



**Lower Trent Region
Conservation Authority**

**Ontario Regulation 41/24
Policy Document**

Board Approved: December 11, 2025

TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	Organization of This Document.....	1
1.2	Objective.....	2
1.3	Notes Regarding Ontario Ministry Names.....	2
1.4	Overview of Legislative Framework	3
1.4.1	Conservation Authorities Act.....	3
1.4.1.1	Prohibited Activities.....	3
1.4.1.2	Exceptions	4
1.4.1.3	Crown Activities	5
1.4.1.4	Permits	5
	Application/Hearing	6
	Renewable Energy Projects.....	6
	Request for Minister's Review	6
	Appeal to Tribunal.....	6
1.4.1.5	Permits issued by Minister.....	8
1.4.1.6	Mandatory permits, zoning orders.....	8
1.4.1.7	Cancellation of permits.....	12
1.4.1.8	Delegation of Power	12
1.4.2	Regulations under the Conservation Authorities Act	12
1.4.2.1	Ontario Regulation 97/04	12
1.4.2.2	LTC Section 28 Regulation, Ontario Regulation 163/06	12
1.4.2.3	Mandatory Programs and Services – Ontario Regulation 686/21.....	13
1.4.2.4	Prescribed Acts – Ontario Regulation 586/22	13
1.4.2.5	Ontario Regulation 41/24: Prohibited Activities, Exemptions, and Permits	15
1.5	Other Related Legislation	17
1.5.1	Planning Act	18
1.5.2	Other Legislation.....	19
1.6	Definitions and Interpretations	19
1.6.1	Conservation Authorities Act.....	19
1.6.2	Ontario Regulation 41/24	20
1.6.3	Provincial Policy Statement	21
1.6.4	Additional Interpretations	22
1.7	Activities Typically Regulated	23
1.8	Provincial Perspective on Natural Hazards.....	23
1.8.1	Introduction	23
1.8.2	Principles of Natural Hazard Management.....	24
1.8.3	Consideration of Ingress/Egress	24
1.8.4	Floodproofing.....	25

1.9 Flood, Erosion and Dynamic Beach Hazard Applications in the Lower Trent Conservation Watershed	25
1.9.1 Lake Ontario.....	25
1.9.2 Other Lakes	27
1.9.3 Trent River and Rice Lake.....	27
1.9.4 One-Zone and Two Zone Riverine Areas	28
1.9.5 Special Policy Area	30
2 GENERAL POLICIES	31
3 GREAT LAKES AND LARGE INLAND LAKES SHORELINES	33
3.1 Conservation Authorities Act.....	33
3.2 Ontario Regulation 41/24.....	33
3.3 Policy Standards.....	34
3.3.1 Development within the Shoreline Flood Hazard.....	34
3.3.2 Development within the Allowance Adjacent to the Shoreline Flood Hazard	38
3.3.3 Development within the Shoreline Erosion Hazard	38
3.3.4 Development within the Allowance Adjacent to the Shoreline Erosion Hazard	42
3.3.5 Development within the Dynamic Beach Hazard	42
3.3.6 Development within the Allowance Adjacent to the Dynamic Beach Hazard	44
4 RIVER OR STREAM VALLEYS.....	46
4.1 Conservation Authorities Act.....	46
4.2 Ontario Regulation 41/24.....	46
4.3 Policy Standards.....	48
4.3.1 Development within the Allowance Adjacent to the Erosion Hazard of a River or Stream Valley	48
4.3.2 Development within the Allowance of the Regulatory Floodplain of River or Stream Valleys	49
5 HAZARDOUS LANDS	52
5.1 Conservation Authorities Act.....	52
5.2 Ontario Regulation 41/24.....	52
5.3 Policy Standards.....	52
5.3.1 Development within Flood Hazard Lands	53
5.3.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes) ...	53
5.3.1.2 Development within Two-Zone Regulatory Floodplain of River or Stream Valleys	56
5.3.1.3 LTC Policies - For the Trout Creek 2-Zone area:.....	58
5.3.1.4 LTC Policies - For All 2-Zone Areas:	59
5.3.2 Development within Erosion Hazard Lands.....	60

5.3.2.1	Development within the Erosion Hazard of an Apparent (Confined) River or Stream Valley.....	60
5.3.2.2	Development within the Erosion Hazard of a Not Apparent (Unconfined) River or Stream Valley (Meander Belt)	63
5.3.3	Development within Hazardous Sites.....	66
6	WETLANDS AND OTHER AREAS	68
6.1	Conservation Authorities Act.....	68
6.2	Ontario Regulation 41/24.....	68
6.3	Provincial Policy Statement	69
6.4	Additional Definitions and Interpretations	69
6.5	Policy Standards.....	70
6.5.1	Development and Interference within Wetlands	70
6.5.2	Development within Other Areas (Areas of Interference/Adjacent Lands within which Development may Interfere with the Hydrologic Function of the Wetland).....	72
6.5.2.1	Area within 30 Metres of the Wetland.....	72
7	WATERCOURSES	74
7.1	Conservation Authorities Act.....	74
7.2	Ontario Regulation 41/24.....	74
7.3	Policy Standards.....	74
7.3.1	Interference with a Watercourse	75
8	PROCEDURE FOR APPLICATION UNDER ONTARIO REGULATION 41/24	77
8.1	Ontario Regulation 41/24.....	77
8.2	Procedural Standards	77
8.2.1	Deposit Fees.....	77
8.2.2	Types of Applications	78
8.2.2.1	Minor Permits	78
8.2.2.2	Standard Permits	78
8.2.2.3	Complex Permits	78
8.2.2.4	Compliance Permits	78
8.2.2.5	Restoration Agreements	79
8.2.2.6	Permit Categories for Reporting	79
8.2.3	Application Requirements	79
8.2.4	Application Process	80
8.2.5	Client Service Facilitator	81
8.2.6	Consideration of a Complete Application	81
8.2.7	Request for Review – Permit Completeness	82
8.2.8	Timelines for Application Review	82
8.2.9	Staff Refusal of Application	83
8.2.10	Hearing	84

8.2.11	Appeal to Minister	84
8.2.12	Appeal to Ontario Land Tribunal.....	85
8.2.13	Permit.....	85
8.2.14	Period of validity of permissions and extensions	85
8.3	Compliance Inspections.....	86
8.4	Cancellation of Permission	87
8.5	File Closure	87
9	GLOSSARY	88

List of Appendices

Appendix A – Technical Guidelines for Delineation of Regulated Features

Appendix B – Conservation Authorities Act

Appendix C – Ontario Regulation 41/24

Appendix D - Memorandum of Understanding on Conservation Authorities Delegated Responsibility

Appendix E – Floodproofing Standards

Appendix F – Hearing Guidelines

Appendix G – LTC Jurisdiction Information and Orders in Council

Appendix H – Bay of Quinte Hazard Information

Appendix I – Ontario Regulation 686/21

Appendix J – Little Lake Flood Hazard Information

Appendix K – Oak Lake Flood Hazard Information

Appendix L – Watercourse Realignment Checklist

Appendix M – Process for Administrative Review Under Section 8 of O.Reg. 41/24

Revision Summary:

Original - Approved June 13, 2024

Revised – Approved December 11, 2025

1 INTRODUCTION

This is the Policy Document for the implementation of Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits for the Lower Trent Region Conservation Authority jurisdiction. Within this document the Lower Trent Region Conservation Authority is referred to as Lower Trent Conservation or LTC. O.Reg. 41/24 is a Regulation that was enacted in 2024 by the Minister of Natural Resources under the *Conservation Authorities Act*, R.S.O. 1990, c. C.27 (the *CA Act*).

1.1 Organization of This Document

The first section of this document is the introduction which includes the objective, discussion about relevant legislation, some legislative definitions and references to technical studies identifying hazards in the Lower Trent Conservation watershed. The next 5 sections of this document are organized according to the areas/features regulated under Section 28 of the *CA Act*:

Section 2.0 – Land Use Planning

Section 3.0 - General Policies

Section 4.0 - Great Lakes and Large Inland Lakes Shorelines

Section 5.0 - River or Stream Valleys

Section 6.0 - Hazardous Lands (Flood, Erosion, Dynamic Beach, Unstable Soil and Unstable Bedrock)

Section 7.0 – Wetlands

Section 8.0 - Watercourses

Each of these sections is intended to be self-contained while minimizing repetition in the guidelines and all should be read in conjunction with **Section 1.0 Introduction**. It should be noted that more than one type of regulated feature may exist for a given property and application, and as such, reference must be made to all relevant sections and the policies must be applied concurrently. In preparing this document, technical publications have been summarized and as such, staff are encouraged to consult the original documents.

It should be noted that although there are Hazardous Lands (flood, erosion and dynamic beach hazards) associated with Great Lakes and Inland Lakes Shorelines, we have included all shoreline hazardous lands in Section 4.0.

In general, each section provides:

- the relevant excerpts from the Regulation; and
- policy standards for implementing the Regulation.

These suggested policy guidelines follow a format similar to the *CA Act* and the Conservation Authorities Regulations, O.Reg. 41/24. That is, the policies address both the “Prohibited Activities” and the “Application for Permit” requirements of the legislation. The language used in the policy document is “shall not be permitted” to reflect the prohibition language while the “may permit” caveat is provided because, consistent with the legislation, there is an expectation that LTC may grant an “Application for Permit”, if “in its opinion”, the five tests, where applicable, are satisfied (i.e., “the control of flooding, erosion, dynamic beaches, unstable soils or bedrock will not be affected”).

Additionally, the “development” policies are complementary to the Natural Hazard policies (Section 5.2) within the Provincial Planning Statement (PPS 2024). For example, the Natural Hazard policies (Section 5.2) state that “Development or site alteration shall generally be directed to areas outside of” or that it “shall not be permitted” (i.e. in a land use planning context) while in other policies recognizing that “further to development and site alteration may be permitted...”.

Section 9.0 – Procedure for Applications under the Conservation Authorities and O.Reg. 41/24

Section 10.0 - Glossary (provides definitions for the purpose of interpreting and implementing the development policy.)

General Technical Guidelines that provide background information on defining the area of regulation are included in **Appendix A**. Lower Trent Conservation’s jurisdiction to apply the regulation is defined by our Orders in Council, which can be found in **Appendix G**. In 2018, Lower Trent Conservation and the Municipality of Trent Hills worked together on the expansion of LTC’s jurisdiction in the north section of Trent Hills. This resolution was acknowledged by the province in early 2019. Documentation of this expansion is also included in **Appendix G**.

1.2 Objective

The objective of this document is to provide policy guidelines to assist the Lower Trent Region Conservation Authority (LTC) in interpreting and implementing the *CA Act*, Section 28 (1) Regulations.

The overall approach of this document is to provide a consistent policy interpretation and implementation across the watershed by staff.

1.3 Notes Regarding Ontario Ministry Names

Provincial Ministries have gone through a number of name modifications due to changes in political ideology or focus. In the following document, references to the current version of the Ministry label have been made but in referencing certain publications by these ministries under previous names, the previous name or acronym associated with the publication at that time is used.

Ministry of Environment, Conservation and Parks (MECP) (2018 to present) was previously known as Ministry of the Environment (MOE), (1972 – 1993, 1998 -2014), Ministry of Environment and Energy (MOEE) (1993 – 1997) and the Ministry of Environment and Climate Change (MOECC) (2014 – 2018).

The Ministry of Natural Resources and Forestry (MNRF; 2014-2021, 2022- 2024), has returned to their previous name of the Ministry of Natural Resources (MNR; 1997 – 2014, 2024- Current). For a period, the MNR was previously known as the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF; 2021–2022).

The Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has held this name since 1994; however, it has now been labelled as the Ministry of Agriculture, Food and Agribusiness. Historically, it was known as the Ministry of Agriculture and Food during the period of 1972 to 1994.

The Ministry of Municipal Affairs and Housing (MMAH) has existed since 1981 but Housing and Municipal Affairs were separate ministries for short periods in this time frame (1985-1989 and 1991-1995).

1.4 Overview of Legislative Framework

1.4.1 Conservation Authorities Act

The *Conservation Authorities Act (CA Act)* was created in 1946 in response to erosion and drought concerns, recognizing that these and other natural resource initiatives are best managed on a watershed basis.

In 1956, in response to the severe economic and human losses associated with Hurricane Hazel (1954), amendments to the *CA Act* first empowered Conservation Authorities to make Regulations to prohibit filling in floodplains. These Regulations were broadened in 1960 to prohibit or regulate the placing or dumping of fill in defined areas where, in the opinion of the Conservation Authorities, the control of flooding, pollution or the conservation of land may be affected. In 1968, amendments to the *CA Act* further extended the Regulations to prohibit or control construction and alteration to waterways, in addition to filling.

In 1998, the *CA Act* was amended as part of the *Red Tape Reduction Act* (Bill 25), to ensure that Regulations under the *CA Act* were consistent across the province and complementary to provincial policies. Significant revisions were made to Section 28, which led to the replacement of the “Fill, Construction and Alteration to Waterways” Regulation with the current “Development, Interference with Wetlands and Alterations to Shorelines and Watercourses” Regulation in 2006. While some Conservation Authorities have been regulating wetlands, shorelines and inter-connecting channels for years, the amendments required all Conservation Authorities to regulate Great Lakes shorelines, inter-connecting channels¹, large inland lakes and wetlands in addition to the areas and features each Conservation Authorities historically regulated.

In subsequent years numerous amendments have been made to Section 28 of the *CA Act* and associated Regulations. [Ontario Regulation 686/21](#), among other provisions, requires that an Authority shall provide programs and services to ensure that the Authority satisfies its duties, functions and responsibilities to administer and enforce the provisions of Parts VI and VII of the *CA Act* and any regulations made under those Parts.” O. Reg. 686/21, s. 16.

In 2024, a new Regulation was developed, [Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits](#). This regulation replaces the individual Regulations approved in 2006.

The current legislative structure includes requirements for the administration of PART VI of the *CA Act* in both the *CA Act* and O. Reg. 41/24.

1.4.1.1 *Prohibited Activities*

Section 28 of the *CA Act*, as provided in **Appendix B**, includes the following section:**28 (1)** Subject to subsections (2), (3), and (4) and section 28.1, no person shall carry on the following activities, or permit another person to carry on the following activities, in jurisdiction of an authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.
2. Development activities in areas that are within the authority's area of jurisdiction and are,
 - i. hazardous lands,
 - ii. wetlands,
 - iii. river or stream valleys the limits of which shall be determined in accordance with the regulations,
 - iv. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations, or
 - v. other areas in which development should be prohibited or regulated, as may be determined by the regulations. 2017, c. 23, Sched. 4, s. 25.

[1.4.1.2 Exceptions](#)

Section 28 of the *CA Act* includes the following sections dealing with exceptions:

Exception, aggregates

(2) The prohibitions in subsection (1) do not apply to an activity approved under the *Aggregate Resources Act* after December 18, 1998, the date the *Red Tape Reduction Act, 1998* received Royal Assent. 2017, c. 23, Sched. 4, s. 25.

Same, prescribed activities

(3) The prohibitions in subsection (1) do not apply to an activity or a type of activity that is prescribed by regulation and is carried out in accordance with the regulations. 2017, c. 23, Sched. 4, s. 25.

Same, prescribed areas

(4) The prohibitions in subsection (1) do not apply to any activity described in that subsection if it is carried out,

(a) in an area that is within an authority's area of jurisdiction and specified in the regulations; and
(b) in accordance with any conditions specified in the regulations. 2017, c. 23, Sched. 4, s. 25.

Same, *Planning Act*

(4.1) Subject to subsection (4.2), the prohibitions in subsection (1) do not apply to an activity within a municipality prescribed by the regulations if,

(a) the activity is part of development authorized under the *Planning Act*; and
(b) such conditions and restrictions as may be prescribed for obtaining the exception and on carrying out the activity are satisfied. 2022, c. 21, Sched. 2, s. 7 (2).

Same

(4.2) If a regulation prescribes activities, areas of municipalities or types of authorizations under the *Planning Act* for the purposes of this subsection, or prescribes any other conditions or restrictions

relating to an exception under subsection (4.1), the exception applies only in respect of such activities, areas and authorizations and subject to such conditions and restrictions. 2022, c. 21, Sched. 2, s. 7 (2).

1.4.1.3 Crown Activities

It is noted that the *CA Act* does not contain a subsection that specifically “binds the Crown”. Therefore, activities of Provincial Ministries, Federal Departments and Crown Agencies or “Crown Corporations” are not bound by the *CA Act* and these entities are not legally required to obtain permission under the *CA Act*.

The same is true for proponents proposing to undertake activities entirely on Crown Land. Voluntary compliance with the review process requirement is always a possibility for the Crowns and their Agencies. Through their policies, the Conservation Authorities may invite them to voluntarily submit proposals for works through the permit review process. Although best practice would suggest that they comply to ensure a sufficient technical review of their activity, they are within their legal rights to refuse to participate in the voluntary review process. Typically, projects undertaken by the Crown on Crown land do not require permission from LTC. However, projects by private entities on Crown Land do require permission through LTC.

In 2021 the Memorandum of Understanding (MOU) between Conservation Ontario and Hydro One Networks Inc. was updated (from original 2011 MOU) to address the reduced public ownership of the company. Their status as a Crown Corporation was no longer valid and exemptions provided under the *CA Act* are no longer applicable. Therefore, activities by Hydro One require permits from LTC. Please reference the “*2021 Memorandum of Understanding between Conservation Ontario and Hydro One Networks Inc.*” endorsed by Conservation Ontario Council on June 21, 2021 and by Hydro One Networks on July 19, 2021. Specific forms have been developed for these permits and are available at the LTC Office.

1.4.1.4 Permits

Section 28.1 of the *CA Act* outlines the legal requirements for Conservation Authorities decisions for a permit application. The *CA Act* includes two subsections that provide the ‘tests’ or criteria that a permit application must meet to the satisfaction of the Conservation Authorities. These include:

“28.1 (1) An authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

- (a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;
- (b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; and
- (c) any other requirements that may be prescribed by the regulations are met. 2017, c. 23, Sched. 4, s. 25.”

Currently, there are no additional requirements under 28.1(1)(c).

Below is a summary of the clauses in s. 28.1 (2) to (26). Figure 1 below provides a high-level summary of the potential Permit processes including the Minister's Review and OLT.

Application/Hearing

Sections 28.1 (2) to (5) include sections that relate to: the requirement to apply for a permit, enabling a Conservation Authority to include conditions in a permit, and the right to a hearing where an application may be refused, or conditions are being contested.

Renewable Energy Projects

Renewable energy projects (28.1 (6)) limit the 'tests' that may be applied to a Conservation Authority's consideration of a permit application and the conditions that can be attached to these permits. A Conservation Authorities shall not refuse an application unless it is of the opinion that it is necessary to do so to control flooding, erosion, dynamic beaches or unstable soil or bedrock; and the Conservation Authorities shall not attach conditions to the permit unless the conditions relate to controlling flooding, erosion, dynamic beaches or unstable soil or bedrock. In other words, the test broadly related to health or safety and found in 28.1 (1) (b) does not apply to these permits. As with similar applications, the applicant has a right to a hearing where an application may be refused, or conditions are being contested. After a hearing the Conservation Authority shall provide an applicant with written reasons for the decision.

Request for Minister's Review

Sections 28.1 (8) to (19) outline, in detail, the steps and requirements in the process if an applicant appeals the decision of the Conservation Authority or conditions attached to a permit. In general, these sections outline the hearing process, appeal timelines, the Minister's review process and timelines associated with that review (includes requirements for the Conservation Authorities and the applicant). The Minister is required to publish on the Environmental Registry a notice of the Minister's intention to review a decision made by an authority and shall do so within 30 days of giving a reply that a review will be undertaken. Upon the completion of the review, the Minister may confirm or vary the authority's decision or make any decision that the Minister considers appropriate, including issuing the permit subject to conditions. The decision made by the Minister in this process is final.

Appeal to Tribunal

Sections 28.1 (20) to (26) outline, in detail, the steps, requirements and timelines associated with appeals to the Minister and the Ontario Land Tribunal (OLT).

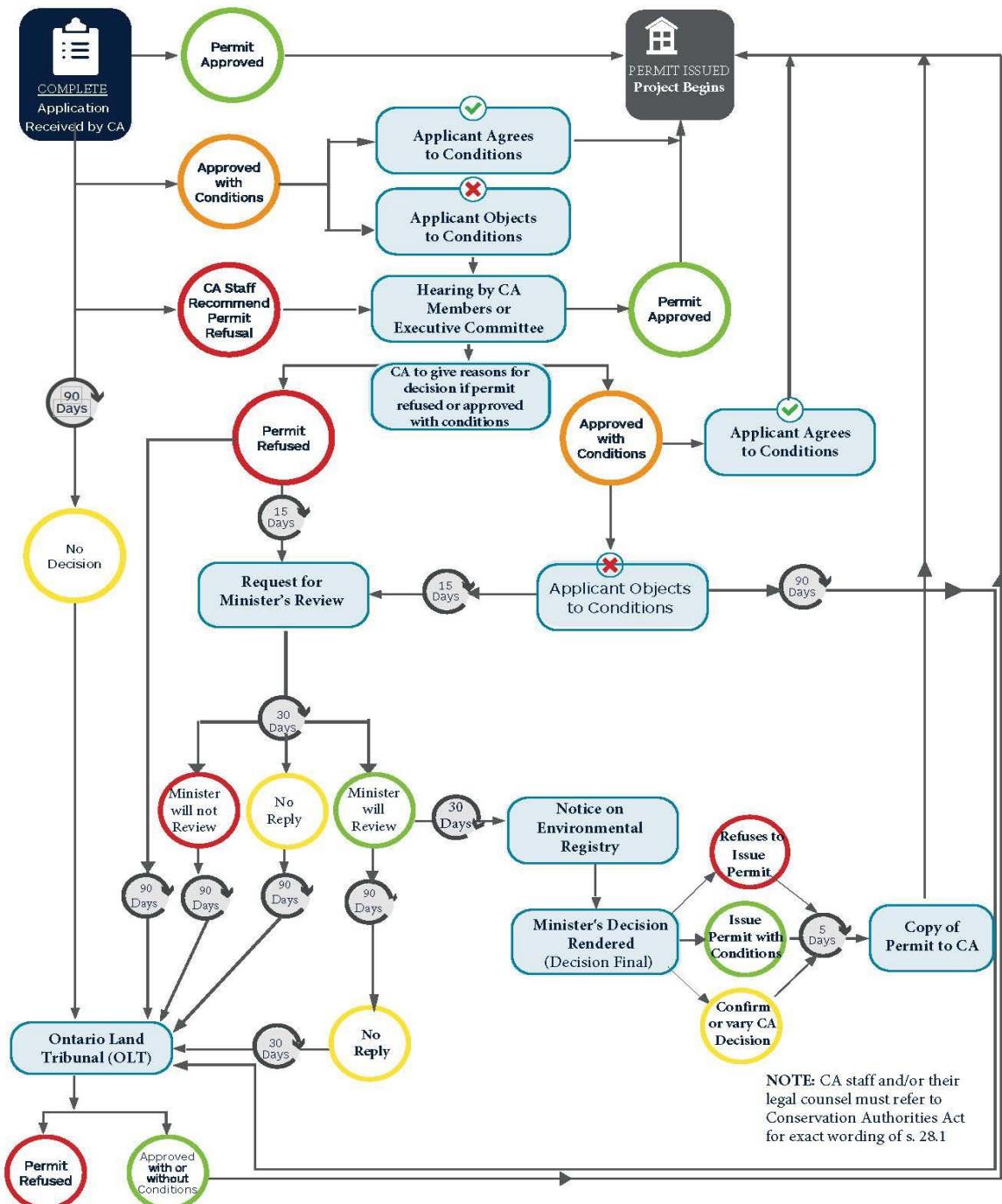


Figure 1 provides a general overview of the potential Permit processes outlined in s. 28.1 including the Minister's Review and Ontario Land Tribunal. It is important to note that CAs and legal counsel must refer to the CA Act for the exact requirements.

