Erosion Hazard Assessment

PURPOSE:

This document provides guidance for the completion of an Erosion Hazard Assessment, which may be required for the submission of an application under the *Planning Act*. All Erosion Hazard Assessments shall follow the requirements referenced in this document.

An Erosion Hazard Assessment provides information required for a Planning Application where the exact extent of an erosion hazard limit in relation to a proposed development needs to be verified.

Erosion hazard means the loss of land, due to human or natural processes, that poses a threat to life and/or property. The erosion hazard limit is determined using considerations that include the 100 year erosion rate (the average annual rate of recession extended over a hundred year time span), dynamic beach hazard, an allowance for slope stability, toe erosion, and an erosion / erosion access allowance. An Erosion Hazard Assessment utilizes standard procedures of the regulating Conservation Authority to identify the erosion hazard limit associated with a river, stream and/or the Lake Ontario shoreline.

PREPARED BY:

An Erosion Hazard Assessment must be prepared by a consultant registered as a Professional Engineer (P.Eng.)in the province of Ontario. The consultant must affix their stamp and seal and specifically identify the engineer who prepared the work. The consultant is expected to be a professional engineering qualified in coastal or geotechnical engineering. Where toe erosion must be considered in determining the erosion hazard, a qualified Fluvial Geomorphologist should be consulted.

CONTENTS:

Erosion Hazard Assessments shall utilize the standards established by the regulating Conservation Authority for identifying the extent of the erosion hazard limit. The method for calculating the erosion hazard limit will vary depending on whether it is associated with a confined river or stream system, an unconfined river or stream system, or the Lake Ontario shoreline.

Erosion Hazard Assessment reports shall include:

- Supporting field data;
- Analysis and discussion on the methodology applied;
- Supporting calculations regarding determination of the erosion hazard limit;
- A detailed contour/topographic plan to scale showing the erosion hazard limit and components used to determine the erosion hazard limit (meander belt allowance, erosion access allowance, stable slope allowance, etc., where applicable);
- All analysis should be in accordance with the Technical Guidelines for River & Stream Systems – Erosion Hazard Limit (Ministry of Natural Resources , 2002) and the Technical Guide for Great Lakes – St. Lawrence River Shorelines (MNR, 2001); and,
- GIS Shape files to support regulatory mapping upgrades as applicable.

OTHER INFORMATION:

Technical Guidelines for River & Stream Systems – Erosion Hazard Limit (Ministry of Natural Resources, 2002)

https://www.scrca.on.ca/wp-content/uploads/2018/09/MNR-Technical-Guide-River-and-Stream-Erosion-Hazard.pdf

Alternately, email FHIMPapplications@ontario.ca

Technical Guide for Great Lakes – St. Lawrence River Shorelines (Ministry of Natural Resources, 2001)

https://conservationontario.ca/fileadmin/pdf/Members_Program_Areas/Section_28_Regulations/LUPRegs_GRT_LAKE_PART_1.pdf

Alternately, email FHIMPapplications@ontario.ca

Hamilton Conservation Authority Planning & Regulation Policies and Guidelines: PlanRegPolicyGuidewAppendices.pdf (conservationhamilton.ca)

Conservation Halton Polices and Guidelines:

Policies and Guidelines - Conservation Halton

Niagara Peninsula Conservation Authority Policy Document:

NPCA_Policy_Document_-_Nov_18_2022_Office_Consolidation.pdf

Grand River Conservation Authority Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation: https://www.grandriver.ca/planning-development/policies-and-guidelines/

REVIEWED AND APPROVED BY:

The Conservation Authority with regulatory authority over the subject lands, namely:

- Hamilton Conservation Authority
- Conservation Halton
- Niagara Peninsula Conservation Authority
- Grand River Conservation Authority

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