obstructing fast flowing flood water, increasing flood water levels, and recontouring or devegetating the bank.
- Bed, shore and bank activities may destroy fish and wildlife habitat.
- Concentration of unserviced development in a flood risk area increases the chance that sewage effluent will contaminate the water course.

iii. Relationship of these Guidelines to Provincial Acts and Regulations

These guidelines are tied to environmental provisions in the *Municipal Government Act* (refer to Appendix A for complete list), its *Subdivision and Development Regulation* (see Appendix B), and the *Environmental Protection and Enhancement Act*.

According to section 654(1)(a) of the *Municipal Government Act* "A subdivision authority must not approve an application for subdivision approval unless the land that is proposed to be subdivided is, in the opinion of the subdivision authority, suitable for the purpose for which the subdivision is intended." These guidelines assist in evaluating the environmental suitability of a proposed subdivision, specifically with respect to river flooding and erosion. Land that is subject to flooding may be dedicated as an Environmental Reserve or an Environmental Reserve Easement (section 664 of the Act; refer to Appendix A, Section K.).

Many provisions within Part 1 - Subdivision Applications, of the *Subdivision and Development Regulation*, *Municipal Government Act* support requests by a subdivision authority for information on site conditions (Appendix B; for these guidelines refer especially to section 4(4)(e), section 4(5)(a)(d)(i), section 5(2), section 5(3)(e) and section 7(a)(d)(i)); refer also to Appendix F, Section B. - Bed, Shore and Bank of a Naturally Occurring Body of Water). This information will assist a subdivision authority to decide whether the land to be subdivided is suitable for the purpose for which the subdivision is intended (section 654(1)(a) of the *Municipal Government Act*; refer to Appendix A.I.).

The *Land Use Policies* (Appendix C) established by the Lieutenant Governor in Council pursuant to Section 622 of the *Municipal Government Act* (Appendix A, Section F.) contains a number of goals and policies relevant to these groundwater supply guidelines. In this regard refer in particular to section 3.0 Planning Cooperation, policy 7.; section 4.0 Land Use Patterns, policy 2.; section 5.0 The Natural Environment; section 6.3 Resource Conservation – Water Resources; and Appendix 1.

These guidelines are consistent with the purpose of the *Water Act*, particularly with subsections 2(a)(b)(c) and (d).