1.4.1.5 Permits issued by Minister

Section 28.1.1 of the *CA Act* outlines the powers of the Minister to issue an Order related to Section 28 permits.

The Minister may, by order, direct the Conservation Authorities not to issue a permit to a person (28.1.1(1)(a)). In addition, the Minister may direct a Conservation Authority or Conservation Authorities not to issue a permit for a type or class of activities for a specified period of time (28.1.1(1)(b)). If an order is made, the Minister can issue a permit for any activity in the order “if, in the Minister’s opinion, the criteria described in clauses 28.1 (1) (a),

(b) and (c) are satisfied....” The order(s) apply before or after applications have been received by the Conservation Authority(s) and decisions are pending. Section 28.1.1 (5) outlines the notice provisions i.e., notice will be given to the applicable Conservation Authority(s), applicants who submitted an application before the order was made and a decision is pending, and that it will be posted on the Environmental Registry within 30 days of being made.

Sections 28.1.1 (6) to (11) outline, in detail, the steps and requirements which generally include responsibilities of the Conservation Authority and the applicant with respect to the order and information that they may have that will be provided to the Minister within the timelines specified by the Minister. It also includes application requirements and consultation process for permits to be considered by the Minister, conditions of an approval, and written reasons for a decision of the Minister. The Conservation Authority shall receive a copy of the permit that includes the date of validity.

Sections 28.1.1 (12) to (14) identify the decision and appeal process. The Minister’s decision is final. The application must comply with other sections of the *CA Act* (s. 28.1 (3) or clause 28.1.1

(7) (a)) and the applicable Regulation e.g., complete application. However, in specific circumstances the decision may be appealed to the Ontario Land Tribunal i.e., no notice of a decision from the Minister within 90 days of the application being made. Subsections 28.1 (24),

(25) and (26) apply with necessary modifications to an appeal to the Tribunal. These sections include an appeal of non-decision by the Minister, notice of appeal and hearing requirements of the Tribunal.

Ontario Regulation 474/24 Minister’s Review Under Sections 28.1 and 28.1.2 of the *CA Act* and Minister’s Orders under Section 28.1.1 of the *CA Act* came into effect on January 1, 2025. The regulation dictates the submission requirements for a Minister’s review under the *CA Act*.

1.4.1.6 Mandatory permits, zoning orders

The [Planning Act](#), RSO 199, c. P.13 (s. 34.1) gives the Minister of Municipal Affairs and Housing the authority to control the use of any land in the Province. Zoning orders can be used to protect a provincial interest or to help overcome potential barriers or delays to critical projects. This includes an order for [Community Infrastructure and Housing accelerator](#) projects.

The *CA Act* requires the implementation of a Zoning Order as outlined in Section 28.1.2. (1).

A general summary of this section of the *CA Act* is included in this document and [Conservation Authorities](#) and their legal counsel should refer to the *CA Act* if a permit application is received related

to a zoning order made by the Minister of Municipal Affairs and Housing under section 34.1 or 47 of the [Planning Act](#) (see Figure 2).

The zoning order received by the Authority will apply to a ‘development project’ as defined by the *CA Act* provided that this project is not located in the Greenbelt Area under section 2 of the *Greenbelt Act*, 2005. The Conservation Authority shall issue the permit if all of the requirements in Section 28.1.2 (1) (a)-(c) are satisfied. The Authority shall not refuse a permit despite the prohibitions a. 28(1) or the ‘tests’ or criteria in s. 28.1.(1). The Conservation Authority may include conditions of approval on the permit as outlined in s. 28.1.2 below:

“(6) Subject to subsection (7), an authority may attach conditions to the permit, including conditions to mitigate,

- (a) any effects the development project is likely to have on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;
- (b) any conditions or circumstances created by the development project that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; or
- (c) any other matters that may be prescribed by regulation. 2020, c. 36, Sched. 6, s. 17.”

Sections 28.1.2 (7) to (13) outline the process and timeline associated with attaching any conditions to a permit associated with a zoning order. In general, these clauses require LTC provide a Hearing before the Hearing Board and the applicant may appeal the Authority’s decision on a condition(s) to the Minister. The permit holder must submit their request for the Minister to conduct a review of the Authority’s conditions within 15 days of the reasons being given under subsection (8). The Minister may amend the conditions and will consider the same mitigation criteria or tests noted above in their review. In the case of this review, the Minister’s decision is final.

Alternatively, or in addition, Sections 28.1.2 (14) to (16) outline, in detail, the appeal process to the Ontario Land Tribunal and criteria and timelines required in this process.

Subsection (14) states “A permit holder who objects to any conditions attached to the permit by an authority may, within 90 days of the reasons being given under subsection (8), appeal to the Ontario Land Tribunal to review the conditions if,

- (a) the permit holder has not submitted a request under subsection (9) to the Minister to review the conditions; or
- (b) the permit holder has submitted a request to the Minister to review the conditions under subsection (9) and,
 - i. 30 days have elapsed following the day the permit holder submitted the request and the Minister did not make a reply in accordance with subsection 28.1 (9), or
 - ii. the Minister made a reply in accordance with subsection 28.1 (9) indicating that the Minister refused to conduct the review. 2020, c. 36, Sched. 6, s. 17.”

If the Minister is conducting a review of the conditions as outlined in earlier sections (28.1.2(9)), and the Minister’s decision has not been provided within 90 days of the start of that review, the permit holder may, within 30 days, appeal this non-decision on the Authority conditions directly to

the Ontario Land Tribunal. The permit holder and the Tribunal are required to follow the notice requirements in s. 28.1 (24) and (25). The powers of the tribunal include the authority to take evidence, to refuse the permit or to order the authority to issue the permit, with or without conditions (Subsection 28.1 (26)).

Subsections (17) to (18) outline the Agreement requirements. The Conservation Authority shall enter into an agreement with the permit holder for the development project and they may add other parties to this agreement. The agreement under subsection (17) shall set out actions or requirements that the permit holder must complete or satisfy in order to compensate for ecological impacts and any other impacts that may result from the development project.

Subsections (19) and (19.1) outline the timing of the implementation of the ‘development project’ and the agreement with the Conservation Authority. Subsection (19) includes “No person shall begin a development project until an agreement required under subsection (17) has been entered into. 2020, c. 36, Sched. 6, s. 17.” However, subsection (19.1) includes “If a regulation made under subsection 40

(4) provides that a development project may begin prior to entering into an agreement under subsection (17), but an agreement is not entered into by the date identified in the regulation, no person shall carry out the development project until such time the agreement is entered into. 2022, c. 21, Sched. 2, s. 10 (10).” It is anticipated that the regulation for a ‘development project’ will be limited to a specific project. The Province has the ability to create a regulation that permits the development project to begin prior to entering into an agreement.

It is recommended that Conservation Authorities should develop policies that include mandatory permits and Minister’s Zoning Orders. Conservation Authorities policies shall comply with s. 28.1.2. Conservation Authorities policies should also identify additional requirements that may apply to any application for a development project within a regulated area where a zoning order has been made by the Minister of Municipal Affairs and Housing under s. 34.1 or 47 of the *Planning Act* which authorizes the development project. LTC does not currently have specific policies for mandatory permits or Minister’s Zoning Orders. The creation of a set of specific policies for these permissions will be revisited in the near future.

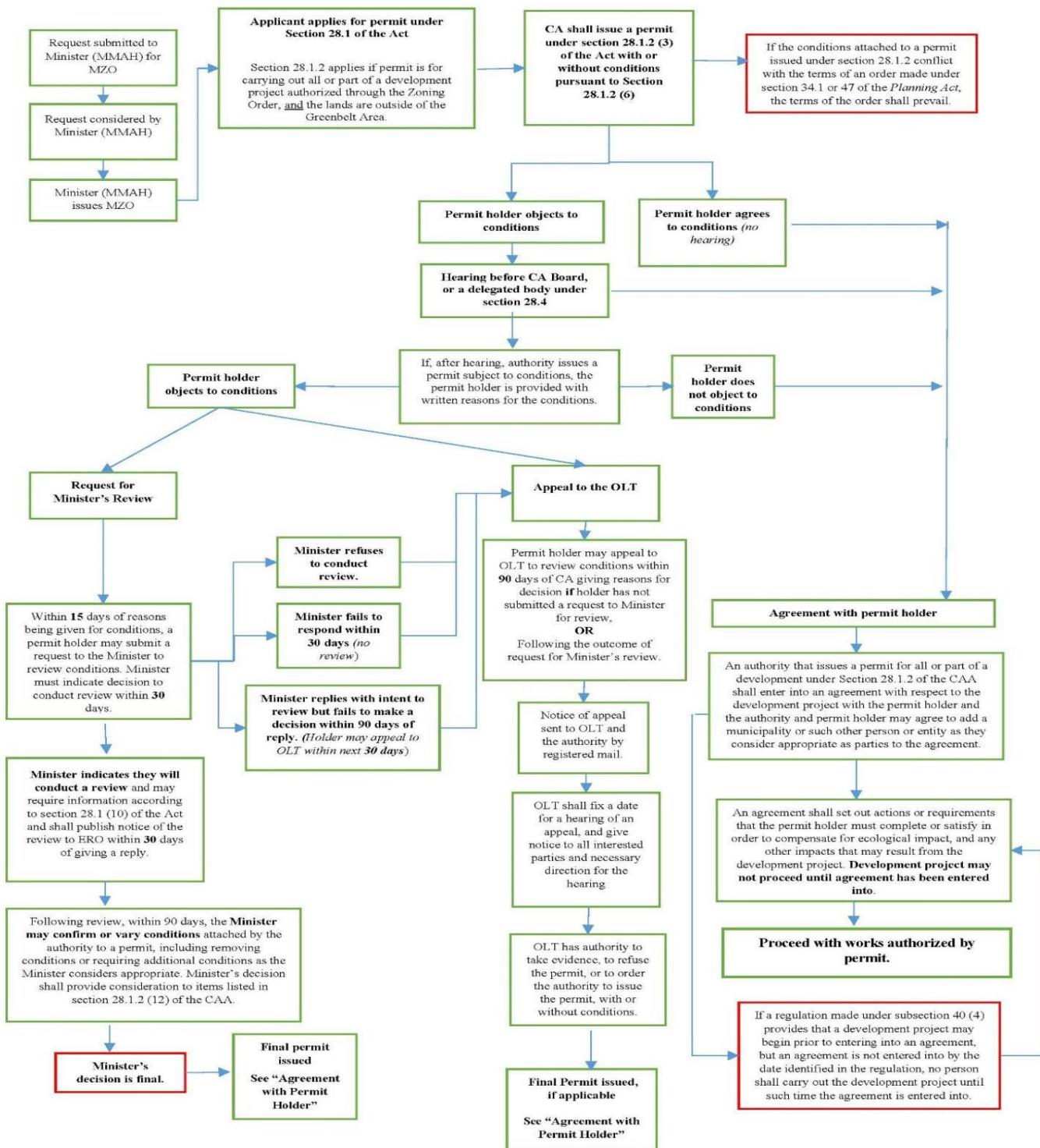


Figure 2 provides a general overview of the permit process related to Mandatory Permits or a Zoning Order outlined in s. 28.1.2.

1.4.1.7 Cancellation of permits

Section 28.3 enables the Authority with the option to cancel a permit issued if it is the Authority's opinion that the conditions of the permit have not been met or that the circumstances that are prescribed by regulation exist. This section outlines the process the Authority shall follow to cancel a permit. This includes notice requirements (intent to cancel, specified date, permit holder hearing request).

Within 15 days of receiving the Conservation Authority's notice of intent to cancel, the permit holder must submit a written request for a hearing. The hearing will be scheduled within a reasonable time frame. The Conservation Authority may confirm, rescind or vary the decision to cancel the permit. If the Conservation Authority confirms the cancellation of the permit or varies the permit in such a way that the permit holder objects, the permit holder may, within 90 days of receiving notice of the authority's decision, appeal the decision to the Ontario Land Tribunal. The permit holder is required to send their notice of appeal to the Tribunal and the Authority by registered mail.

1.4.1.8 Delegation of Power

Section 28.4 of the *CA Act* states "An authority may delegate any of its powers relating to the issuance or cancellation of permits under this Act or the regulations, or to the holding of hearings in relation to the permits, to the authority's executive committee or to any other person or body, subject to any limitations or requirements that may be prescribed by regulation. ..."

The Lower Trent Conservation Board of Directors has delegated the approval and issuance of permit applications that meet the Board approved policies to the CAO/Secretary-Treasurer.

1.4.2 Regulations under the Conservation Authorities Act

1.4.2.1 Ontario Regulation 97/04

Ontario Regulation 97/04 "*Content of Conservation Authority Regulations under Subsection 28 (1) of the Act: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*" (i.e. Generic Regulation) was approved in May 2004 following a prescribed public consultation process. This Regulation established the content requirements to be met in a Regulation made by a Conservation Authority under Subsection 28 (1) of the *CA Act*.

Ontario Regulation 97/04 is revoked on the day section 25 of Schedule 4 to the *Building Better Communities and Conserving Watersheds Act, 2017* comes into force, April 1, 2024.

1.4.2.2 LTC Section 28 Regulation, Ontario Regulation 163/06

In 2006, the MNR approved the Development, Interference and Alteration Regulations (individual Conservation Authorities Regulations) for all Conservation Authorities consistent with Ontario Regulation 97/04 of the *Conservation Authorities Act*. LTC's Regulation was identified as Ontario Regulation 163/06: Regulation of Development, Interference with Wetlands, Alterations to Shorelines and Watercourses. The individual Conservation Authority Regulations have been revoked and replaced by Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits as of April 1, 2024.

1.4.2.3 Mandatory Programs and Services – Ontario Regulation 686/21

Further to the *CA Act* s. 21.1, [Ontario Regulation 686/21](#) requires Conservation Authorities to provide mandatory programs and services related to the risk of natural hazards (see s. 1-8) (Category 1 Program or Service). Conservation Authorities are required to satisfy their duties, functions, and responsibilities to administer and enforce the provisions of Part VI and VII of the *CA Act* and any regulations made under those Parts. Programs and services related to the risk of natural hazards include:

- Comment re applications, proposals (ss. 6. (1) and ss. 6. (2))
- Plan Review, comments (ss. 7 (1) and ss. 7 (2))
- Administering and enforcing the Act (s 8)

Applications or projects under other legislation may be the earliest opportunity for LTC to provide input on natural hazards. In the review of these applications or proposals, LTC can identify natural hazards and attempt to resolve any issues with the proposal that may arise due to natural hazards. This will result in a streamlined permit application or remove the need for a permit.

Under s. 6. (1) Conservation Authorities shall provide programs and services to enable the authority to review applications or proposals to comment on the risks related to natural hazards arising from the proposal made under the Acts noted below:

1. *Aggregate Resources Act*
2. *Drainage Act*
3. *Environmental Assessment Act*
4. *Niagara Escarpment Planning and Development Act*

Subsection 7 (1) of Ontario Regulation 686/21 outlines the requirements for Conservation Authorities to review and provide comments on policy documents (e.g., Official Plans and comprehensive Zoning By-laws) and applications submitted pursuant to the *Planning Act* in accordance with the Mandatory Programs and Services Regulation.

Conservation Authorities provide technical support and advisory services to municipalities for planning applications for natural hazards (not including hazardous forest types for wildland fire). In this capacity, Conservation Authorities staff provide technical input regarding potential natural hazard impacts and advice about how negative impacts can be avoided or minimized.

Subsection 7 (2) 1 to ss. 7 (2) outline additional responsibilities of Conservation Authorities for natural hazard land use planning related matters. These include providing comments, technical support, information, notice and/or training to municipalities or planning boards, as well as providing comments and other support to the Ministry of Municipal Affairs and Housing and MNRF when requested to do so.

1.4.2.4 Prescribed Acts – Ontario Regulation 586/22

In 2022, the *CA Act* was amended, and the Province included an exception to the services a Conservation Authority may provide.

Municipal programs and services

Subsection 21.1.1 (1); Subject to subsection (1.1), an authority may provide, within its area of jurisdiction, municipal programs and services that it agrees to provide on behalf of a municipality situated in whole or in part within its area of jurisdiction under a memorandum of understanding, or such other agreement as may be entered into with the municipality, in respect of the programs and services. 2020, c. 36, Sched. 6, s. 8 (1). 2022, c. 21, Sched. 2, s. 3 (1).

Exception, prescribed Acts

Subsection 21.1.1(1.1); An authority shall not provide under subsection (1), within its area of jurisdiction, a municipal program or service related to reviewing and commenting on a proposal, application or other matter made under a prescribed Act. 2022, c. 21, Sched. 2, s. 3 (2).

Ontario Regulation 596/22: Prescribed Acts enabled under the *CA Act* s. 21.1.1 (1.1) and s. 21.1.2 (1.1)) came into effect on January 1, 2023. This regulation stipulates that Conservation Authorities shall not provide a Municipal (Category 2) or Other (Category 3) program or service related to reviewing and commenting on proposals, applications, or other matters under a prescribed Act.

The prescribed Acts include:

- *Planning Act*
- *Aggregate Resources Act*
- *Condominium Act*
- *Drainage Act*
- *Endangered Species Act*
- *Environmental Assessment Act*
- *Environmental Protection Act*
- *Niagara Escarpment Planning and Development Act*
- *Ontario Heritage Act*
- *Ontario Water Resources Act*

Under the Mandatory Programs and Services Regulation (O. Reg. 686/21) which includes natural hazards, the Conservation Authorities continue to provide review and comments on applications related to natural hazards and regulatory requirements. O. Reg. 596/22 does not affect the Conservation Authorities provision of mandatory (Category 1) programs or services related to the prescribed Acts. Subject to the individual legislative and regulatory requirements, applications made under Acts including the *Planning Act*, *Environmental Assessment Act*, *Drainage Act*, *Niagara Escarpment Planning and Development Act* etc. must continue to be circulated for mandatory program and service delivery for Conservation Authorities to review and provide comments.

1.4.2.5 Ontario Regulation 41/24: Prohibited Activities, Exemptions, and Permits

Ontario Regulation 41/24 went into effect on April 1, 2024.

Conservation Authorities regulate all components noted in s. 28 of the Act within its jurisdiction and the Regulation includes some components of the regulated areas. Conservation Authorities shall use the CA Act as well as Ontario Regulation 41/24 in the administration of the permit process.

As noted above, there are many legal requirements for the administration of Ontario Regulation 41/24 and associated sections of the CA Act, including:

- Definitions for the purposes of Section 28
- Prohibited Activities
- Flood Event Standards
- Maps of Regulated Areas
- Regulation Text Prevails Over Mapping
- Exceptions
- Pre-Submission Consultation
- Application for Permit
- Conditions of Permits
- Lake Simcoe Protection Requirements
- Request for Review
- Period of Validity of Permits and Extensions
- Guidance and Policy Documents re Permits
- Schedule 1

As part of the Bill 23 legislation that was enacted by the Province, CA Act amendments were implemented that triggered the requirement for new Regulations to be created. On February 16, 2024 a new Minister's regulation (Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits) under the CA Act was approved by the Province. This regulation will replace the existing individual "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulations. O.Reg. 41/24 applies to all Conservation Authorities and was created to implement a clear and streamlined permitting process that protects people and property from natural hazards across Ontario. Effective April 1, 2024, O.Reg. 41/24 is to be implemented by all Conservation Authorities and dictates the prohibited activities, exemptions and permit processes under the CA Act.

Similar to O.Reg. 163/06, O.Reg. 41/24 is a text-based regulation. This means that it is not necessary to map a feature before it can be regulated. The legal basis for defining regulated areas remains with the written text. While the Regulation refers to required maps which depict approximate prohibited areas

(and may be subject to revision), the text of the Regulation prevails. Detailed studies requested at the time of an application may further refine or delineate the regulated features (e.g., hazardous lands).

Board-approved policies provide a decision-making framework for the review of applications under the Regulation. In general, policies ensure a consistent, timely and fair approach to the review of applications, staff recommendations, and Board decisions. They also facilitate the effective and efficient use and allocation of available resources.

Notable exceptions under O.Reg. 41/24 (i.e., do not require a s.28 permit) include:

- (a) the construction, reconstruction, erection or placement of,
 - (i) a seasonal or floating dock that,
 - (A) is 10 square metres or less,
 - (B) does not require permanent support structures, and
 - (C) can be removed in the event of flooding,
 - (ii) a rail, chain-link or panelled fence with a minimum of 75 millimetres of width between panels, that is not within a wetland or watercourse,
 - (iii) agricultural in-field erosion control structures that are not within and that do not have any outlet of water directed or connected to a watercourse, wetland or river or stream valley,
 - (iv) a non-habitable accessory building or structure that,
 - (A) is incidental or subordinate to the principal building or structure,
 - (B) is 15 square metres or less, and
 - (C) is not within a wetland or watercourse, or
 - (v) an unenclosed detached deck or patio that is 15 square metres or less, is not placed within a watercourse or wetland and does not utilize any method of cantilevering;
- (b) the installation of new tile drains that are not within a wetland or watercourse, within 30 metres of a wetland or within 15 metres of a watercourse, and that have an outlet of water that is not directed or connected to a watercourse, wetland or river or stream valley, or the maintenance or repair of existing tile drains;
- (c) the installation, maintenance or repair of a pond for watering livestock that is not connected to or within a watercourse or wetland, within 15 metres of a wetland or a watercourse, and where no excavated material is deposited within an area where subsection 28 (1) of the Act applies;
- (d) the maintenance or repair of a driveway or private lane that is outside of a wetland or the maintenance or repair of a public road, provided that the driveway or road is not extended or widened and the elevation, bedding materials and existing culverts are not altered;
- (e) the maintenance or repair of municipal drains as described in, and conducted in accordance with the mitigation requirements set out in the *Drainage Act* and the *Conservation Authorities Act Protocol*, approved by the Minister and available on a government of Ontario website, as it may be amended from time to time; and

(f) the reconstruction of a non-habitable garage with no basement, if the reconstruction does not exceed the existing footprint of the garage and does not allow for a change in the potential use of the garage to create a habitable space.

It is LTC's interpretation of these exceptions that where is no principal building or structure that a permit is required for a non-habitable accessory building that is 15 square metres or less.

Permit Approval Process

To receive permission for proposed works in regulated areas the proponent must submit a permit application to LTC for approval prior to any works. A summary of the permit approval process is outlined below and is discussed in further detail in Section 8 of this document.

- To receive permission for development, it must be demonstrated in an application to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches, unstable soils and bedrock will not be affected. The control of dynamic beaches is applicable to the Lake Ontario shoreline. Additionally, it must be demonstrated that the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property. Other requirements may be prescribed by regulations made under the *CA Act*.
- To receive permission to interfere with a watercourse or wetland, it must be demonstrated in an application to the satisfaction of LTC, that the interference on the watercourse or wetland is acceptable in terms of the natural features and hydrologic and ecological functions of the watercourse or wetland.
- To receive permission for development within "other areas" associated with wetlands, it must be demonstrated in an application that interference on the hydrologic functions of the wetland is deemed acceptable.

Permission from LTC will be given in the form of a formal permit and a letter of permission. For any type of application, submission of technical studies may be necessary. These technical studies must be carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC. These established procedures should be in keeping with MNRF's Technical Guides for Natural Hazards (MNR, 2002a; MNR, 2002b; MNR, 1996a; MNR, 1996b; and MNR 1996c), other Provincial guidelines and/or guidelines approved by the LTC Board. LTC may request that technical studies be carried out at the expense of the applicant.

Where technical expertise within LTC is not available, it may be requested that the study be peer-reviewed by a qualified professional at the expense of the applicant.

It is important to note that the LTC Section 28 permission, if granted, does not exempt the applicant from complying with any or all other approvals, laws, statutes, ordinances, directives and regulations that may affect the property or the use of same. Alternatively, complying with or obtaining all other approvals, laws, statutes, ordinances, directives and regulations, does not exempt the applicant from obtaining permission under Section 28 of the *CA Act*.

1.5 Planning Act and Provincial Planning Statement

The *Planning Act* sets out the framework and rules for land use planning in Ontario and describes how land uses may be controlled, and who may control them. The *Planning Act* also establishes the foundation for review and approval of development proposals and gives citizens and public entities/organizations, such as LTC, the opportunity to be notified about planning proposals to give their views to their municipal council and, where permitted, to appeal decisions to an administrative tribunal, known as the Ontario Land Tribunal.

The essential elements of the *Planning Act* include the listing of key planning issues noted as “Provincial Interest” and provisions that enable the Provincial Planning Statement (PPS) to provide specific province-wide policy direction to address Provincial Interests. This includes policies of paramount interest and importance that relate to Conservation Authorities’ mandate through flooding and erosion related hazard policies.

Finally, the *Planning Act* requires LTC’s review of planning applications and comments to be “consistent” or, alternatively “to conform to” the Provincial Planning Statement and Provincial Plans.

1.6 Clean Water Act

One of LTC’s “mandatory programs” includes “programs and services related to the authority’s duties, functions and responsibilities as a source protection authority under the Clean Water Act, 2006”. LTC’s mandate in this regard includes supporting the local Source Water Protection Committee, regular reviews and updates of the Trent Source Protection Plan and assisting in the review of development applications that have a source water protection component.

1.7 Environmental Assessment Act

Under the provisions of the *Environmental Assessment Act*, R.S.O. 1990, c. E. 18 (the *EA Act*) LTC reviews and comments on class and individual environmental assessments that occur in the watershed. LTC brings local natural hazard and watershed knowledge into the review and assessment process.

It is a requirement for proponents to identify and consult with government agencies and may include Conservation Authorities if the proposed project may have an impact on an issue related to the Conservation Authorities’ areas of interest (i.e., mandate).

Conservation Authorities as landowners may also be a project proponent under the *EA Act* for proposed projects that may occur on Conservation Authority lands. The Class EA for remedial flood and erosion control projects establish planning and approval processes for a variety of remedial flood and erosion control projects.

1.8 Building Code

LTC works closely with local building officials to ensure that legislative requirements for development and construction activities within regulated areas are being adhered to. The *Building Code Act*, 1992, S.O. 1992, c. 23 specifies a need to conform to other existing legislation, which is referred to as

“applicable law”. Ontario Regulation 41/24 is considered applicable law, which means where O.Reg. 41/24 applies, a permit must be obtained from LTC prior to a municipal building permit being issued.

1.9 Other Legislation

There are many other pieces of legislation that address various water and related resource management activities. Some of the key pieces of legislation include:

- *Fisheries Act* (Fisheries and Oceans Canada): managing threats to the sustainability and ongoing productivity of Canada's commercial, recreational and Aboriginal fisheries;
- *Lakes and Rivers Improvement Act* (MNR): provides the Minister of Natural Resources with the legislative authority to govern the design, construction, operation, maintenance and safety of dams in Ontario;
- *Public Lands Act* (MNR): the “rules” governing the administration of Crown land are laid out in a provincial law known as the *Public Lands Act*;
- *Water Resources Act* (MECP): designed to conserve, protect and manage Ontario's water resources for efficient and sustainable use. The *Act* focuses on both groundwater and surface water throughout the province; and
- *Drainage Act* (OMAFA): provides a democratic procedure for the construction, improvement and maintenance of drainage works.

1.10 Definitions and Interpretations

The following sections outline the key definitions and interpretations recommended for implementing the Regulation. The Regulation allows LTC to prohibit or restrict development in areas where the control of flooding, erosion, dynamic beaches, unstable soils and bedrock may be affected by development. The Regulation defines development activity, hazardous land, watercourse and wetland. It is important to note that the *CA Act* and the Regulation do not provide definitions for all terms. Therefore, other relevant documents were reviewed by the Conservation Ontario Peer Review Committee in 2006 to 2008 in an effort to establish interpretations for those terms not defined in the *CA Act*. It is important to note that where definitions are provided in the *CA Act* or O. Reg. 41/24, these definitions (e.g. “development activity”) prevail for the implementation of the Regulation, even if other definitions exist in other relevant documents.

The following definitions provided are essential for interpreting this document and as such are defined in the next sections. Additional definitions of common terms and those used for implementation of this document can be found in Section 9.0 (Glossary). Words found in the Glossary are italicized in the text.

1.10.1 Conservation Authorities Act

Section 28.1.2 (2) of the *CA Act* provides the following definition in relation to Mandatory Permits Zoning Orders:

“Development project” means development activity as defined in subsection 28 (5) or any other act or activity that, without a permit issued under this section or section 28.1, would be prohibited under section 28.

1.10.2 Ontario Regulation 41/24

Ontario Regulation 41/24 includes for the purposes of Section 28 of the *CA Act*, the following terms have the following meanings:

Definitions

In section 28 of the *CA Act* and in this Regulation,

“development activity” means,

- (a) the construction, reconstruction, erection or placing of a building or structure of any kind,
- (b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- (c) site grading, or
- (d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

“hazardous land” means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock;

“watercourse” means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs;

“wetland” means land that,

- (a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
- (b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
- (c) has hydric soils, the formation of which has been caused by the presence of abundant water, and
- (d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water,

The definition of “wetland” in does not include periodically soaked or wet land used for agricultural purposes which no longer exhibits a wetland characteristic referred to in clause (c) or (d) of that definition.

Although each of the natural hazards included in the ‘hazardous land’ definition are not included in the definition section of the regulation, the regulated area of some of these terms are included in other sections of the Regulation such as the River and Stream Valley or Shoreline (e.g., flooding, erosion, dynamic beaches).

1.10.3 Provincial Planning Statement

The Provincial Planning Statement (PPS 2024) provides the following definitions, which are now to be used in conjunction with the regulations under the *CA Act*;

Erosion Hazard means:

... the loss of land, due to human or natural processes, that poses a threat to life and 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 one-hundred-year time span), an allowance for slope stability, and an erosion/erosion access allowance.

Flooding Hazard means:

... the inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

- a) Along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one-hundred-year flood level plus an allowance for wave uprush and other water-related hazards;
- b) Along river, stream and small inland lake systems, the flooding hazard limit is the greater of:
 1. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
 2. the one-hundred-year flood; and
 3. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry;

except where the use of the one-hundred-year flood or the actually experienced event has been approved by the Minister of Natural Resources as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard).

Dynamic Beach Hazard means:

... areas of inherently unstable accumulations of shoreline sediments along the Great Lakes – St. Lawrence River System and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the flooding hazard limit plus a dynamic beach allowance.

Hazardous Sites means:

Property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

1.10.4 Additional Interpretations

The CA Act and Ontario Regulation 41/24 do not define “Interference” nor was any definition found in any other planning document; hence, the **interpretation** below was developed by the Conservation Ontario Section 28 Peer Review and Implementation Committee with representatives from the Ontario Ministry of Natural Resources. Under the Regulation, “interference” only applies to projects within watercourses and wetlands.

Interference in any way is interpreted as:

“any anthropogenic act or instance which hinders, disrupts, degrades or impedes in any way the natural features or hydrologic and ecologic functions of a wetland or watercourse” (March 2008).

The common uses of words in this interpretation can be found in the Oxford Dictionary as follows:

Hinder means to delay or impede

Disrupt means to interrupt or disturb (an activity or process)

Degradate means lower the character or quality of

Impede means to delay or block the progress or action of

Internal Renovations The definition of development in Ontario Regulation 41/24 includes 1. (1) (b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure”.

Repairs and renovations to an existing building within the existing roofline and exterior walls and above the existing foundation within a hazard area would generally not require a permit of the Conservation Authority, unless the proposal is associated with a change in use or increases the number of dwelling units (see definition of ‘development activity’.) When reviewing internal renovation proposals Conservation Authorities need to consider other changes that may be associated with an internal renovation (e.g., upgrades or replacement of a septic system, new openings for doors or windows, etc). These additional activities may meet the definition of development activity and may be considered under the health or safety tests e.g., increase to the risk of injury or fatalities, social disruption, or result in damages from the hazard.

1.11 Activities Typically Regulated

The following list identifies examples of development activities that LTC typically regulates. In many cases, the proposed development and proposed ancillary uses of the development could detrimentally affect the control of flooding, erosion, dynamic beaches, unstable soils or bedrock. These development activities may include, but are not limited to:

- Construction of all buildings and additions including modification or reconstruction of foundations which support existing buildings;
- Breakwalls, revetments, rubble groynes, jetties, etc.;
- Other similar marine works on or near shorelines or lakeshores;
- Dock Abutments;
- Stairs, decks, gazebos;
- Boat ramps, boat storage structures;
- Dredging;
- In-ground and above-ground pools;
- Temporary or permanent placement of *fill*, grading, removal of *fill*, or site alteration;
- Retaining walls;
- Park model trailers and mobile homes;
- Bridges, crossings, roads and pipelines; and
- Municipal drains.

In some cases (e.g., docks), permits may not be required from LTC if permission is granted by Parks Canada or MNR. Please refer to the exceptions noted in Section 1.4.6. In other cases (e.g., shoreline protection) permits may be required from more than one agency.

Minor repairs and renovations to an existing building within the existing roofline and exterior walls and above the existing foundation within a hazard area may not require the permission of LTC, unless the proposal is associated with a change in use or increases the number of dwelling units. This type of activity could increase the risk to life, social disruption, or result in damages from the hazard.

LTC staff review all projects to ensure that the control of flooding, erosion, dynamic beaches and unstable soils or bedrock are not impacted. Therefore, LTC staff have been directed through the regulatory policies to limit development proposals in order to protect people and property from natural hazards.

1.12 Provincial Perspective on Natural Hazards

1.12.1 Introduction

The Ministry of Natural Resources is responsible for natural hazard management in Ontario. Where Conservation Authorities have been established, the responsibility for natural hazard management has been delegated to them. The Province, however, continues to provide the overall direction, guidance and technical standards with respect to natural hazard management. The following is an executive summary of the Province's approach to natural hazard management in Ontario.

Natural, physical environmental processes that occur near or at the surface of the earth can produce unexpected events of unusual magnitude or severity. Such occurrences are generally regarded as natural hazards. The outcome can be catastrophic, frequently resulting in damage to property, injury to humans and other organisms, and tragically even loss of life. In these cases, natural hazards are considered natural disasters.

(Excerpt from MNR (2001) – p. 4)

The management of natural hazards involves a combination of four main program components:

1. Prevention – of new development locating within areas subject to loss of life and property damage from natural hazards;
2. Protection – of existing development from natural hazards through the application of structural and non-structural measures/acquisition;
3. Emergency Response – to evacuate and mitigate existing residents through flood forecasting and warning including disaster relief; and
4. Co-ordination – between natural hazard management and planning and development.

Details related to natural hazard management applications are contained in the Natural Hazards Technical Guides (MNR, 2002a; MNR, 2002b; MNR, 1996a; MNR, 1996b; and MNR 1996c).

1.12.2 Principles of Natural Hazard Management

The guiding principles behind natural hazard management are:

- Proper natural hazard management requires that natural hazards (flooding, erosion, leda clay, organic soils, karst bedrock, dynamic beaches) be simultaneously recognized and addressed in a manner that is integrated with land use planning and maintains environmental and ecosystem integrity;
- Effective floodplain management can only occur on a watershed and littoral reach basis with due consideration given to development effects and associated environmental and ecosystem impacts;
- Local conditions vary along floodplains and shorelines including depth, velocity, littoral drift, seiche, fetch, accretion, deposition, valleyland characteristics, etc., and accordingly must be taken into account in the planning and management of natural hazards;
- New development which is susceptible to natural hazards or which will cause or aggravate the hazards to existing and approved land uses or which will cause adverse environmental impacts must not be permitted to occur unless the natural hazard and environmental impacts have been addressed; and
- Natural hazard management and land use planning are distinct yet related activities that require overall co-ordination on the part of Municipalities, Conservation Authorities, the Ministry of Natural Resources , and the Ministry of Municipal Affairs and Housing.

1.12.3 Consideration of Ingress/Egress

The ability for the public and emergency operations personnel (police, firefighters, ambulance, etc.) to safely access a regulated feature during an emergency, such as a flooding event, is an important factor when considering any application for development. Proposals must be reviewed to ensure access to the proposed development is safe and appropriate for the proposed use. The provision of means by which people, vehicles, and equipment can gain access to and from the regulated feature for maintenance and/or construction of remedial works must also be considered.

In the context of new development, the risks should be controlled by prohibiting development in dangerous or inaccessible portions of the regulated feature.

For existing development, safety risks are a function of the occupancy of structures, the susceptibility of the structure and the access routes to the structure. For existing development, the following factors should be considered:

- The degree of risk with the use of the existing access;
- The ability to modify the existing access or construct a new safe access;
- The ability to find and use the access during an emergency; and
- The ability and willingness of the municipality (emergency vehicles) to use the access.

The risk can also be controlled by limiting the size (and therefore limiting the occupancy) of additions or reconstruction projects. If the risk is determined to be too great, no modifications/alterations/ and/or reconstructions of existing structures should be considered.

1.12.4 Floodproofing

The “Floodproofing Standard” as defined in the PPS means:

the combination of measures incorporated into the basic design and/or construction of buildings, structures, or properties to reduce or eliminate flooding hazards, wave uprush and other water related hazards along the shorelines of the Great Lakes-St. Lawrence River System and large inland lakes and flooding hazards along river, stream and small inland lake systems.

Floodproofing includes alteration to the design of specific buildings, raising of ingress and egress roadways and driveways, the construction of dykes, flood control channels, etc. The variety of floodproofing options and requirements are too detailed and extensive to include in a policy and procedures guideline. LTC has established criteria which are outlined in **Appendix E**. Additional information is also available for referencing in the “Technical Guide – River and Stream Systems: Flooding Hazard limit” (MNR, 2002a).

1.13 Flood, Erosion and Dynamic Beach Hazard Applications in the Lower Trent Conservation Watershed

The regulatory standard for the Lower Trent watershed is:

- Lake Ontario: 1:100-year event
- Trent River: 1:100-year event
- All other watercourses: Timmins event

In the LTC watershed, the following flood, erosion and dynamic beach hazards are applied, and the reference documents are listed here for each delineated floodplain.

1.13.1 Lake Ontario

The flood hazard for Lake Ontario is based on the 100-year flood limit that is comprised of the 100-year flood level plus wave uprush. The erosion hazard is based on the potential for erosion in a 100-year time frame. These hazards along with dynamic beach hazards for Lake Ontario were first identified in the following report:

- Lake Ontario Shoreline Management Plan (LOSMP), 1990, by Sandwell, Swan & Wooster.

Final flood hazard elevations were provided in an update, dated December 1992. Subsequent shoreline studies for the Township of Alnwick/Haldimand and Township of Cramahe were undertaken to build on the information provided in the “Sandwell Report”. The updated studies were:

- *Cramahe Shorelands Project, 1997*
- *Alnwick/Haldimand Township Lake Ontario Shorelands Project, 2002.*

In 2018 to 2020, LTC undertook an update to the Shoreline Management Reports in partnership with the Ganaraska Region Conservation Authority (GRCA) and Central Lake Ontario Conservation Authority (CLOCA). The resulting report provided much needed updates to flood, erosion and dynamic beach hazards along the Lower Trent Conservation portion of the Lake Ontario Shoreline. This study extended from Wellers Bay in the City of Quinte West in the east to the western boundary of the Township of Alnwick/Haldimand. The current Lake Ontario hazard report is:

- *Lake Ontario Shoreline Management Plan, November 5, 2020 (Zuzek)*

The resulting 100-year combined (still water and wind setup) flood level for the LTC Lake Ontario shoreline is 75.97 metres CGVD28 (Canadian Geodetic Vertical Datum 1928) with varying wave uprush considerations that determine the entire Flood Hazard delineation.

There were no detailed technical studies for the Bay of Quinte portion of Lake Ontario but a Memorandum by the MNR (February 21, 1991—see **Appendix H**) identified the 100-year water level for the Lower Trent Conservation portion of the Bay of Quinte as 75.8 metres CGVD28.

During the 2019-2020 Lake Ontario Shoreline Update, LTC contracted SJL Engineering to provide an update on the Combined 100-year Flood Level for the Bay of Quinte based on statistical analyses completed with the Lake Ontario Study. The resulting memorandum provides an update for the flood level for the Bay of Quinte and is found in **Appendix H**. The resulting flood level for the Bay of Quinte is 76.05 metres CGVD28:

- *Bay of Quinte 100-Year Combined Flood Level, February 29, 2020 (SJL Engineering)*

There are communications in the historic memos about wave uprush to be used on the Bay of Quinte in the communications between MNR and the Bay of Quinte Conservation Authorities and three acceptable methods to calculate wave uprush were documented. Lower Trent Conservation applies a 0.2 metre uprush to the 100-year flood limit on the Bay of Quinte, resulting in a Flood Hazard elevation of 76.25 metres CGVD28.

There are no dynamic beach hazards identified on the Bay of Quinte and the standard erosion hazard of 15 metres from the 100-year flood elevation has been applied as per MNR Technical Guidelines for Large Inland Lakes, 1996.

1.13.2 Other Lakes

Both Little Lake in the Township of Cramahe and Oak Lake in the City of Quinte West originally had mapped flood lines that had not been delineated through engineered studies. These lines were identified as a horizontally measured 15 metre zone around the average lake water level to delineate a potential high-water level. A 15-metre regulation limit was applied to these floodlines for a regulated area of 30 metres beyond the typical water's edge.

In 2021 LTC staff conducted a preliminary hydrology assessment of Little Lake and used LiDAR mapping provided through OMAFRA to better identify the actual flood hazard for Little Lake. This mapping has now been incorporated into the LTC mapping. Flood Hazard elevations for Little Lake are 171.93 metres CGVD2013 or **172.28 metres CGVD1928**. Calculations for this assessment are provided in **Appendix J**.

In 2024 LTC staff conducted a preliminary hydrology assessment of Oak Lake and used LiDAR mapping provided through OMAFA to better identify the actual flood hazard for Oak Lake. This mapping has now been incorporated into the LTC mapping. Flood Hazard elevations for Oak Lake are **204.9 metres CGVD2013** or **205.25 metres CGVD1928**. Calculations for this assessment are provided in **Appendix K**.

Oak Lake is identified as Area Specific Policy 3 in the City of Quinte West Official Plan and the LTC regulated area is still defined as stated above. Planning studies may be required before Lower Trent Conservation can issue permits. These policies should be reviewed in consultation with City of Quinte West planning staff, prior to approval of any LTC permits.

Policies specific to flood hazards on Little Lake and Oak Lake are found in Section 6.3.1.1 regarding One-Zone Floodplain mapping.

1.13.3 Trent River and Rice Lake

The regulatory event for the Trent River is the 100-year event. Historical floodplain delineations were completed in two studies and were treated as one-zone areas. The first study defined the floodplain from the Bay of Quinte to Highway 401 and the second study defined the floodplain from Highway 401 to Rice Lake.

- Trent River Floodplain Mapping Report, 1975. M.M. Dillon Limited.
(Associated Mapping TR-T-1 to TR-T-4).
- Floodplain Mapping Study of the Trent River, 1983. Cumming-Cockburn & Associates.
1:5000 mapping TR-1 to TR-45
1:2000 mapping of Flood Damage Areas:
 - Hastings: (TR-H-1 to TR-H-5)
 - Campbellford: (TR-C-1 to TR-C-5)
 - Percy Boom: TR-PB-1 to TR-PB-3)
 - Frankford: (TR-F-1 to TR-F-4)

Through the Flood Hazard Identification and Mapping Program (FHIMP), an update to the Trent River floodplain from the Bay of Quinte to Hastings was conducted in 2023/2024. Therefore, the current Trent River floodplain report is:

- Trent River Floodplain Mapping Update: Floodplain Mapping Report, 2024. KGS Group.

The updated floodplain mapping for the Trent River is focused on Rice Lake to the outlet of the River draining into the Bay of Quinte. The floodplain mapping was completed with both 1-D and 2-D modelling and the mapping is divided into 5 model areas.

- Model 1 – Bay of Quinte to Frankford and Glen Ross Dam (1-D Steady State Model)
- Model 2 – Frankford and Glen Ross Dam to Upstream of Hagues Reach (2-D Unsteady – Constant Flow Model)

- Model 3 – Upstream of Hagues Reach to Upstream of Dam 12 Crowe Bay (1-D Steady State Model)
- Model 4 – Upstream of Dam 12 Crowe Bay to Upstream of Wight Island (2-D Unsteady – Constant Flow Model)
- Model 5 – Upstream of Wight Island to Rice Lake (1-D Steady State Model)

Note that Rice Lake is listed as the smallest of the Large Inland Lakes in the MNR Technical Guide with an area of 100 km². There are no technical studies assessing erosion or dynamic beach hazards on Rice Lake and therefore the flood elevation for Rice Lake identified in the Trent River mapping is the only hazard delineated for Rice Lake at this time (187.9 metres CGVD28). This elevation may be subject to change based on the updated Trent River floodplain mapping. Discussions are currently underway on a potential revised flood hazard elevation. Also note that there are some steep shorelines along Rice Lake that would require erosion hazard assessment for steep slopes, similar to a riverine system.

It is important to note that the 1983 studies identified flood elevations in the Canadian Geodetic Vertical Datum 1928 (GCVD28) and the 2024 report identifies the flood elevations in the Canadian Geodetic Vertical Datum 2013 (GCVD13).

1.13.4 One-Zone and Two Zone Riverine Areas

Not all streams have delineated floodplains in the Lower Trent Conservation watershed. Most Conservation Authorities (including LTC) approach floodplain management using the One Zone concept. The One Zone concept is a hazards-based approach to limit new development in the floodplain where there is no distinction between a higher risk floodway (where flood depths and velocities are often greater) and a lower risk flood fringe (where depths and velocities are often less).

Two zone concepts recognize that floodplains can be divided into two zones: the floodway, where the majority of the flood is conveyed, and flood fringes, which exist on both sides of the floodway. They can be established by a Municipality in conjunction with the Conservation Authority and MNR, following recommendations of a detailed engineering study.

Below are the studies and floodplain mapping projects that have been delineated:

Shelter Valley and Barnum House Creek Subwatershed

Current Floodplain Mapping (Active)

- **Shelter Valley & Barnum House Creeks:** Shelter Valley and Barnum House Creeks Floodplain Study, 1978. Crysler & Lathem Ltd.

Lake Iroquois Plain Tributaries Subwatershed

Current Floodplain Mapping (Active)

- **Arena Creek (Brighton):** Butler Creek Floodplain Mapping Update, 2024 – Jewell Engineering Inc. ***Completed as part of the Butler Creek mapping update***
- **Butler Creek (Brighton):** Butler Creek Floodplain Mapping Update, 2024 – Jewell Engineering Inc.

- **Colborne Creek (Colborne):** Colborne Creek Floodplain Mapping Update, 2024 DM Wills Associates Limited

Historical Floodplain Mapping (inactive)

- **Butler Creek 2-Zone (Brighton):** Butler Creek Flood Reduction Study, 1988. Totten Sims Hubicki Associates.
- **Colborne Creek (Colborne):** Floodplain Mapping Colborne Creek, Village of Colborne, 1982. Kilborn Limited (Note: 2-Zone study undertaken but results did not support creation of a 2-Zone policy).

Note that a two-zone study was completed for Colborne Creek in the Township of Cramahe (Ecos Garatech Associates - November 1991) but the report concluded that Colborne Creek was NOT a suitable candidate for implementation of a Two-Zone Concept. Floodplain mapping was updated during this study in several areas so this mapping should be used for regulatory purposes. The updated floodplain mapping for Colborne Creek did not review for the implementation of a two-zone concept.

Bay of Quinte Tributaries Subwatershed

Current Floodplain Mapping (Active)

- **Dead & York Creeks (Murray Ward):** Dead & York Creek Subwatershed Plan, 1998. Totten Sims Hubicki Associates.
- **DND Creek (Trenton):** DND Creek Floodline Mapping Study, 2002. PSR Group Ltd.

Meyers, Massey and other South Sidney Creeks (Sidney Ward): South Sidney Watershed Plan, 1985. Totten Sims Hubicki Associates.

Trent River Corridor Tributaries Subwatershed

Current Floodplain Mapping (Active)

- **Glen Miller Creek (Trenton & Sidney Ward):** Floodplain Mapping and Preliminary Engineering Study, Glen Miller Creek, 1983. Cumming-Cockburn & Associates Limited (CCA); and the Spill Analysis of the Glen Miller Creek by CCA dated April 1984.
- **Killoran Creek (Hastings):** Killoran Creek Flood Reduction Study, 1985. Totten Sims Hubicki Associates.

Percy/ Burnley (Mill) Creek Subwatershed

Current Floodplain Mapping (Active)

- **Mill/Burnley Creek (Warkworth):** Mill Creek Preliminary Engineering Study, 1983. Cumming-Cockburn & Associates Limited.

Rawdon Creek Subwatershed

Current Floodplain Mapping (Active)

- **Rawdon Creek (Stirling-Rawdon)** – Rawdon Creek Floodplain Mapping Update, 2024 – Jewell Engineering Inc.

Historical Floodplain Mapping (inactive)

- **Rawdon Creek (Stirling other than SPA):** Flood Damage Reduction Study, Rawdon Creek, Village of Stirling, 1985. Kilborn Limited.

Mayhew Creek Subwatershed

Current Floodplain Mapping (Active)

- **Mayhew Creek (Trenton)** – Mayhew and Cold Creek Floodplain Mapping Update, 2024 – Jewell Engineering Inc.

Historical Floodplain Mapping (inactive)

- **Mayhew Creek 2-Zone (Trenton):** Mayhew Creek Two-Zone Concept, City of Trenton and Township of Murray, 1983. Totten Sims Hubicki Associates. – Note that the 2-Zone was only implemented in Trenton and not Murray Township.

Cold Creek Subwatershed

Current Floodplain Mapping (Active)

- **Cold Creek (Frankford)** - Mayhew and Cold Creek Floodplain Mapping Update, 2024 – Jewell Engineering Inc.

Historical Floodplain Mapping (inactive)

- **Cold Creek 2-Zone (Frankford):** Floodplain Assessment & Policy Formulation for a Two Zone Concept Application in the Village of Frankford, July 1983. Totten Sims Hubicki Associates.

Trout Creek Subwatershed

Current Floodplain Mapping (Active)

- **Trout Creek 2-Zone (Campbellford):** Final Report Trout Creek Floodplain Management Study, 1982. MacLaren Plansearch Inc.

1.13.5 Special Policy Area

A Special Policy Area is an area within a community that has historically existed in the floodplain where site specific policies apply. Only the MNR and MMAH have the authority to establish Special Policy Areas; this authority cannot be delegated to municipalities and other planning bodies.

There are currently no Special Policy Areas in the LTC watershed due to the updated floodplain mapping completed in 2023/2024.

2 Land Use Planning

2.1 Context

LTC is involved in the review of planning applications under the *Planning Act* primarily in four ways: as an agency with delegated responsibilities for the review of natural hazards; as a regulatory agency with respect to the *CA Act* and O.Reg. 41/24; as a technical advisor; and as a commenting agency.

Ontario Regulation 41/24 complements the natural hazard policies in policy statements issued under the *Planning Act* including policies of the Provincial Planning Statement (PPS). The legislated and regulatory responsibility for reviewing applications or other matters under the *Planning Act* is limited to Natural Hazards. This responsibility requires Conservation Authorities to review and provide comments on policy documents (e.g., Official Plans and comprehensive Zoning By-laws) and applications submitted pursuant to the *Planning Act* in accordance with the Mandatory Programs and Services Regulation.

Conservation Authorities provide technical support and advisory services to municipalities and applicants/watershed residents for planning applications. In this capacity, Conservation Authority staff provide technical input regarding potential natural hazard impacts and advice about how negative impacts can be avoided or minimized. In addition, regulations under the *Planning Act* (O.Reg. 545/06, 543/06 and 200/96) require municipalities to give notice to Conservation Authorities regarding planning applications and changes to policy documents. Conservation Authorities may comment on natural hazard matters as outlined in the *CA Act* and *Planning Act*. Consistent with its watershed-based resource management strategy, LTC may provide observations which relate to its goals and objectives for watershed management.

One of the main differences between the PPS and the O. Reg 41/24 is that the *Planning Act* establishes the principle of development and the LTC regulations, like a building permit, identify specific site requirements prior to activities taking place. Prior to the review of a Regulation application, LTC will often see the proposal through their Plan Review process including applications under the *Planning Act* (e.g., severances, site plan, subdivision applications), and the *EA Act*. Although permission may not be issued for many years after the planning application, LTC endeavours to ensure, through its comments on the planning application, that the requirements under the Regulation process can be fulfilled at the time an application under the Regulation is received.

If an application under the *Planning Act* does not meet the Board approved policies (for its regulation), staff should work with the municipality and the proponent to modify the application. As previously noted, the principle of development is established through the *Planning Act* process. It is not acceptable to recommend approval of a planning application and then recommend refusal of a regulatory permission, unless the applicant refuses to meet the specific requirements under the Regulation. If an issue remains unresolved, LTC should not recommend approval of the *Planning Act* application and assess the option of making an appeal to the Ontario Land Tribunal (OLT). Note that Conservation Authority's ability to appeal to the OLT regarding municipal decisions of *Planning Act* applications was limited to appeals regarding Natural Hazards only with the approval of Bill 229 - An Act to implement Budget measures and to enact, amend and repeal various statutes, in December 2020.

Alternatively, it is also recognized that there may be historic planning approval decisions that were made in the absence of current technical information or prior to the establishment of the current regulations and policies, which would now preclude development. In these situations, innovative efforts may be necessary to address the site constraints and accommodate the development. However, in some cases approval should not be granted.

2.2 Planning First Approach to Regulation-Integration

Efficient and effective local planning decision-making that is based on modern official plans and zoning by-laws, will integrate information related to natural hazard and other environmental features, such as wetlands, and streamline review and approvals in the *CA Act*. LTC supports a “Planning First” approach to its regulatory mandate, which means that development proposals should be evaluated through up-to-date provincially and municipally approved planning policy and zoning before any regulatory requirements under Part VI of the *CA Act* are integrated and applied. It is noted that although we support this approach, we do understand that it may not always be possible to implement for all situations.

2.3 Provincial Planning Statement

In the review and comment on development proposals and making decisions on permit application, LTC will seek to ensure consistency with the policies contained in:

- Chapter 5: Protecting Public Health and Safety, specifically, policies 5.1 General Policies for Natural and Human-made Hazards and 5.2 Natural Hazards; and,
- The associated implementation of technical guidelines issued by the Province and amended from time -to-time.

3 GENERAL POLICIES

Background:

Lower Trent Region Conservation Authority (LTC) will be guided by the following general administrative guidance with respect to the implementation of its regulatory responsibilities:

- Development, interference and/or alteration activities shall not be undertaken in a regulated area without written permission from LTC.
- Where a regulated area pertains to more than one water-related hazard (e.g., lands susceptible to flooding that are part of a wetland), policies will be applied jointly, and where applicable, the more restrictive policies will apply.
- Technical studies and/or assessments, site plans and/or other plans submitted as part of an application for permission to undertake development, interference and/or alteration in a regulated area must be completed by a qualified professional to the satisfaction of LTC in conformity with the most current provincial technical guidelines or guidelines accepted by LTC through a Board Resolution.

Note: Information regarding technical standards and guidelines is contained within the Appendices.

Similar to the MNR recommended 6-metre erosion access allowance (Section 3.4, Technical Guide for River and Stream Systems: Erosion Hazard Limit, MNR), LTC recommends that a 6-metre access allowance is applied to all hazard lands. Note that emergency access is required along the hazard as well as between the buildings and the lot line to allow for heavy equipment access to the hazard area.

The guidelines for development within the 15 metre adjacent lands to a hazard include an access setback. Three main principles support the inclusion of an access setback:

- providing for emergency access to hazard areas;
- providing for construction access for regular maintenance and access to the site in the event of a natural hazard or failure of a structure; and
- providing protection against unforeseen or predicted external conditions which could have an adverse effect on the natural conditions or processes acting on or within a hazard prone area.

Activities in regulated areas that are carried out by other provincial ministries or the federal government do not require a permit. Activities conducted on provincial crown land by third-party proponents in a regulated area may require a permit, unless acting as an agent of the Crown.

Works for which permission is required under the Regulation may also be subject to other legislation, policies and standards that are administered by other agencies and municipalities, such as the *Planning Act*, *Public Lands Act*, *Nutrient Management Act*, *Drainage Act*, *EA Act* or the federal *Fisheries Act*, etc. It is the responsibility of the applicant (or applicant's agent) to ensure that all necessary approvals are obtained prior to undertaking any works for which a permit under this Regulation has been obtained.

LTC Policies – General Policies:

Within areas defined by the regulation (i.e., regulated areas), including Lake Ontario shoreline hazard lands and an allowance, river or stream valleys and an allowance, wetlands or other areas where development could interfere with the hydrologic function of a wetland (areas of interference), watercourses, or hazardous lands, the following general policies will apply:

- 1) Development, interference and/or alteration will not be permitted within a regulated area, except in accordance with the policies contained in this document.
- 2) Notwithstanding Policy 2 (1), the LTC Board of Directors, sitting as the Hearing Board, may grant permission for development, interference and/or alteration where the applicant provides evidence acceptable to the Board that documents that the development and/or activity will have no adverse effect on the control of flooding, erosion, dynamic beaches and unstable soils and bedrock with respect to Lake Ontario shoreline, river or stream valleys, hazardous land, wetlands, and areas of interference or will not result in an unacceptable interference with a watercourse or wetland.
- 3) In addition to specific conditions outlined through this document, development activities, interference and/or alteration within a regulated area may be permitted only where:
 - a) risk to public safety is not increased;
 - b) there is no increase in habitation in the hazard area with the exception of allowable flood fringes or wave uprush hazard areas;
 - c) susceptibility to natural hazards is not increased nor new hazards created (e.g., there will be no impacts on adjacent properties with respect to natural hazards);
 - d) safe ingress/egress is available for proposed development that increases habitation outside of hazard lands;
 - e) sedimentation and erosion during construction and post construction is minimized using best management practices including site, landscape, infrastructure and/or facility design, construction controls, and appropriate remedial measures;
 - f) access for emergency works and maintenance of flood or erosion control works is available;
 - g) proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards or to the satisfaction of LTC, whichever is applicable based on the structural scale and scope, and purpose of the project;
 - h) there are no adverse hydraulic or fluvial effects on rivers, creeks, streams, or watercourses;
 - i) there are no adverse sedimentation or littoral effects on the Lake Ontario shoreline;
 - j) there are no adverse effects on the hydrologic function of wetlands;
 - k) the control of flooding, erosion, dynamic beaches and unstable soils and bedrock is not adversely affected during and post development; and,
 - l) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.

Prohibited Uses:

- 4) Notwithstanding the General Policies referenced above, in accordance with Section 5.2 of the Provincial Planning Statement, development will not be permitted within hazardous lands as defined in the CA Act, where the use is:
 - an institutional use associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities or the young during an emergency as a result of flooding, failure of floodproofing and/or protection works, and/or erosion;

- an essential emergency service such as that provided by fire, police and ambulance stations and electrical substations, which would be impaired during an emergency as result of flooding, failure of flood-proofing measures and/or protection works, and/or erosion; or,
- uses associated with the disposal, manufacture, treatment or storage of hazardous substances.

4 GREAT LAKES AND LARGE INLAND LAKES SHORELINES

4.1 Conservation Authorities Act

The *CA Act* contains the following sections dealing with the shoreline of Lake Ontario.

Activities prohibited (Prohibited activities re watercourses, wetlands, etc.)

“28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority: ...

2. Development activities in areas that are within the authority's area of jurisdiction and are, ...
 - iv. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations, or,...

Permits

28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

- a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; and
- b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; ...

The permit shall be given in writing, with or without conditions.

4.2 Ontario Regulation 41/24

The following section indicates how the extent of Great Lakes and large inland lakes shorelines are determined for the purpose of administering the Regulation. The Regulation contains the following sections dealing with Great Lakes and large inland lakes shorelines. Although Rice Lake is listed as the smallest of the Large Inland Lakes (100 km²), it has been regulated as a smaller lake.

Prohibited activities, subparagraph 2 of ss. 28 (1) of the *CA Act* (development activity prohibited)

(2) For the purposes of subparagraph 2 iv of subsection 28 (1) of the Act, areas adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes that may be affected by flooding, erosion or dynamic beaches include,

- (a) the area starting from the furthest offshore extent of the Authority's boundary to the furthest of the following distances:
 - (i) the 100-year flood level, plus the appropriate allowance for wave uprush, and, if necessary, for other water-related hazards, including ship generated waves, ice piling and ice jamming;

- (ii) the predicted long-term stable slope projected from the existing stable toe of the slope or from the predicted location of the toe of the slope as that location may have shifted as a result of shoreline erosion over a 100-year period; and
- (iii) where a dynamic beach is associated with the waterfront lands, an allowance of 30 metres inland to accommodate dynamic beach movement; and

(b) the area that is an additional 15 metres allowance inland from the area described in clause (a).

Permits

The Authority may grant a permit for development activity adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes subject to the tests or criteria in the *CA Act*.

Note: There is no reference to “alterations to shorelines” within the Regulation Policy Standards

4.3 Policy Standards

The following sections outline the policy standards for LTC’s implementation of *the CA Act* and O. Reg. 41/24 with respect to the Lake Ontario shoreline and the associated allowances. LTC, in their role through the planning process, should review planning applications to ensure that, all development can be set back an appropriate distance from all shoreline hazards.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies must be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and prepared using established procedures and recognized methodologies to the satisfaction of LTC.

4.3.1 Development within the Shoreline Flood Hazard

Background

For the purposes of the following policies, the shoreline flood hazard is the limit of the landward extent of flooding accounting for the 100-year flood elevation, plus an allowance for wave uprush and other water related hazards. The 100-year flood elevation (sometimes called the Combined Flood Elevation) consists of the 100-year stillwater level plus the wind setup (otherwise known as the storm surge).

LTC Policies

- 1) Development activity within the shoreline flood hazard shall not be permitted.
- 2) Placement of fill, flood hazard protection and bank stabilization works to allow for future/proposed development or an increase in development envelope within the shoreline flood hazard shall not be permitted.
- 3) Development activity associated with new and/or the expansion of existing trailer parks / campgrounds in the shoreline flood hazard shall not be permitted.
- 4) *Major development* within the shoreline flood hazard shall not be permitted.

- 5) Redevelopment of derelict and abandoned buildings within the shoreline flood hazard shall not be permitted.
- 6) Stormwater management facilities within the shoreline flood hazard shall not be permitted.
- 7) Basements within the shoreline flood hazard shall not be permitted.
- 8) Underground parking within the shoreline flood hazard shall not be permitted.
- 9) Notwithstanding Section 4.3.1 4), *major development* within the shoreline flood hazard may be permitted where it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) The proposed development is not located at or below the 100-year flood level (75.97 m CGVD28 for Lake Ontario or 76.05 m CGVD28 for Bay of Quinte);
 - b) there is no feasible alternative site outside of the Regulatory flood hazard for the proposed development and the proposed development is located in an area of least (and acceptable) risk;
 - c) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - d) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques;
 - e) the flood depths on access roads and the lot do not exceed 0.3 metres;
 - f) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - g) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - h) control of erosion and dynamic beach hazards, or unstable soil or bedrock have been adequately addressed; and,
 - i) for *major development* where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering design, carried out by a qualified professional with recognized expertise in the appropriate discipline, must be prepared using established procedures and recognized methodologies to the satisfaction of the LTC.
- 10) Notwithstanding Section 4.3.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the shoreline flood hazard subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches, unstable soil and unstable bedrock will not be affected.
- 11) Notwithstanding Section 4.3.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the

shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

- 12) Notwithstanding Section 4.3.1 1), shoreline, bank, and slope stabilization to protect existing development and conservation or restoration projects may be permitted within the shoreline flood hazard for *major stabilization works*.
- 13) Notwithstanding Section 4.3.1 1), *moderate development* and major structural repairs may be permitted within the shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the shoreline flood hazard for the proposed development and that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new or aggravate flooding on the subject, adjacent or other properties;
 - c) the development is protected from the shoreline flood hazard in accordance with established floodproofing and protection techniques. Habitable development must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and non-habitable development must be floodproofed to the Regulatory flood elevation;
 - d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) control of erosion and dynamic beach hazards, or unstable soil or bedrock have been adequately addressed; and,
 - g) for *moderate development* (except decks) where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.
- 14) Notwithstanding Section 4.3.1. 1), development associated with existing uses located within the shoreline flood hazard such as marine facilities, in-ground (at existing grade) pools, *minor development*, landscaping retaining walls, grading, etc., may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected.
- 15) Notwithstanding 4.3.1 1), construction of a second storey addition to a habitable building greater than 46m² (500ft²) may be permitted within the 100-year static flood level of the shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. Subsequent moderate development proposals as in Section 4.2.1 13) which increase the

footprint of the structure would not be supported. The submitted plans must demonstrate that:

- a) the original footprint of the building is not increased;
- b) habitation is not increased for the entire building;
- c) the entire building is protected from the flood hazard in accordance with established floodproofing and protection techniques with dry floodproofing to 0.3 metres above the Regulatory flood elevation;
- d) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- e) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

16) Notwithstanding 4.3.1 1), development may be permitted for the reconstruction or relocation of a building within the shoreline flood hazard, provided that it has not been damaged or destroyed by flooding or other water related hazards and if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:

- a) the building or structure meets the criteria described in Policy 9) above with the exception of Condition a);
- b) the building or structure must not be located closer to the hazard than the original building; and,
- c) the building or structure does not exceed the original floor space plus the allowable floor space for *moderate development*. If the building or structure is enlarged, future *moderate development* to the building or structure will not be considered.

17) Notwithstanding Section 4.3.1 1), development associated with the construction of a driveway or access way through the shoreline flood hazard in order to provide access to lands outside of the shoreline flood hazard may be permitted subject to the provision of safe access as identified in Section 3 – General Policies, and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

18) Notwithstanding Section 4.3.1 1), removal or placement of *minor fill* and associated site grading or *moderate stabilization works* may be permitted within the shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

19) Notwithstanding Section 4.3.1 1), the replacement of sewage disposal systems may be permitted within the shoreline flood hazard if it has been demonstrated to the satisfaction

of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The replacement system should be located outside of the shoreline flood hazard where possible and only permitted within the shoreline flood hazard in the area of lowest risk.

20) Notwithstanding Section 4.3.1 1), parking areas may be permitted within the shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected and that safe pedestrian and vehicular access is achieved.

21) Notwithstanding Section 4.3.1 1), *boathouses* may be permitted within the Shoreline Flood Hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beach hazards, unstable soil or bedrock not be affected, and an engineered design may be required for wet flood proofing.

4.3.2 Development within the Allowance Adjacent to the Shoreline Flood Hazard

LTC Policies

1) Development may be permitted within the allowance adjacent to the shoreline flood hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- development does not aggravate the flood hazard or create a new one;
- development does not impede access for emergency works, maintenance and evacuation; and,
- the potential for surficial erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/ restoration plans.

4.3.3 Development within the Shoreline Erosion Hazard

Background

For the purpose of the following policy, the shoreline erosion hazard is the limit of the landward extent of the stable slope measured from the existing protected or unprotected toe of slope, plus the limit of the 100-year erosion limit.

LTC Policies

- Development shall not be permitted within the shoreline erosion hazard.
- Stabilization works within the shoreline erosion hazard to allow for future/proposed development or an increase in development envelope or area shall not be permitted;
- Development associated with new and/or the expansion of existing trailer parks/campgrounds in the shoreline erosion hazard shall not be permitted.
- Major development* within the shoreline erosion hazard shall not be permitted.

- 5) Redevelopment of derelict and abandoned buildings within the shoreline erosion hazard shall not be permitted.
- 6) Stormwater management facilities within the shoreline erosion hazard shall not be permitted.
- 7) Basements within the shoreline erosion hazard shall not be permitted.
- 8) Underground parking within the shoreline erosion hazard shall not be permitted.
- 9) Notwithstanding Section 4.3.3 4), *major development* within the mapped erosion hazard may be permitted where it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The development may be permitted outside of the revised site-specific erosion hazard. The submitted plans must demonstrate that:
 - a) Pre-existing engineered shoreline protection works are present and structural integrity has been confirmed. The shoreline protection works will be given a maximum credit of 35 years erosion protection unless otherwise specified by a qualified professional with recognized expertise in the appropriate discipline. This assessment will define a revised site-specific erosion hazard.;
 - b) there is no feasible alternative site outside of the mapped erosion hazard for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - c) the proposed works do not create new hazards or aggravate erosion on adjacent or other properties;
 - d) the development will not prevent access into and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) the control of flooding, erosion and dynamic beach hazards and unstable soil and bedrock have been adequately addressed; and
 - g) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the LTC.
- 10) Notwithstanding Section 4.3.3 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the shoreline erosion hazard subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 11) Notwithstanding Section 4.3.3 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within

the shoreline erosion hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

- 12) Notwithstanding Section 4.3.3 1), *major stabilization works* to protect existing development and conservation or restoration projects may be permitted within the shoreline erosion hazard subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected through detailed engineering design.
- 13) Notwithstanding Section 4.3.3 1), removal or placement of *minor fill* for shoreline stabilization or *moderate stabilization works* may be permitted within the shoreline erosion hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 14) Notwithstanding Section 4.3.3 1), *moderate development, in-ground (at grade) pools and structural repairs* may be permitted within the shoreline erosion hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the shoreline erosion hazard and that the proposed development is located in an area of least (and acceptable) risk;
 - b) no development is located within the stable slope allowance;
 - c) there is no impact on existing and future slope stability and bank stabilization;
 - d) development will not prevent access into and along the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
 - e) development will have no negative impacts on natural shoreline processes;
 - f) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - g) the control of flooding, erosion and dynamic beach hazards and unstable soil and bedrock have been adequately addressed; and
 - h) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the LTC.
- 15) Notwithstanding Section 4.3.3 1), *minor development* associated with existing uses located within the shoreline erosion hazard including landscaping retaining walls, grading, and *minor fill*, may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- a) there is no feasible alternative site outside of the shoreline erosion hazard and that the proposed development is located in an area of least (and acceptable) risk;
- b) development will not prevent access into and through the shoreline erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
- c) there is no impact on existing and future slope stability and bank stabilization;
- d) development will have no negative impacts on natural shoreline processes;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans; and
- f) the control of flooding, erosion, and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

16) Notwithstanding 4.3.3 1), development may be permitted for the reconstruction or relocation of a building within the shoreline erosion hazard, provided that it has not been damaged or destroyed by erosion and if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:

- a) the building or structure meets the criteria described in Policy 13) above;
- b) the building or structure is no closer to the hazard than existing development; and
- c) the building or structure does not exceed the original floor space plus the allowable floor space for *moderate development*. If the building or structure is enlarged, future *moderate development* to the building or structure will not be considered.

17) Notwithstanding Section 4.3.3 1), development associated with the placement of *fill* for the replacement of a sewage disposal system may be permitted within the shoreline erosion hazard if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The replacement system should be located outside of the shoreline erosion hazard where possible, and only permitted within the shoreline erosion hazard subject to being located in the area of least and acceptable risk. The LTC may request a technical study to ensure that the development is not subject to risk, and/or to establish the area of least and acceptable risk.

18) Notwithstanding Section 4.3.3 1), parking areas may be permitted within the shoreline erosion hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected and that safe pedestrian and vehicular access is achieved.

19) Notwithstanding Section 4.3.3 1), development associated with uses that by their nature are located within the hazard such as the construction or reconstruction of a marine facility, erosion control works, stairs, and shore wells may be permitted within the

shoreline erosion hazard if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. LTC will require that the design be carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the LTC.

4.3.4 Development within the Allowance Adjacent to the Shoreline Erosion Hazard

LTC Policies

- 1) Development may be permitted within the allowance adjacent to the shoreline erosion hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) development does not aggravate the erosion hazard or create a new one;
 - b) development does not impede access for emergency works, maintenance and evacuation;
 - c) where new development is proposed adjacent to the erosion hazard, all buildings or structures must be located a minimum horizontal distance of 6 metres beyond the furthest landward extent of the erosion hazard;
 - d) for additions to existing buildings or structures located within the 6-metre setback allowance, the addition cannot encroach further into the setback from the erosion hazard limit than the original building or structure;
 - e) for reconstruction of buildings or structures located within the 6-metre setback allowance, the new building or structure is constructed in the same location as the original building or structure provided that there are no reasonable alternatives to locate the new building or structure outside of the required setback, and the new building or structure cannot encroach further into the setback from the erosion hazard limit than the original building or structure;
 - f) the potential for surficial erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - g) the control of flooding, erosion, and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

4.3.5 Development within the Dynamic Beach Hazard

Background

For the purpose of the following policies the Dynamic Beach Hazard is the limit of the landward extent of the 100-year flood elevation limit, plus the allowance for wave uprush and other water-related hazards, plus the dynamic beach allowance.

LTC Policies

- 1) Development shall not be permitted within the dynamic beach hazard.

- 2) Stabilization works within the dynamic beach hazard to allow for future/proposed development or an increase in development envelope or area shall not be permitted.
- 3) Notwithstanding Section 4.3.5 2), major stabilization works (such as a beach curb) may be permitted at the transition area between the dynamic beach and existing development if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected through a satisfactory engineering design by a qualified professional.
- 4) Development associated with new and/or the expansion of existing trailer parks/campgrounds in the dynamic beach hazard shall not be permitted.
- 5) *Major development* within the dynamic beach hazard shall not be permitted.
- 6) Redevelopment of derelict and abandoned buildings within the dynamic beach hazard shall not be permitted.
- 7) Stormwater management facilities within the dynamic beach hazard shall not be permitted.
- 8) Basements within the dynamic beach hazard shall not be permitted.
- 9) Underground parking within the dynamic beach hazard shall not be permitted.
- 10) Notwithstanding Section 4.3.5 1), underground public infrastructure (i.e. sewers) and various utilities (e.g. pipelines) may be permitted within the dynamic beach hazard subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 11) Notwithstanding Section 4.3.5 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the dynamic beach hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 12) Notwithstanding Section 4.3.5 1), conservation or restoration projects may be permitted within the dynamic beach hazard subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 13) Notwithstanding Section 4.3.5 1), development may be permitted for the reconstruction or relocation of a building within the dynamic beach hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the dynamic beach hazard and that the proposed development is located in an area of least (and acceptable) risk;
 - b) the building or structure is no closer to the hazard than existing development;
 - c) the building or structure does not exceed the original floor space;

- d) there is no impact on existing and future dynamic beach movement;
- e) development will not prevent access into and along the dynamic beach hazard in order to undertake preventative actions/maintenance or during an emergency;
- f) development will have no negative impacts on natural shoreline processes;
- g) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- h) the control of flooding, erosion and dynamic beach hazards and unstable soil and bedrock have been adequately addressed.; and
- i) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

14) Notwithstanding Section 4.3.5 1), removal or placement of *minor fill* and site grading may be permitted within the dynamic beach hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

15) Notwithstanding Section 4.3.5 1), development associated with the placement of *fill* for the replacement of a sewage disposal system may be permitted within the dynamic beach hazard if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The replacement system should be located outside of the dynamic beach hazard where possible, and only permitted within the dynamic beach hazard subject to being located in the area of least and acceptable risk. The LTC may request a technical study to ensure that the development is not subject to risk, and/or to establish the area of least and acceptable risk.

4.3.6 Development within the Allowance Adjacent to the Dynamic Beach Hazard

LTC Policies

1) Development may be permitted within the allowance adjacent to the dynamic beach hazard if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beach or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:

- a) development does not create or aggravate the dynamic beach hazard;
- b) development does not prevent access to and along the dynamic beach;
- c) where new development is proposed adjacent to the dynamic beach hazard, all buildings or structures must be located a minimum horizontal distance of 6 metres beyond the furthest landward extent of the dynamic beach hazard;
- d) for additions to existing buildings or structures located within the 6-metre setback allowance, the addition cannot encroach further into the setback from the dynamic beach hazard than the original building or structure;

- e) for reconstruction of buildings or structures located within the 6-metre setback allowance, the new building or structure is constructed in the same location as the original building or structure provided that there are no reasonable alternatives to locate the new building or structure outside of the required setback, and the new building or structure cannot encroach further into the setback from the dynamic beach hazard than the original building or structure;
- f) the potential for surficial erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/ restoration plans; and
- g) the control of flooding, erosion, and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

5 RIVER OR STREAM VALLEYS

5.1 Conservation Authorities Act

The *CA Act* contains the following sections dealing with river or stream valleys:

Activities prohibited (Prohibited activities re: watercourses, wetlands, etc.)

“28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority: ...

2. Development activities in areas that are within the authority’s area of jurisdiction and are, ...
 - iii. river or stream valleys the limits of which shall be determined in accordance with the regulations, ...”

Permits

28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by s. 28, if, in the opinion of the authority,

- a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; and
- b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; ...

The permit shall be given in writing, with or without conditions.

5.2 Ontario Regulation 41/24

The following section identifies how the extent of river or stream valleys are determined for the purpose of administering the Regulation. Inland lakes that do not meet the definition of “large inland lake” (i.e., waterbody that has a surface area equal to or greater than 100 square kilometres where there is no measurable or predictable response to a single runoff event) should be treated in a manner similar to a river or stream valley. The Regulation contains the following sections dealing with river or stream valleys.

Prohibited activities, subparagraph 2 of ss. 28 (1) of the CA Act

2.(1) For the purposes of subparagraph 2 iii of subsection 28 (1) of the *CA Act*, river or stream valleys include river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse, the limits are determined as follows:

1. where the river or stream valley is apparent and has stable slopes, the valley extends from the stable top of bank, plus 15 metres, to a similar point on the opposite side,

2. where the river or stream valley is apparent and has unstable slopes, the valley extends from the predicted long-term stable slope projected from the existing stable slope or, if the toe of the slope is unstable, from the predicted location of the toe of the slope as a result of stream erosion over a projected 100-year period, plus 15 metres, to a similar point on the opposite side,
3. Where the river or stream valley is not apparent, the valley extends,
 - (i) to the furthest of the following distances:
 - A. the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard to a similar point on the opposite side; and
 - B. the distance from the predicted meander belt of a watercourse, expanded as required to convey the flood flows under the applicable flood event standard to a similar point on the opposite side; and
 - (ii) an allowance of 15 metres on each side, except in areas under the jurisdiction of the Niagara Peninsula Conservation Authority.

Permits

The Authority may grant a permit for development activity in or on a river or stream valley subject to the tests or criteria in the *CA Act*. The permit from the Authority shall be given in writing, with or without conditions.

5.3 Policy Standards

The following sections outline the policy standards for LTC's implementation of the *CA Act* and O. Reg. 41/24 with respect to river and stream valleys and the associated allowance lands adjacent to natural hazards. LTC, in their role through the planning process, should review planning applications to ensure that, in general, all development can occur an appropriate distance from the river and stream valley hazards.

Development will not be permitted within the regulated area associated with a valley, except in accordance with the policies contained in this section. Note that the hazard lands associated with the River and Stream Valleys and associated policies with these hazard lands are discussed in Section 4 of this report.

5.3.1 Development within the Allowance Adjacent to the Erosion Hazard of a River or Stream Valley

Background

The guidelines for development within the 15 metre adjacent lands to an erosion hazard include an erosion access setback. Note that access is required along the hazard as well as between buildings to allow for heavy equipment access to the hazard area. Three main principles support the inclusion of an erosion access setback:

- providing for emergency access to erosion prone areas;
- providing for construction access for regular maintenance and access to the site in the event of an erosion event or failure of a structure; and
- providing protection against unforeseen or predicted external conditions which could have an adverse effect on the natural conditions or processes acting on or within an erosion prone area.

The erosion access setback for river and stream systems shall be 6 metres (Section 3.4, Technical Guide for River and Stream Systems: Erosion Hazard Limit, MNR).

LTC Policies

- 1) Development may be permitted within the allowance adjacent to the erosion hazard of a river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) development does not create or aggravate an erosion hazard;
 - b) development is set back a sufficient distance from the stable top of bank to avoid increases in loading forces on the top of the slope;
 - c) development is not permitted in the access setback of 6 metres from the erosion hazard;

- d) for additions to existing buildings or structures located within the 6-metre setback allowance the addition cannot encroach further into the setback from the erosion hazard than the original building or structure;
- e) for reconstruction of buildings or structures located within the 6-metre setback allowance, the new building or structure is constructed in the same location as the original building or structure provided that there are no reasonable alternatives to locate the new building or structure outside of the required setback, and the new building or structure cannot encroach further into the setback from the erosion hazard than the original building or structure;
- f) development does not change drainage or vegetation patterns that would compromise slope stability or exacerbate erosion of the slope face;
- g) development will not prevent access to and along the erosion hazard in order to undertake preventative actions/maintenance or during an emergency;
- h) the potential for surficial erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/restoration plans; and
- i) the control of flooding, erosion and dynamic beach hazards and unstable soil and bedrock have been adequately addressed.

2) For slopes and embankments that exist above a proposed site for development, and all or a portion of the upper slope lies within the regulated area, a 15-metre setback from the stable toe of slope will be applied. LTC may consider a reduction of this allowance if it can be demonstrated that the hazard will not be aggravated and the development will not be negatively affected by the hazard. Generally, a technical study conducted by a qualified professional will be required for a reduction to be considered.

5.3.2 Development within the Allowance of the Regulatory Floodplain of River or Stream Valleys

Background

Similar to the MNR recommended 6-metre erosion access allowance (Section 3.4, Technical Guide for River and Stream Systems: Erosion Hazard Limit, MNR), LTC recommends that a 6-metre flood access allowance is applied to the Regulatory floodplain as well. Note that emergency access is required along the hazard as well as between the buildings to allow for heavy equipment access to the hazard area.

The guidelines for development within the 15 metre adjacent lands to a flooding hazard include a flood access setback. Three main principles support the inclusion of a flood access setback:

- providing for emergency access to flood prone areas;
- providing for construction access for regular maintenance and access to the site in the event of a flooding event or failure of a structure; and,
- providing protection against unforeseen or predicted external conditions which could have an adverse effect on the natural conditions or processes acting on or within a flood prone area.

LTC Policies

- 1) Development may be permitted within the allowance of a Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) development does not aggravate the flood hazard or create a new one;
 - b) development does not impede access for emergency works, maintenance and evacuation;
 - c) where development is proposed, buildings or structures must be located a minimum horizontal distance of 6 metres beyond the furthest landward extent of the Regulatory floodplain;
 - d) for additions to existing buildings or structures located within the 6-metre setback allowance, the addition cannot encroach further into the setback from the Regulatory floodplain than the original building or structure;
 - e) for reconstruction of buildings or structures located within the 6-metre setback allowance, the new building or structure is constructed in the same location as the original building or structure provided that there are no reasonable alternatives to locate the new building or structure outside of the required setback, and the new building or structure cannot encroach further into the setback from the Regulatory floodplain than the original building or structure;
 - f) the potential for surficial erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/ restoration plans; and
 - g) the control of flooding, erosion and dynamic beach hazards and unstable soil and bedrock have been adequately addressed.
- 2) Where development is proposed and the elevation of the Regulatory floodplain is unknown, LTC may request a technical study, completed by a qualified professional, to determine the extent of the Regulatory floodplain. Subsequent to the completion of a technical study to the satisfaction of LTC, policy Section 6.3.1 would apply in addition to this Section.
- 3) If a technical study is completed to establish the extent of the Regulatory floodplain, the 6-metre setback may be applied for development. These studies are to be done at the applicant's expense and must be completed to the satisfaction of LTC.
- 4) Where development is proposed for an addition within the regulatory allowance but the main structure is located within the flood hazard, the development may be permitted if the following can be demonstrated:
 - a) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques. Habitable development must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and non-habitable development must be floodproofed to the Regulatory flood elevation;
 - b) the number of dwelling units is the same or less

- c) habitation is not increased;
- d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans; and
- f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

6 HAZARDOUS LANDS

6.1 Conservation Authorities Act

The CA Act contains the following sections dealing with hazardous lands:

Activities prohibited (Prohibited activities re watercourses, wetlands, etc.)

“28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority: ...

2. Development activities in areas that are within the authority’s area of jurisdiction and are,
 - i. hazardous lands, ...

Permits

28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by s. 28, if, in the opinion of the authority,

- a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; and
- b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; ...

The permit shall be given in writing, with or without conditions.

6.2 Ontario Regulation 41/24

The following section indicates the extent of hazardous lands for the purpose of administering the Regulations. The Authority may grant a permit for development activity in or on Hazardous Lands subject to the tests or criteria in the CA Act. The Regulation contains the following definition for hazardous lands.

“hazardous land” means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock.

Therefore, the following policies have been developed to deal with flooding, erosion, unstable soil and unstable bedrock. The dynamic beach hazards were identified in the Great Lakes section along with the flooding and erosion hazards for Great Lakes and Large Inland Lakes.

6.3 Policy Standards

The following sections outline the policy standards for LTC’s implementation of the CA Act and O. Reg. 41/24 with respect to hazardous lands including flood hazard lands, erosion hazard lands, unstable soil, and unstable bedrock. LTC, in their role through the planning process, should review planning applications to ensure that, in general, all development occurs outside the unstable soil and bedrock boundaries.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies should be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and should be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

6.3.1 Development within Flood Hazard Lands

6.3.1.1 *Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)*

Background

The following policies are focused on development within the One-Zone Regulatory floodplain. These policies do not apply to development within the allowance adjacent to the One-Zone Regulatory floodplain and the reader should refer to Section 5.3.2 for policies that apply to these areas.

LTC Policies

- 1) Development within the Regulatory floodplain shall not be permitted.
- 2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.
- 3) Development associated with new and/or the expansion of existing trailer parks / campgrounds in the Regulatory floodplain shall not be permitted.
- 4) *Major development* within the Regulatory floodplain shall not be permitted. This includes multiple residential development projects or additional dwelling units.
- 5) Redevelopment of derelict and abandoned buildings within the Regulatory floodplain shall not be permitted.
- 6) Stormwater management facilities within the 100-year floodplain shall not be permitted.
- 7) Basements within the Regulatory floodplain shall not be permitted.
- 8) Underground parking within the Regulatory floodplain shall not be permitted.
- 9) Cut and fill operations will not be permitted within the One-Zone Regulatory floodplain.
- 10) Notwithstanding Section 6.3.1.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 11) Notwithstanding Section 6.3.1.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the

control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

- 12) Notwithstanding Section 6.3.1.1 1), stream bank slope and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 13) Notwithstanding Section 6.3.1.1 1), *moderate development and structural repairs* may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques. Habitable development must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and non-habitable development must be floodproofed to the Regulatory flood elevation;
 - d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,
 - g) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.
- 14) Notwithstanding Section 6.3.1.1 4), detached non-habitable accessory structures greater than 46 m² (500 ft²) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
- b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
- c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques;
- d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,
- g) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

15) Notwithstanding Section 6.3.1.1 4), construction of a second storey addition to a habitable building greater than 46 m² (500 ft²) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. Future moderate development proposals as noted in Section 6.2.1.1 13) which may increase the footprint of the structure would not be supported. The submitted plans must demonstrate that:

- a) The original footprint of the building is not increased;
- b) Habitation is not increased for the entire building;
- c) the entire building is protected from the flood hazard in accordance with established floodproofing and protection techniques with dry floodproofing to 0.3 metres above the Regulatory flood elevation;
- d) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- e) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

16) Notwithstanding Section 6.3.1.1 1), development associated with the construction of a single-dwelling unit on an existing lot where the current zoning is appropriate to the nature of the proposed development and the existing lot is not in a historic flood damage area may be permitted within the Regulatory floodplain if it has been demonstrated to the

satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- a. the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
- b. the development is protected from the flood hazard in accordance with established floodproofing and protection techniques;
- c. the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- d. no basement is proposed and any crawl space is designed to facilitate services only;
- e. proposed septic systems is protected and in accordance with established floodproofing and protection techniques;
- f. the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- g. the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,
- h. an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

17) Notwithstanding Section 6.3.1.1 1), development associated with existing uses located within the Regulatory floodplain such as marine facilities, in-ground (at existing grade) pools, *minor development*, landscaping retaining walls, grading, etc., may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

18) Notwithstanding Section 6.3.1.1 1), development may be permitted for the reconstruction or relocation of a building within the Regulatory floodplain, provided that it has not been damaged or destroyed by flooding and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock land will not be affected. The submitted plans must demonstrate that:

- a) the building or structure meets the criteria described in Policy 13) above;
- b) the building or structure must not be located closer to the hazard than the original building; and,
- c) the building or structure does not exceed the original floor space plus the allowable floor space for a *minor addition*. If the building or structure is enlarged, a future *minor addition* to the building or structure will not be considered.

19) Notwithstanding Section 6.3.1.1 1), development within a spill flood hazard associated with the Regulatory floodplain may be permitted provided that it has been demonstrated to the

satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock land will not be affected. The submitted plans must demonstrate that:

- a. All *Planning Act* approvals/permissions are in place for the proposed development activity;
- b. flood depths are less than one (1) metre and velocities are less than one metre per second (1 m/s) under regulatory event conditions;
- c. the development activity does not significantly impede flood conveyance or storage, and changes in flood depths, velocities and storage will not result in an unacceptable risk to life or property; and,
- d. a technical report and study has been prepared by a qualified professional that includes hydraulic modelling and a flood storage assessment;
- e. development was not previously damaged or destroyed by the spill flood hazard;
- f. the development is protected from the flood hazard in accordance with established floodproofing and protection techniques; and,
- g. the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

20) Notwithstanding Section 6.3.1.1 1), development associated with the construction of a driveway or access way through the Regulatory floodplain in order to provide access to lands outside of the Regulatory floodplain may be permitted subject to the provision of safe access as identified in Section 3 – General Policies and if it has been demonstrated to the satisfaction of LTC that there is no viable alternative outside of the regulated area and that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

21) Notwithstanding Section 6.3.1.1 1), removal or placement of *minor fill* and associated site grading may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected.

22) Notwithstanding Section 6.3.1.1 1), the replacement of sewage disposal systems may be permitted within the Regulatory floodplain if it does not require greater than 1 metre depth of *fill* and has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The replacement system should be located outside of the floodplain where possible, and only permitted within the floodplain subject to being located in the area of lowest risk.

23) Notwithstanding Section 6.3.1.1 1), parking areas may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected, and that safe pedestrian and vehicular access is achieved.

24) Notwithstanding Section 6.3.1.1 1), boathouses may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding,

erosion, dynamic beaches or unstable soils or bedrock will not be affected, and an engineered design may be required for wet flood proofing.

6.3.1.2 Development within Two-Zone Regulatory Floodplain of River or Stream Valleys

Background

The following policies are focused on development within the Two-Zone Regulatory floodplain. See Section 6.3.1.1 for policies associated with the One-Zone Regulatory floodplain. The policies in this section do not apply to development within the allowance adjacent to the Two-Zone Regulatory floodplain and the reader should refer to Section 5.3.2 for policies that apply to those areas.

The Two-Zone floodplain concept consists of two zones in the Regulatory floodplain, and these have been defined by technical studies and accepted by the Province. The Floodway is identified as the area of highest risk delineated by the extent of the 100-year flood event. The Flood Fringe is identified as the area of lesser risk located between the 100-year flood elevation and the Regulatory event flood elevation.

Areas subject to the two-zone Regulatory floodplain are:

Trout Creek (Former Town of Campbellford)

Policies for each Two-Zone are shown below separately.

Background - For the Trout Creek 2-Zone area:

From the "Final Report – Trout Creek Floodplain Management Study" by MacLaren Plansearch Lavalin (1982), the following policies were recommended:

- The floodway was subject to the same policies as a one-zone floodplain:
 - *No future federal or provincial government buildings or structures that are vulnerable to flood damage will be placed in the flood risk area.*
 - *Funds from government sources, such as the Canada Mortgage and Housing Corporation will no longer be available for new buildings or structures placed in the flood risk area and subject to flood damage.*
 - *Any buildings or structures vulnerable to flood damage placed in the flood risk area after designation will not be eligible for flood disaster assistance.*
 - *The two governments will encourage local municipalities to adopt Official Plan Policies and zoning restriction on development in the flood risk area.*
- In the flood fringe area development would be allowed provided that it is adequately protected from flood damage and the area has been given due engineering consideration to show no significant impact on existing regulatory flood levels.
- Furthermore, any additions or enlargements made to existing buildings in the flood fringe after designation would also require flood roofing to be eligible for future disaster assistance.

Under the Trent Hills Official Plan (1999), development policies with respect to the Trout Creek two-zone were developed. These policies are quoted below:

- *The Trout Creek floodplain in the Urban Centre of Campbellford is subject to two-zone floodway fringe regulations.*

- *The two-zone floodway fringe concept allows for some development to occur between the 100 year and regional floodlines, but prohibits development within the 100-year floodline.*
- *The 100 year and regional flood lines are identified on the Flood and Fill Line Mapping for Trout Creek, prepared by Lower Trent Conservation and are identified in the Comprehensive Zoning By-law. The following will apply to these lands:*
 - (i) *The placing or removal of fill of any kind, whether originating on the site or elsewhere, or the alteration of any watercourse shall not be permitted without the prior written approval of the Conservation Authority and the municipality;*
 - (ii) *Prior to the issuance of a building permit, the Conservation Authority will be consulted to assess any proposed or necessary flood damage reduction measures which may include such matters as:*
 - *the design of the structure to withstand hydrostatic forces;*
 - *the strength of structural materials and components to ensure that the materials used will not be subject to deterioration from flooding;*
 - *the elevation of living space and building openings relative to the Regulatory Flood level;*
 - *the location and elevation of electrical and heating equipment relative to the Regulatory Flood level;*
 - *the location, elevation and design of municipal services and public utilities;*
 - *the design of the structure to ensure that the interior ground floor level is above such Regulatory Flood level as is determined;*
 - *applicable fill and construction regulations, and,*
 - *such other additional flood damage reduction measures as may be warranted in the context of the location and nature of the proposed building or structure.*
 - (iii) *All new buildings and structures, or additions and renovations to existing buildings or structures, will be protected from flooding to the level of the Regulation Flood level plus 0.3 metre freeboard where applicable.*

6.3.1.3 LTC Policies - For the Trout Creek 2-Zone area:

- 1) Development within the floodway of the two-zone Regulatory floodplain shall not be permitted.
- 2) Development within the flood fringe of the two-zone Regulatory floodplain may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the flood fringe of the two-zone Regulatory floodplain for the proposed development and that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques. Habitable development

must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and *non-habitable* development must be floodproofed to the Regulatory flood elevation;

- d) any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.
- e) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- f) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans; and;
- g) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed.

6.3.1.4 LTC Policies - For All 2-Zone Areas:

- 3) Placement of fill, flood hazard protection and bank stabilization works to allow for future/proposed development or an increase in development envelope or area within the floodway of the two-zone Regulatory floodplain shall not be permitted.
- 4) Development associated with new and/or the expansion of existing trailer parks/campgrounds in the floodway of the two-zone Regulatory floodplain shall not be permitted.
- 5) Stormwater management facilities within the floodway of the two-zone Regulatory floodplain shall not be permitted.
- 6) Basements within the floodway or the flood fringe of the two-zone Regulatory floodplain shall not be permitted.
- 7) Underground parking within the floodway or the flood fringe of the two-zone Regulatory floodplain shall not be permitted.
- 8) Notwithstanding Sections 6.3.1.3 1), 6), 10) & 13), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the floodway of the two-zone Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 9) Notwithstanding Sections 6.3.1.3 1), 6), 10) & 13), development associated with public parks (e.g. passive recreation and education, trail systems) may be permitted within the floodway of the two-zone Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 10) Notwithstanding Sections 6.3.1.3 1), 6), 10) & 13), stream, bank, slope, and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the floodway of the two-zone Regulatory floodplain subject to the

activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected through detailed engineered design.

11) Notwithstanding Sections 6.3.1.2 1), 6), 10) & 13), the replacement of sewage disposal systems may be permitted within the floodway of the two-zone Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The replacement system should be located outside of the floodplain where possible, and only permitted within the floodplain subject to being located in the area of lowest risk.

12) Notwithstanding Sections 6.3.1.3 1), 6), 10) & 13), parking areas may be permitted within the floodway of the two-zone Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected, and that safe pedestrian and vehicular access is achieved. Note that fill placement to achieve safe access in floodway would not be permitted.

13) Development permitted within the flood fringe does not require a setback from the 100-year floodway but must include all development (i.e. filling around structures for frost proofing). Plans provided must demonstrate all development located outside of the floodway.

6.3.2 Development within Erosion Hazard Lands

6.3.2.1 Development within the Erosion Hazard of an Apparent (Confined) River or Stream Valley

Background

The following policies are focused on the erosion hazards associated with apparent river or stream valleys including the shoreline of Rice Lake in some areas. These policies do not apply to development within the allowance adjacent to apparent (confined) river or stream valleys and the reader should refer to Section 5.3.1 for policies that apply to these areas.

LTC Policies

- 1) Development shall not be permitted within the erosion hazard of an apparent river or stream valley.
- 2) Stabilization works within the erosion hazard of an apparent river or stream valley to allow for future/proposed development or an increase in development envelope or area shall not be permitted.
- 3) Development associated with new and/or the expansion of existing trailer parks/campgrounds within the erosion hazard of an apparent river or stream valley shall not be permitted.
- 4) *Major development* within the erosion hazard of an apparent river or stream valley shall not be permitted.
- 5) Redevelopment of derelict and abandoned buildings within the erosion hazard of an apparent river or stream valley shall not be permitted.

- 6) Stormwater management facilities within the erosion hazard of an apparent river or stream valley shall not be permitted.
- 7) Notwithstanding Section 6.3.2.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g., pipelines) may be permitted within the erosion hazard of an apparent river or stream valley subject to the activity being approved through a satisfactory Environmental Assessment process and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 8) Notwithstanding Section 6.3.2.1 1), development associated with public parks (e.g., passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the erosion hazard of an apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 9) Notwithstanding Section 5.3.2.1 1), stream bank, slope and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the erosion hazard of an apparent river or stream valley subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 10) Notwithstanding Section 5.3.2.1 1), removal and placement of *minor fill* and site alteration within the erosion hazard of an apparent river or stream valley may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 11) Notwithstanding Section 6.3.2.1 1), development associated with the construction of a driveway or access way through the erosion hazard of an apparent river or stream valley in order to provide access to lands outside of the apparent river or stream valley, may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the apparent river or stream valley or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - b) there is no impact on existing and future slope stability;
 - c) bank stabilization or erosion protection works are not required;
 - d) development will have no negative impacts on natural stream meandering/fluvial processes;
 - e) structural development would not be susceptible to stream erosion;
 - f) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;

- g) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,
- h) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the Conservation Authority.

12) Notwithstanding Section 6.3.2.1 1), *moderate development*, in-ground (at-grade) pools and structural repairs associated with existing uses located within the erosion hazard of an apparent river or stream valley may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- a) there is no feasible alternative site outside of the apparent river or stream valley or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
- b) there is no impact on existing and future slope stability;
- c) bank stabilization or erosion protection works are not required;
- d) development will have no negative impacts on natural stream meandering/fluvial processes;
- e) structural development would not exacerbate stream erosion;
- f) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- g) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed;
- h) development will not prevent access into and through the valley in order to undertake preventative actions/maintenance or during an emergency;
- i) no development is located on an unstable slope² except for those works that by their nature must be located on an unstable slope such as slope stabilization works (Policy 6.3.2.1 10); and,
- j) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

13) Notwithstanding 6.3.2 1 1), development may be permitted for the reconstruction or relocation of a building within the erosion hazard of an apparent river or stream valley provided that it has not been damaged or destroyed by erosion and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic

² For this document, the four main classes of slope movement are: translational or surficial sliding, rotational failures, retrogressive failures, and flow slides or earth flows. Refer to Section 2.4.5.1 of MNR's Technical Guide - River and Stream Systems: Erosion Hazard Limit (2002) for additional information.

beaches or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:

- a) the building meets the guidelines described in Policy 12) above; and
- b) the building does not exceed the original floor space plus the allowable floor space for a *minor addition*. If the building is enlarged, a future *minor addition* to the building or structure will not be considered.

14) Notwithstanding Section 6.3.2.1 1), where technical assessment or studies demonstrate that lands within the erosion hazard of an apparent river or stream valley are not subject to an erosion or flooding hazard, policies within Sections 5.3.1. and 5.3.2., for development within the hazard allowance, are applicable.

15) Notwithstanding Section 6.3.2.1 1), the replacement of sewage disposal systems may be permitted within the erosion hazard of an apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils and bedrock will not be affected. The replacement system should be located outside of the erosion hazard where possible, and only permitted within the erosion hazard subject to being located in the area of least and acceptable risk. LTC may request a technical study to ensure that the development is not subject to risk, and/or to establish the area of least and acceptable risk.

16) Notwithstanding Section 6.3.2.1 1), development associated with uses that by their nature are located within the hazard such as the construction or reconstruction of an erosion control works, stairs, and shore wells may be permitted within the erosion hazard of an apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. In order to be considered, the submitted plans must demonstrate that:

- a) development will not prevent access in order to undertake preventative actions/maintenance or during an emergency; and
- b) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans.

6.3.2.2 Development within the Erosion Hazard of a Not Apparent (Unconfined) River or Stream Valley (Meander Belt)

Background

The following policies are focused on the erosion hazard associated with not apparent river or stream valleys. These policies do not apply to development within the allowance adjacent to river or stream valleys and the reader should refer to Section 5.3.1 for policies that apply to these areas.

LTC Policies

- 1) Development shall not be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley.

- 2) Stabilization works within the erosion hazard (meander belt) of a not apparent river or stream valley to allow for future/proposed development or an increase in development envelope or area shall not be permitted.
- 3) Development associated with new and/or the expansion of existing trailer parks/campgrounds in the erosion hazard (meander belt) of a not apparent river or stream valley shall not be permitted.
- 4) Major development within the erosion hazard (meander belt) of a not apparent river or stream valley shall not be permitted.
- 5) Redevelopment of derelict and abandoned buildings within the erosion hazard (meander belt) of a not apparent river or stream valley shall not be permitted.
- 6) Stormwater management facilities within the erosion hazard (meander belt) of a not apparent river or stream valley shall not be permitted.
- 7) Notwithstanding Section 6.3.2.2. 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley subject to the activity being approved through a satisfactory Environmental Assessment process and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 8) Notwithstanding Section 6.3.2.2. 1), development associated with public parks (e.g. passive recreation and education, trail systems) may be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 9) Notwithstanding Section 6.3.2.2. 1), stream bank, slope and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 10) Notwithstanding Section 6.3.2.2. 1) and 6.3.2.2. 3), removal and placement of *minor fill* and site alteration within the erosion hazard (meander belt) of a not apparent river or stream valley may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 11) Notwithstanding Section 6.3.2.2. 1), development associated with the construction of a driveway or access way through the erosion hazard (meander belt) of a not apparent river or stream valley in order to provide access to lands outside of the not apparent river or stream valley, may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans shall demonstrate that:

- a) there is no feasible alternative site outside of the meander belt of a not apparent river or stream valley or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
- b) bank stabilization or erosion protection works are not required;
- c) development will have no negative impacts on natural stream meandering/fluvial processes;
- d) structural development would not be susceptible to stream erosion;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,
- g) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

12) Notwithstanding Section 6.3.2.2. 1), moderate development, in-ground (at-grade) pools and structural repairs associated with existing uses located within the erosion hazard (meander belt) of a not apparent river or stream valley may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

- a) there is no feasible alternative site outside of the meander belt of a not apparent river or stream valley or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
- b) bank stabilization or erosion protection works are not required;
- c) development will have no negative impacts on natural stream meandering/fluvial processes;
- d) structural development would not be susceptible to stream erosion;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed;
- g) development will not prevent access into and through the meander belt in order to undertake preventative actions/maintenance or during an emergency;
- h) no development is located on an unstable slope except for those works that by their nature must be located on an unstable slope such as slope stabilization works (Policy 6.3.2.2. 10)); and

- i) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

13) Notwithstanding 6.3.2.2. 1), development may be permitted for the reconstruction or relocation of a building within the erosion hazard (meander belt) of a not apparent river or stream valley provided that it has not been damaged or destroyed by erosion and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:

- a) the building meets the guidelines described in Policy 12) above; and
- b) the building does not exceed the original floor space plus the allowable floor space for a *minor addition*. If the building is enlarged, a future *minor addition* to the building or structure will not be considered.

14) Notwithstanding Section 6.3.2.2. 1), where technical assessment or studies demonstrate that lands within the erosion hazard (meander belt) of a not apparent river or stream valley are not subject to an erosion or flooding hazard, policies within Sections 5.2.1 and 5.2.2., for development within the hazard allowance, are applicable.

15) Notwithstanding Section 6.3.2.2.1), the replacement of sewage disposal systems may be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock not be affected. The replacement system should be located outside of the erosion hazard where possible, and only permitted within the erosion hazard subject to being located in the area of least and acceptable risk. LTC may request a technical study to ensure that the development is not subject to risk, and/ or to establish the area of least and acceptable risk.

16) Notwithstanding Section 6.3.2.2. 1), development associated with uses that by their nature are located within the hazard such as the construction or reconstruction of an erosion control works, stairs, and shore wells may be permitted within the erosion hazard (meander belt) of a not apparent river or stream valley if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. In order to be considered, the submitted plans must demonstrate that:

- a) development will not prevent access in order to undertake preventative actions/maintenance or during an emergency; and
- b) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/ restoration plans.

6.3.3 Development within Hazardous Sites

Background

Hazardous sites consist of sites with unstable soils, such as Leda Clays and Organic Soils, and unstable bedrock, such as Karst formations.

LTC Policies

- 1) Development shall not be permitted within hazardous lands associated with unstable soils or unstable bedrock.
- 2) Redevelopment of derelict and abandoned buildings within hazardous lands associated with unstable soils or unstable bedrock shall not be permitted.
- 3) Notwithstanding Section 6.3.3. 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within hazardous lands associated with unstable soil or bedrock subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of the Conservation Authority that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
- 4) Notwithstanding 6.3.3. 1), development may be permitted for the reconstruction or relocation of a building or septic within hazardous lands associated with unstable soils or bedrock provided it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The submitted plans must demonstrate that:
 - a) There is no feasible alternative site outside of the hazardous lands;
 - b) The control of flooding, erosion, dynamic beaches, unstable soils or bedrock will not be affected;
 - c) All hazards/risks associated with unstable soils or unstable bedrock have been adequately addressed; and,
 - d) the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

7 WETLANDS AND OTHER AREAS

7.1 Conservation Authorities Act

The *CA Act* contains the following sections dealing with wetlands.

Activities prohibited (Prohibited activities re watercourses, wetlands, etc.)

“28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.
2. Development activities in areas that are within the authority's area of jurisdiction and are, ...
 - a. wetlands, ..., or
 - v. other areas in which development should be prohibited or regulated, as may be determined by the regulations. 2017, c. 23, Sched. 4, s. 25.”

Permits for development activity or change or interfere in any way

28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

- a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; and
- b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; ...

The tests in the clauses outlined above apply to change or interfere with a wetland and development activities in the wetland and ‘other area’ (s. 28 (1) 1 and 2)). The tests will be used by Conservation Authority staff in the review of a permit for both of these regulated areas and types of activities. The permit shall be given in writing, with or without conditions.

7.2 Ontario Regulation 41/24

The Authority may grant a permit to change or interfere in any way with a wetland; or for a development activity, in or near the wetland i.e., in the ‘other area’ 30 metres from the wetland. O. Reg 41/24 defines wetlands for the purpose of administering the Regulations.

Prohibited activities, subparagraph 2 of ss. 28 (1) of the *CA Act* (development activity prohibited) O. Reg. 41/24 defines ‘other areas’ as:

(3) For the purposes of subparagraph 28(1) 2.v. of the *CA Act*, no person shall carry out development activities in areas that are within an authority's area of jurisdiction and are within 30 metres of a wetland.

Wetland Definition

"wetland" means land that,

- a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
- b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
- c) has hydric soils, the formation of which has been caused by the presence of abundant water, and
- d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, does not include periodically soaked or wet land used for agricultural purposes which no longer exhibits a wetland characteristic referred to in clause (c) or (d) of that definition.

7.3 Provincial Policy Statement

Hydrologic Function in the Provincial Policy Statement means: the functions of the hydrological cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.

This is a comprehensive definition for the hydrologic cycle, which allows many factors to be considered when reviewing a change or interference to wetlands. The Southern Ontario Wetland Evaluation System (pg. 85 MNR, 2022) states "it must be recognized that many of the non-hydrological functions of a wetland depend, in part, on the wetland's hydrological setting and that changes in the basin beyond the boundaries of the wetland could have an effect on the ecological value of the wetland."

7.4 Additional Definitions and Interpretations

The '[Guidelines for Developing Schedules of Regulated Areas, October 2005](#)' approved by MNR and CO includes the following "The requisite function of a wetland - '... directly contributes to ... hydrological function/through connection with a surface watercourse...' is deemed to exist for all wetlands. Where a surface connection between a wetland and surface watercourse is not apparent, it is assumed that a groundwater connection exists between them, unless there is information to the contrary." (pg. 27). LTC continues to use this interpretation and require the applicable studies to assess the application (e.g., hydrological, hydrogeological, geotechnical study).

It should be noted that the CA Act uses the wording "in any way" when describing change or interference with a wetland.

Activities proposed within the wetland boundary that could interfere in any way with the wetland, including both those activities that meet the definition of "development activity" and those that do not necessarily meet the definition of "development activity". An

example of an activity that does not strictly meet the definition of “development activity” and could represent “change or interference” is the removal of hydrophytic or water tolerant plants in the wetland.

The CO [Draft Guidelines to Support Conservation Authority Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation](#), 2008 developed in consultation with MNR, interpreted ‘Interference in any way’ as:

“any anthropogenic act or instance which hinders, disrupts, degrades or impedes in any way the natural features or hydrologic functions of a wetland or watercourse” (March 2008).

‘Natural features’ include vegetation as outlined in the definition of a wetland “...(d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, ...”.

7.5 Policy Standards

The following sections outline the policy standards for implementing the LTC Regulation with respect to wetlands and “other areas”. LTC, in their role through the planning process, should review planning applications to ensure that, in general, all development can occur outside and be set back an appropriate distance from the wetland boundaries.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies should be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and should be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

7.5.1 Development and Interference within Wetlands

Background

The following policies are focused on all wetlands, no matter the significance.

LTC Policies

- 1) Development and interference shall not be permitted within wetlands.
- 2) Redevelopment of derelict and abandoned buildings within wetlands shall not be permitted.
- 3) Ponds and drains shall not be permitted within wetlands.
- 4) Stormwater management facilities shall not be permitted within wetlands.
- 5) Notwithstanding Section 7.5.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within a wetland subject to the activity being approved through a satisfactory Environmental Assessment process and/ or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the

interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC.

- 6) Notwithstanding Section 7.5.1 1), conservation or restoration projects may be permitted within a wetland if it has been demonstrated to the satisfaction of the Conservation Authority that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC.
- 7) Notwithstanding Section 7.5.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within a wetland if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC.
- 8) Notwithstanding Section 7.5.1 1), development associated with boardwalks (e.g. narrow, raised wooden planked trails) may be permitted within a wetland if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC through an Environmental Impact Study (EIS). A boardwalk may be permitted with the following considerations:
 - a) the footprint of the development in the wetland is minimized;
 - b) boardwalk must be raised over flood level;
 - c) maximum width of 1.5 metres;
 - d) constructed with materials that will not affect the natural environment.
- 9) Notwithstanding Section 7.5.1 1), development may be permitted within small (< 0.5 ha), wetlands or portions of larger wetlands with an equivalent size of 0.5 ha or less in accordance with other LTC policies, if available, where it has been demonstrated through satisfactory technical studies that the loss of the wetland will not impact the hydrologic and natural features of the landscape. Additionally, the above may be permitted with the following considerations:
 - a. hazards associated with unstable soils have been addressed through satisfactory technical studies;
 - b. Offsetting plans are required and must be designed and undertaken by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of LTC. Offsetting and compensation must be completed in accordance with LTC wetland specific policies; and,
 - c. it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the

interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC.

10) Notwithstanding Section 7.5.1 1), new development to facilitate the construction of a single-family dwelling unit on an existing vacant lot of record may be permitted within a small portion of a wetland OR where a wetland is less than 0.5 hectares may be permitted provided that:

- a. Existing Municipal zoning supports residential development without additional *Planning Act* applications being required;
- b. There is no alternative location for the development activity on the subject lot outside of the wetland inclusive of municipal/county setbacks and/or other applicable setbacks;
- c. A technical site-specific report undertaken by a qualified professional demonstrates to the satisfaction of LTC that all hazards and risk associated with flooding and/or unstable soils have been addressed;
- d. It can be demonstrated through technical studies or plans as will be requested by LTC that offsetting will be accommodated on the subject lands resulting in a net gain in wetland function and, where applicable, the maintenance of existing hydrologic linkages;
- e. Inert fill material will be used; and,
- f. it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected and the interference on the natural features and hydrologic functions of the wetland has been deemed to be acceptable by LTC.

11) Notwithstanding Section 7.5.1 1), stream, bank and channel realignment, stabilization, lowering, channelization or straightening to improve hydraulic and fluvial processes or aquatic habitat may be permitted within a wetland if it has been demonstrated to the satisfaction of LTC that;

- a. the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected;
- b. the interference on the natural features and the hydrologic functions of the wetland has been deemed to be acceptable by LTC; and,
- c. the policies outlined in Section 8.3.1 dealing with interference to watercourses are addressed.

12) Notwithstanding Section 7.5.1 1), interference to a wetland by selective tree harvesting through employing good forestry practises may be permitted provided it can be demonstrated through an EIS or equivalent technical study, such as a forest management plan, that there will be no negative impacts on the hydrologic function of a wetland.

7.5.2 Development within Other Areas (Areas of Interference/Adjacent Lands within which Development may Interfere with the Hydrologic Function of the Wetland)

7.5.2.1 Area within 30 Metres of the Wetland

Background

The following policies are focused on lands adjacent to all wetlands, no matter the significance.

LTC Policies

- 1) Development shall not be permitted within 30 metres of the boundary of the wetland.
- 2) Notwithstanding Section 7.5.2.1 1), development within the area within 30 metres of a wetland may be permitted where it has been demonstrated through a technical study, prepared by a qualified professional with recognized expertise in the appropriate discipline using established procedures and recognized methodologies to the satisfaction of the LTC, that:
 - a) there is no feasible alternative site outside of the 30 metre adjacent lands for the proposed development and the proposed development is located in an area of least (and acceptable) impact;
 - b) the hydrologic function of the wetland will not be impacted;
 - c) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control, site stabilization, restoration and / or planting plans; and,
 - d) natural features are protected, and the control of flooding, erosion, dynamic beaches or unstable soils or bedrock have been adequately addressed.
- 3) Notwithstanding Section 7.5.2.1 1), development within the area within 30 metres of a wetland may be permitted where proposed development impacts will not increase impacts beyond that of historic development activities (i.e. existing road, driveway, filled yard, foundation, etc.) provided it has been demonstrated to the satisfaction of the LTC, that:
 - a) there is no feasible alternative site outside of the 30 metre adjacent lands for the proposed development and the proposed development is located in an area of least (and acceptable) impact;
 - b) the hydrologic function of the wetland will not be further impacted;
 - c) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control, site stabilization, restoration and / or planting plans; and,
 - d) natural features are protected, and the control of flooding, erosion, dynamic beaches or unstable soils or bedrock have been adequately addressed.
- 4) Notwithstanding Section 7.5.2.1 1), development within the area between 20 and 30 metres of a field verified wetland may be permitted where LTC is satisfied that:
 - a) there is no feasible alternative site outside of the 30 metre adjacent lands for the proposed development and the proposed development is located in an area of least (and acceptable) impact;
 - b) the wetland feature has been delineated by an Ontario Wetland Evaluation System individual and is characterized as being heavily impacted by anthropogenic sources (e.g., low species diversity, dominated by invasive species, etc.);
 - c) Where an existing vegetative buffer is not present, a buffer/planting plan will need to be developed in consultation with LTC staff;

- d) the hydrologic function of the wetland will not be further impacted;
- e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control, site stabilization, restoration and / or planting plans; and,
- f) natural features are protected, and the control of flooding, erosion, dynamic beaches or unstable soils or bedrock have been adequately addressed.

- 5) Notwithstanding Section 7.5.2.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within 30 metres of a wetland if the interference on the hydrologic functions of the wetland has been deemed to be acceptable by LTC.
- 6) Notwithstanding Section 7.5.2.1 1), conservation or restoration projects may be permitted within 30 metres of a wetland if the interference on the hydrologic functions of the wetland has been deemed to be acceptable by LTC.
- 7) Notwithstanding Section 7.5.2.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation and education, trail system) may be permitted within 30 metres of a wetland if the interference on the hydrologic functions of the wetland has been deemed to be acceptable by LTC.
- 8) Notwithstanding Section 7.5.2.1 1), the replacement of sewage disposal systems may be permitted within the 30-metre allowance of a wetland if it has been demonstrated to the satisfaction of LTC that there is no feasible location outside of the 30-metre allowance. The replacement system should be located outside of the wetland and only permitted within the allowance subject to being located in the area of least impact to the natural features and hydrologic function of the wetland.

8 WATERCOURSES

8.1 Conservation Authorities Act

The CA Act contains the following sections dealing with watercourses.

Activities prohibited (Prohibited activities re watercourses, wetlands, etc.)

“28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.
2. Development activities in areas that are within the authority's area of jurisdiction and are, ...
 - iii. river or stream valleys the limits of which shall be determined in accordance with the regulations, ..., or

Permits (for activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse)

“28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

- a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; and
- b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; ...”

The permit shall be given in writing, with or without conditions.

8.2 Ontario Regulation 41/24

Ontario Regulation 41/24 includes the following definition of a watercourse:

“watercourse” means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs.

The following section indicates how watercourses are defined for the purpose of administering the Regulations. A watercourse shall have a 15 metre allowance in accordance with the Regulation for River or Stream Valleys.

8.3 Policy Standards

The following sections outline the policy standards for implementing the LTC Regulation with respect to watercourses. The term “interference” below includes all alterations mentioned within the Regulation (straighten, change, divert or interfere in any way). LTC, in their role through the planning process,

should review planning applications to ensure watercourse alterations associated with development are appropriate.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies should be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and should be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

8.3.1 Interference with a Watercourse

Background

The following policies apply to watercourses as defined in the CA Act: “An identifiable depression in the ground in which a flow of water regularly or continuously occurs.”

LTC Policies

- 1) Interference with a watercourse shall not be permitted.
- 2) Proposals for channelization and/or re-alignment will not be considered where the purpose of the proposal is to increase the development potential on the lands.
- 3) Notwithstanding Section 8.3.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within a watercourse subject to the activity being approved through a satisfactory Environmental Assessment process or through other studies deemed necessary by the Conservation Authority and/ or if the interference on the natural features and hydrologic functions of the watercourse has been deemed to be acceptable by the Conservation Authority.
- 4) Notwithstanding Section 8.3.1 1), stream, bank, and channel stabilization to protect existing development or conservation or restoration projects may be permitted within a watercourse if the interference on the natural features and hydrologic functions of the watercourse has been deemed to be acceptable by the Conservation Authority.
- 5) Notwithstanding Section 8.3.1 1), any works that are to be located below the bed of the river within a watercourse shall be located below the long-term scour depth to the satisfaction of the Conservation Authority.
- 6) Notwithstanding Section 8.3.1 1), minor interference and/or alteration may be permitted within a watercourse if it has been demonstrated to the satisfaction of the Conservation Authority that the interference is acceptable on the natural features and hydrologic functions of the watercourse.
- 7) Notwithstanding Section 8.3.1 1), major interference (e.g. realignment, dam, enclosure) with a watercourse may be permitted where supported by the recommendations of a sub-watershed study, Environmental Assessment; or other technical approved study. A Complete Application Checklist for Creek Realignments can be found in **Appendix L**. The checklist will be filled out as part of the pre-consultation process for this type of application.
- 8) Notwithstanding Section 8.3.1 2), major interference (i.e., realignment and/or, enclosure) with a watercourse may be permitted where the purpose of the proposal is to increase the

development potential on the lands when supported by the recommendations of a sub-watershed study, Environmental Assessment; or other technical approved study. This policy provision may be applied to large watercourse features with subwatershed drainage areas above 1.25 km². A Complete Application Checklist for Creek Realignments can be found in **Appendix L**. The checklist will be filled out as part of the pre-consultation process for this type of application.

- 9) Notwithstanding Section 8.3.1 1), the construction, replacement or repair of a bed level crossings may be permitted if it has been demonstrated to the satisfaction of LTC that the interference on the natural features and hydrologic of the watercourse has been deemed to be acceptable. Additionally, the submitted plans must demonstrate that:
 - a. Stable, non-erodible, rounded inorganic material is used;
 - b. crossings avoid any bends or meanders in the watercourse;
 - c. crossings are located to take advantage of the existing impacted or open areas on the channel bank or valley slope;
 - d. the risk of flood damage to upstream or downstream is reduced through site and structure design;
 - e. physical realignments or alterations to the river, creek, stream or watercourse channel associated with the bed level crossing are avoided or in accordance with policy provisions 8.3.1 7 and 8; and,
 - f. maintenance requirements are minimized.
- 10) Notwithstanding Section 8.3.1 1), watercourse crossings may be permitted if it has been demonstrated to the satisfaction of the Conservation Authority that the interference on the natural features and hydrologic of the watercourse has been deemed to be acceptable by the Conservation Authority. At a minimum, the submitted plans must demonstrate the following based on morphological characteristics of the watercourse system³:
 - a) culverts have an open bottom where it is feasible, or where it is not feasible, the culverts should be appropriately embedded into the watercourse;
 - b) crossing location, width, and alignment should be compatible with stream morphology, which typically requires location of the crossing on a straight and shallow/riffle reach of the watercourse with the crossing situated at right angles to the watercourse;
 - c) the crossing is sized and located such that there is no increase in upstream or downstream erosion or flooding;
 - d) the design should consider fish and wildlife passage;
 - e) have regard for upstream and downstream effects when installing/replacing a culvert.

³ Refer to Adaptive Management of Stream Corridors in Ontario (Stream Corridors Project Management Team, 2001) for more information.

- f) the design should incorporate site stabilization and erosion control measures;
- g) the submitted plans should incorporate detailed information related to installation and sequencing; and,
- h) is consistent with Ontario Ministry of Transportation (MTO) Highway Drainage Design Standard WC-1 (January 2008) and follows the MTO Drainage Management Manual Guidelines.

9 PROCEDURE FOR APPLICATION UNDER ONTARIO REGULATION 41/24

9.1 Ontario Regulation 41/24

The regulation contains the following sections dealing with the application procedure.

9.2 Procedural Standards

The following outlines the procedural standards for implementing the regulation with respect to all regulated areas within the watershed.

Permits under Part VI of the *CA Act* and O.Reg. 41/24 are required for development activities within regulated areas for agencies, municipalities and landowners except for the exceptions listed within Section 28 (2), (3) and (4) of the *CA Act* as amended, and the exceptions listed in O.Reg. 41/24. Additionally, it is noted that the *CA Act* does not specifically “bind the Crown”. Therefore, activities of Provincial Ministries, Federal Departments and Crown Agencies or “Crown Corporations” are not legally required to obtain permission under the *CA Act*. Note that if third parties are undertaking activities on Provincial Crown Land, with the permission of the province, permits from LTC are still required.

Permits for proposed works will be issued if it has been demonstrated to the satisfaction of the LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected, and the project is technically sound.

A fee schedule has been developed to partially recover the costs associated with administering and delivering the regulations program. LTC staff will assist the applicant in the analysis of their site and the acceptability of the proposed use. However, it shall be the responsibility of the applicant to provide the necessary technical design and environmental data at their own cost and at a quality acceptable to LTC. The LTC assumes no liability for any technical recommendations that staff may provide the applicant in completing the application form. LTC staff will review all applications on a “first-come, first served” basis in a timely, professional manner. Each proposed project that requires the approval of LTC under the regulation, and for which an application has been filed, will be processed according to the procedures set out in this document.

Additional information related to permits can be found in Section 1.4, specifically, subsections 1.4.1.4 to 1.4.1.8.

9.2.1 Deposit Fees

For applications requiring professional confirmation of conditions of the permit a deposit fee will be required to cover costs of professional services if the proponent refuses to undertake these additional services. These fees will be used to pay for an Ontario Land Surveyor (OLS) to confirm floodproofing elevation requirements or to pay for the design engineer of shore protection works to visit the property to confirm the works were completed in accordance with the approved design.

The deposit fees will be released back to the proponent within 10 business days of receiving an acceptable OLS or engineering notification confirming compliance of the conditions of the permit.

9.2.2 Types of Applications

Reporting approved by Conservation Ontario Council (CO) and presented to the province identifies three categories of permits based on general scope and response timelines. Additionally, pursuant to Ontario Regulation 42/24, an amendment to Ontario Regulation 686/21: Mandatory Programs and Services under the *CA Act* was completed to ensure that Conservation Authorities prepare and publish an annual report that outlines statistics on permits including the level of compliance with Ontario Regulation 41/24. Permit timelines have been set by the Province through O.Reg. 41/24 and are discussed in Section 8.2.7 below. LTC permits are divided into three categories for reporting purposes, which include **Major**, **Minor** and **Routine** and are discussed in Section 8.2.2.6 below.

Additionally, LTC has identified other permit types based on how the fee structure is to be applied. Within the Major permits category, there are separate permit types for Standard, Complex, Compliance and Restoration Agreements and associated fees with these types. In some cases, the compliance or restoration required is of a minor nature and fees are reflective of the scale. Major permit category for reporting will include Standard and Complex permit applications as described below as well as the majority of Compliance Permit applications and Restoration Agreements.

The application process is similar for all types of applications and the same application form is used for all types of applications. Other information may be required for different types/levels of permits as described below. Fees are based on the type of permit application.

9.2.2.1 *Minor Permits*

Permits for minor works involve *minor fill* (<20 m³ placement or removal of fill); *minor development* (<15 m² development); and *minor site alteration* (<20 m² altered area size) permit applications. Fees for these permits are less than standard permits. Note that most *Routine* category applications will come under this category.

9.2.2.2 *Standard Permits*

Standard Permits are considered the “regular” permit for any development, alteration or interference proposed projects that do not qualify as minor works as defined above and does include *moderate stabilization* works for banks or shorelines.

9.2.2.3 *Complex Permits*

These permits require significant staff involvement due to review of technical studies and the complexity of the proposed project. Multiple staff reviews may be required for different types of technical studies. Higher fees are associated with these applications.

9.2.2.4 *Compliance Permits*

Compliance permits are required when works have been undertaken or in process of being undertaken without prior approval from LTC. Typically, these works would have been approved by LTC staff (possibly with minor modifications or conditions). Fees double the regular applicable fee will be charged for these permit applications.

9.2.2.5 Restoration Agreements

Restoration agreements will be required by LTC staff when works have been undertaken that would not have complied with the policies in this document and restoration and/or remediation measures are required. A separate Restoration Agreement document may be required to be signed by the proponent in addition or in lieu of the permit application.

Due to the nature of these agreements, the works will not typically follow the policies outlined in this document but the work will be required to restore the regulated feature. As such, LTC staff are authorized to approve these plans if in their opinion the impacts to flooding, erosion, dynamic beaches or unstable soils or bedrock have been addressed in the proposed plans. Similar to compliance permits, double the regular applicable fee will be required with these applications.

9.2.2.6 Permit Categories for Reporting

The **Routine** permit category is for activities that are documented through another approval process or are determined to have limited impacts on the control of flooding, erosion, dynamic beaches or unstable soils or bedrock. LTC has determined that Routine permit applications would be those involving, Standard Compliance Requirements under the *Drainage Act* and *CA Act Protocol* (DART) and permit applications that are submitted for works prescribed in the Conservation Ontario and HydroOne Memorandum of Understanding. Note that there is only one Municipal Drain in the LTC watershed and DART applications are very rare. Routine category applications are included in the LTC definitions under Minor Permits (8.2.2.1.) for fee structure but will be recorded separately for reporting purposes and timeline expectations.

Minor permit category applies to projects that would be minor in nature due to the project size, level of risk, location, and/or other factors. These have minor impacts on the control of flooding, erosion, dynamic beaches or unstable soils or bedrock. Based on the proximity of the project to the hazard, the minor permit applications are reviewed by Conservation Authority staff and generally require standard recommendations or conditions. Minor permits are those involving minor fill; minor development; and minor site alteration where there is a high degree of certainty that issues associated with natural hazards are minimal.

Major permit category refers to applications that require significant staff involvement. They could be highly complex projects requiring technical review supported by comprehensive analysis, or smaller scale site specific applications that require complex technical reviews. The proposals may involve developments with significant natural hazards, environmental impacts, or multiple approval process requirements. Major applications could also include those where works have been undertaken, or are in process of being undertaken, without prior approval from the Conservation Authority; and those where works have been undertaken that do not comply with the *CAAct* and Section 28 policies and restoration/remediation measures are required.

9.2.3 Application Requirements

An application for a permit under the regulation shall be submitted to LTC by the applicant or their agent. If the owner of the property, whether a private citizen, a company, or public body, does not sign the application form, then a signed landowner authorization form for the agent to act on the owner's

behalf shall be provided. In the case of a corporation, then the written authorization of a designated signing officer shall be required.

If it is necessary to cross or work on another property not owned by the applicant as part of the work (e.g., for equipment access), then a signed landowner authorization form must accompany the permit application.

The following criteria will be used to define the components of a complete permit application. A general list of requirements for a complete application contains the following components as listed under Section 7 (1) of O.Reg. 41/24. (Note: Applicants should pre-consult with LTC staff, since not all components may be required):

- 1) A completed Permit Application Package including the signed Landowner Authorization (required if owner is assigning another party as an agent for the project – part of the application package).
- 2) a plan of the area showing the type and location of the proposed development activity or a plan of the area showing plan view and cross-section details of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- 3) the proposed use of any buildings and structures following completion of the development activity or a statement of the purpose of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or to change or interfere with a wetland;
- 4) the start and completion dates of the development activity or other activity;
- 5) a description of the methods to be used in carrying out an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- 6) the elevations of existing buildings, if any, and grades and the proposed elevations of any buildings and grades after the development activity or other activity;
- 7) drainage details before and after the development activity or other activity;
- 8) a complete description of any type of fill proposed to be placed or dumped;
- 9) a confirmation of authorization for the proposed development activity or other activity given by the owner of the subject property, if the applicant is not the owner; and
- 10) any other technical information, studies or plans that the authority requests including information requested during pre-submission consultations between the authority and the applicant.
- 11) The application fee as required by the most recently approved fee schedule, available on LTC website: www.ltc.on.ca.
- 12) Deposit fee, if required.

9.2.4 Application Process

The following process will be adhered to when processing permits subject to the LTC regulation.

- 1) An application for a permission in accordance with Part VI of the *CA Act* and O.Reg. 41/24 shall be filed on the prescribed form and include all information as required. A unique file number shall be assigned to each application that is submitted. This number shall be related to the order in which it

was received and the current year. The new file will be entered into the Planning & Regulations database on the LTC server (on location at the LTC Office).

- 2) LTC staff will review applications made pursuant to this regulation. Prior to the issuance of a permit, a designated LTC employee will often conduct an inspection of the site. At this time, photos to represent the pre-development condition may be taken and notes regarding the nature of slopes, water features, and any other items should be recorded and put on the file.
- 3) The Board of Directors under Section 28.4 of the *CA Act* may appoint LTC staff, which are authorized to:
 - a) approve applications in which the permitted uses conform to this Policy Document;
 - b) undertake the process to cancel permit (if necessary);
 - c) require from an applicant, any engineering or environmental studies including floodplain, environmental impact, geo-technical, or other studies as per the Authority's policies, considered necessary to make a decision or,
 - d) defer any application to the Hearing Board of the Conservation Authority in which the restricted uses are those as listed in this Policy Document or do not conform to the other Policies stated herein;
- 4) LTC staff will ensure the date of receipt is noted on all copies of the application.
- 5) LTC staff will ensure the appropriate fee has been collected as per the most current approved fee schedule.
- 6) Upon review and assessment that the application meets the policies outlined in this document, the application will be stamped "Permit Granted" and assigned a Permit Number. One copy will be returned to the applicant (if requested), one copy provided to the municipality (if required), and one copy retained by LTC. Electronic distribution of the permits is encouraged and hard copies will only be provided upon request.
- 7) All applications approved by LTC staff shall be presented to the Board of Directors of the Conservation Authority for information.

9.2.5 Client Service Facilitator

LTC has designated the Development and Regulations Lead as the *Client Service Facilitator* for issues regarding permit applications. If the applicant is not satisfied with the permit application process or that the timelines listed below (9.2.7) are not being met or there is a question about completeness as identified in Section 9.2.6 below, the *Client Services Facilitator* is the first contact regarding applications issue management.

9.2.6 Consideration of a Complete Application

- 1) Pre-consultation is strongly encouraged to provide clarity and direction, to facilitate receipt of complete applications and to streamline the permit review and decision-making process. To meet these objectives, depending on the scale and scope of the project, pre-consultation may include staff from the following parties: Conservation Authority, the municipality, the applicant, consultants, the developer and owner, and may be supplemented by staff from provincial ministries, Parks

Canada and any other appropriate government agencies; and may occur concurrently with *Planning Act* pre-consultation.

- 2) LTC will identify and confirm in writing the complete application requirements for specific projects. However, substantial changes to a proposal or a site visit after pre-consultation may warrant further pre-consultation and/or necessitate changes to the complete application requirements.
- 3) Upon receipt of a permit application LTC will review the submission for completeness and will confirm in writing as to whether the application has been deemed complete or not. If a permit application is deemed incomplete, LTC will provide the applicant with a written list of missing and required information when notifying the applicant that the application has been deemed incomplete.
- 4) During the review for a “complete application”, LTC may request additional information if LTC deems the permit application does not contain sufficient technical analysis. Delays in timelines for decision making may occur due to these requests for additional information to address errors or gaps in information submitted for review. Thus, an application can be put “on hold” or returned to the applicant pending the receipt of further information. If necessary, this could be confirmed between both parties as an “Agreement to Defer Decision”.
- 5) If the applicant is not satisfied with the decision on whether an application is deemed complete they should contact the Client Services Facilitator. A request for review can be completed and information can be found below under section 9.2.7.

9.2.7 Request for Review – Permit Completeness

Pursuant to subsection 8 (1) of Ontario Regulation 41/24, an applicant can make a request for review can be made by the Authority if,

- (a) The applicant has not received a notice from LTC within 21 days of submitting the permit application in accordance with subsection 7 (2) of O.Reg. 41/24;
- (b) The applicant disagrees with LTC staff’s determination that the application for a permit is incomplete; or,
- (c) The applicant is of the view that a request by LTC staff of other information, studies or plans under clause 7 (1) (i) of O.Reg. 41/24 is not reasonable.

A review requested by an applicant under subsection 8 (2) of O.Reg. 41/24 shall be completed and be notified no later than 30 days after the request is made. LTC will provide:

- (a) confirmation that the application meets the requirements of subsection 7 (1) of O.Reg. 41/24 and is complete or provide reasons why the application is incomplete; or,
- (b) reasons why a request for other information, studies or plans under clause 7 (1) (i) is reasonable or withdraw the request for all or some of the information, studies or plans.

9.2.8 Timelines for Application Review

All timelines presented below exclude statutory holidays and the time required for the applicant to respond to LTC comments on an application. LTC will strive to meet the following standards for rendering decisions and other notifications to applicants during the permitting process.

1. **For Pre-Consultation:** Applicants will be notified of complete application requirements:

- a) Permit applications: Dependent on workload volumes, Staff will provide written comments no more than 15 business days of the pre-consultation meeting.
 - b) Confirmation of whether the application is considered major or minor, if the applicant has provided adequate information (including the scope and scale of the work) for LTC to make that determination will be included with this notification.
2. Upon receipt of the application, Applicants will be notified on **Completeness of the application** within 21 days of the application being received.
Note that LTC may choose to issue a permit prior to the end of the notification period. In that case, no notification of complete application would be received. Additionally, if an application is incomplete, the decision timeline noted below does not begin.
3. Following notification that a permit application has deemed complete, LTC has 90 days to provide a decision to the applicant. If a decision is not provided within 90 days, an applicant has the ability to request a decision be made by the Ontario Land Tribunal.

An infographic illustrating the permit process can be viewed in section 1.4.1.4 (page 7).

The LTC Board of Directors has delegated authority to grant permissions under Part VI of the *CA Act* to the Chief Administrative Officer for permit applications which; are not a significant departure from the approved LTC Regulation Policy Procedures and where the applicant agrees to the conditions of the permit.

LTC staff will review applications to ensure conformity with this Policy document. An application is approved when it is technically sound and complies with the Authority policy. Where an application is complete and conforms to this Policy document, staff delegated with authority to do so, will issue an approval. Staff will issue the permit with only general conditions or they may include additional conditions specific to the project. LTC staff will provide a report to the Board of Directors documenting issued permits on a monthly basis. Additionally, an annual report will be generated that outlines statistics on permits including but not limited to reporting on our level of compliance with O.Reg. 41/24.

9.2.9 Staff Refusal of Application

A recommendation for refusal of an application for a permit will be made by staff if it is determined that the proposed works do not meet the approved policies of LTC or if the proponent does not agree with the proposed conditions of the permit.

Staff will negotiate with the applicant in an attempt to resolve the points of concern. However, in such cases where the differences cannot be resolved, the applicant will be informed in writing of the staff decision to recommend denial of the permit and the reasons for the recommendation. The letter will also inform them of their right to request a Hearing before the LTC's Hearing Board. The applicant may then choose to either withdraw the application, modify the application so it can be supported or request a Hearing.

As per Resolution G111/15, permit applications that do not conform with the approved policies will be denied and LTC Staff would recommend submission to the Hearing Board as per resolution:

RES: G111/15

THAT applications for permits coming forward that do not comply with LTC policies be taken to the Hearings Committee, regardless of whether or not they are recommended for approval by staff

It is important to note that LTC is required to provide a decision within 90 days from the date a permit is determined to be complete or the applicant has the right to request a decision be made by the OLTC. Therefore, LTC staff are to pursue the Hearing process in a timely manner in order to ensure that the 90 day time period is maintained.

9.2.10 Hearing

For an application to be refused or where the applicant objects to the conditions of approval, the *CA Act* requires that the applicant be given the opportunity for a Hearing by the LTC Board (sitting as the Hearing Board). LTC will conduct a Hearing under the Regulation in a manner consistent with the Hearing guidelines which are highlighted in Appendix F. The Hearing Board is empowered by law to make a decision, governed by the *Statutory Powers Procedures Act*. It is the purpose of the Hearing Board to evaluate the information presented at the hearing by both the LTC staff and the applicant and to decide whether the application will be approved with or without conditions or refused.

A Hearing will be set in motion upon the request of the applicant. The Hearing Board is comprised of the LTC Board of Directors. A Hearing can be called if:

- the applicant is granted approval with conditions by LTC staff and the applicant does not agree with the conditions imposed on the permit, or
- an application is reviewed and found to not fully conform to the Policy document and LTC staff recommend denial of the permit.

Once a Hearing is set in motion, the power to grant or deny permission rests with the LTC Hearing Board.

An application for approval under Part VI of the *CA Act* and O.Reg. 41-24 cannot be refused without the opportunity of a Hearing before the Authority. This is a requirement under subsection 28.1 (5) of the *CA Act* which states:

"(5) An authority shall not refuse an application for a permit or attach conditions to a permit unless the applicant for the permit has been given an opportunity to be heard by the authority.
2017, c. 23, Sched. 4, s. 25

Appendix F (Hearing Guidelines) sets out the procedures for Hearings.

9.2.11 Appeal to Minister

There are two opportunities for applicants to appeal directly to the Minister regarding decisions made by LTC during the permit review and approval process. These appeals to the Minister must be made within 15 days of receiving the decision from the Conservation Authority. These circumstances are listed below:

- LTC Staff approved the permit application because it follows the policies outlined in this document and included Conditions of the permit. The applicant does not agree with the imposed Conditions.
- LTC Staff refused the permit application because it did not follow the policies outlined in this document and notified the applicant of the opportunity for a Hearing. The applicant opted for a Hearing and the Hearing Board decision was a denial. The applicant can appeal the Hearing Board decision directly to the Minister within 15 days of receiving the notice of decision from the Hearing Board.

For the Minister's Review, if a decision from the Minister is not received within 30 days, the applicant can request whether a review will be completed. If there is No Intent to Review then this appeal can be forwarded to the Ontario Land Tribunal for review. The applicant can also request the OLT for review if no response is provided from the Minister within 30 days. If the Minister responded that a Review will take place, this review will be placed on the Environmental Registry of Ontario (ERO) for decision. If there is no decision from the Minister within 90 days the appeal can be reviewed by the OLT.

An infographic illustrating the permit process can be viewed in section 1.4.1.4 (page 7).

9.2.12 Appeal to Ontario Land Tribunal

An applicant can appeal to the Ontario Land Tribunal (OLT) in different circumstances during the permit application and review process. These circumstances are listed below:

- If a permit application has been submitted and there has been no decision from the Conservation Authority within 90 days of a complete application, the applicant can appeal to the OLT for a decision;
- If the applicant had requested a Hearing and the Hearing Board decision was denial of the application then they may appeal to the OLT within 90 days of the decision;

The OLT has the ability to order the Conservation Authority to issue the permit (with or without conditions) or to refuse the permit application. The OLT's decision is final and binding. There are no further appeal procedures with the exception of a "judicial review" based on a decision where there is a perceived "error in law."

An infographic illustrating the permit process can be viewed in section 1.4.1.4 (page 7).

9.2.13 Permit

Once approved, authorized Authority staff will issue a permit on the prescribed forms. Where this permit is required by the municipality before a Building Permit is issued, a copy of the permit along with all approved plans and specifications will be forwarded to the Municipality with authorization from the applicant.

9.2.14 Period of validity of permissions and extensions

As per Section 28.2 of the CA Act, the maximum period, including an extension, for which a permission granted may be valid is 60 months.

As outlined in the O.Reg. 41/24 an applicant may request an extension to the date the permit is valid. In considering a period of validity for a permit application, LTC staff may consider criteria such as:

- Complexity of the project (e.g., large scale public infrastructure, single-family dwelling, etc.)
- Consideration for limited construction windows due to other agency seasonal criteria, multiple agency involvement, etc.

LTC staff may support extending a permit application based on considerations such as:

- no material changes to the permit activities or plans;
- ongoing activities are in compliance with the original approval or will be brought into compliance within the requested extension period; and
- the proposed activities are still consistent with the LTC Board approved policies.

O. Reg. 41/24 notes:

2. (1) The maximum period of validity of a permit issued under sections 28.1, 28.1.1 and 28.1.2 of the Act, including any extension, is 60 months.
- (2) If a permit is issued for less than the maximum period of validity, the holder of a permit may, at least 60 days before the expiry of the permit, submit an application for an extension of the permit to,
 - (a) the authority that issued the permit, in the case of permits issued under section 28.1 or 28.1.2 of the Act; or
 - (b) the Minister, in the case of permits issued under section 28.1.1 of the Act.
- (3) An authority or the Minister, as the case may be, may approve an extension of the period of validity of a permit that was issued for a period of less than 60 months but the total period of validity of the permit, including the extension, shall not exceed 60 months.
- (4) If an authority intends to refuse a request for an extension, the authority shall give notice of intent to refuse to the holder of the permit, indicating that the extension will be refused unless the holder requests a hearing under subsection (5).
- (5) Within 15 days of receiving a notice of intent to refuse a request for an extension, the holder of the permit may submit a written request for a hearing to the authority.
- (6) If a request for hearing is submitted under subsection (5), the authority shall hold the hearing within a reasonable time, and shall give the holder at least five days notice of the date of the hearing.
- (7) After holding a hearing under subsection (6), the authority may,
 - (a) confirm the refusal of the extension; or
 - (b) grant an extension for such period of time as it deems appropriate, as long as the total period of validity of the permit does not exceed the applicable maximum period specified in subsection (1).

9.3 Compliance Inspections

LTC staff may conduct an inspection during the work to ensure permit requirements are being met. If the work is found to be contrary to the permit, the applicant will be contacted, and completion or

correction of the work will be requested. Only the approved works are authorized under the permit that was issued, so if the plans have been changed, the applicant needs to apply for a new permit or a permit amendment that accurately describes the new plans. This application (amendment) shall be processed in the normal manner.

If, in the opinion of LTC staff, the change has caused or is likely to cause an impact on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock, a cancellation of permission and enforcement action will be considered. LTC staff may request all work cease until the concerns are addressed. Once the works under the permit have been completed (via notification from the applicant), or one month before the permit expires, a final compliance inspection may be performed by LTC staff. During this site inspection, the drawings/plans will be referenced to determine if the works were completed as approved. Post-development photos may be taken and included in the file. If the work is completed and found to be in conformity with the permit, then written documentation will be sent to the applicant informing the permit holder accordingly. If a permit has expired and there is still additional work to be done to complete the project, the applicant is required to apply for a new permit.

9.4 Cancellation of Permission

LTC may cancel a permission granted if the conditions of the permission have not been met or that the circumstances that are prescribed by regulation exist.

As noted in Section 28.3 of the *CA Act*, prior to cancelling a permit, LTC shall give a notice of intent to cancel to the permit holder indicating that the permit will be cancelled on a date specified in the notice unless the permit holder requests a hearing under subsection 28.3 (3) of the *CA Act*. A permit holder may submit a written request for a hearing within 15 days of receiving the notice of intent if they wish to object to the cancellation. Once the written request for a hearing is received, a hearing will be scheduled within a reasonable time frame.

Through the hearing process, the LTC Hearing Board may confirm, rescind or vary the decision to cancel the permit. If LTC Hearing Board confirms the cancellation of the permit or varies the permit in such a way that the permit holder objects, the permit holder may, within 90 days of receiving notice of Authority' decision, appeal the decision to the OLT. The permit holder is required to send their notice of appeal to the OLT and LTC by registered mail. The OLT has the authority to take evidence, to confirm, rescind or vary the decision to the permit, with or without conditions.

9.5 File Closure

Once all requirements of a permit have been met, the file may be closed. Staff will ensure that the information contained within the regulations database is accurate and up to date, and the file folder can be moved to storage. Permit applications that have been suspended for six months or more from the date of receipt of the application may be deemed inactive. For inactive files, communications will be forwarded to the applicant requesting a status update within a specified time period (normally one month). If no contact is made with the LTC within the specified time period, the file can be closed.

10 GLOSSARY

100 Year Flood Event Standard: That flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

Alteration to a Waterway: the act whereby the channel of a watercourse is altered in some manner. Examples of an alteration include, but are not limited to, the following: channelization, full or partial diversions, retaining walls, revetments, bridges, culverts, pipeline crossings erosion protection measures, construction of storm sewer outlets and agricultural tile drain outlets.

Apparent (confined) river and stream valley: Ones in which the physical presence of a valley corridor containing a river or stream channel, which may or may not contain flowing water, is visibly discernible (i.e., valley walls are clearly definable) from the surrounding landscape by either field investigations, aerial photography and/or map interpretation. The location of the river or stream channel may be located at the base of the valley slope, in close proximity to the toe of the valley slope (i.e., within 15 metres), or removed from the toe of the valley slope (i.e., greater than 15 metres)."

Area of interference: Those lands where development could interfere with the hydrologic function of a wetland.

Armour: Artificial surfacing of bed, banks, shores, or embankments to resist scour or erosion.

Authority: The Lower Trent Region Conservation Authority, a corporate body established under the CA Act.

Basement: One or more storeys of a building located below the first storey (Building Code).

Breakwall/Breakwater: An object (especially a groyne or pier) resisting force of waves.

Boathouse: Structure meant for storage of water craft and associated boating equipment located on or within 6 metres of a navigable waterway. The boathouse must be anchored and is to be constructed as a single storey with no habitable space. The boathouse is considered a detached accessory structure and it must be wet floodproofed with openings on two sides to allow the flow of water through and no electrical services to be located less than 0.3 metres above the flood elevation.

Channel: The area of a watercourse carrying normal flows within the banks.

Crawl Space: A Crawl space must be:

- (a) less than 1500 mm high between the lowest part of the floor assembly and the ground or other surface below, and
- (b) not used for any occupancy.

Development activity: a) the construction, reconstruction, erection or placing of a building or structure of any kind, b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure, c) site grading, or d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Diversion: The process whereby streamflow is directed from the original channel of the watercourse and returned to the original channel at another point on the watercourse. Diversions may be full or partial re-direction of the streamflow. A diversion may also be the redirecting of flow from the channel of one watercourse to the channel of another watercourse.

Dwelling unit: One or more habitable rooms, occupied or capable of being occupied as an independent and separate housekeeping establishment, in which separate kitchen and sanitary facilities are provided for the exclusive use of the occupants.

Dyke (dike): An embankment or wall, usually along a watercourse or floodplain, to prevent overflow on to adjacent land.

Dynamic Beach: That portion of the shoreline where accumulated unconsolidated sediment continuously moves as a result of naturally occurring processes associated with wind and water and changes in the rate of sediment supply.

Dynamic Beach Hazard: Areas of inherently unstable accumulations of shoreline sediments along the Great Lakes – St. Lawrence River System and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the flooding hazard limit plus a dynamic beach allowance.

Erosion: Continual loss of earth material (i.e., soil or sediment) over time as a result of the influence of water or wind.

Erosion Hazard: The loss of land, due to human or natural processes, that poses a threat to life and 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 one-hundred-year time span) and an allowance for slope stability and an erosion/erosion access allowance.

Fill: Earth, sand, gravel, topsoil, building materials, rubble, rubbish, garbage, or any other material whether similar to or different from any of the aforementioned materials, whether originating on the site or elsewhere, used or capable of being used to raise, lower or in any way affect or alter the contours of the ground.

Flooding Hazard: The inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

- a) along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one-hundred-year flood level plus an allowance for wave uprush and other water related hazards;
- b) along river, stream and small inland lake systems, the flooding hazard limit is the greater of:
 - a. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
 - b. the one-hundred-year flood; and

c. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry; except where the use of the one-hundred-year flood or the actually experienced event has been approved by the Minister of Natural Resources and Forestry as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard).

Flood Line: An engineered line delineating the potential extent of flooding.

Floodplain: The area, usually low lands, adjoining a watercourse which has been or may be covered by water.

Floodproofing: A combination of structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures, or properties subject to flooding so as to reduce or eliminate flood damages.

Floodway: The channel of a watercourse and the inner portion of the floodplain where flood depths and velocities are generally higher than those experienced in the flood fringe. The floodway represents that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage.

Groyne: A structure extending from the shore to prevent erosion and arrest sand movement along a shoreline.

Habitable: Suitable to live in or on; that can be inhabited. Inhabit means to dwell in, occupy.

Habitation: is measured by the number of bedrooms within a dwelling unit.

Hazardous Land: Property or lands that could be unsafe for development due to naturally occurring processes associated with flooding, erosion dynamic beaches or unstable soil or bedrock.

Hydric Soil: Soil that, in its undrained condition, is saturated, flooded, or ponded long enough during the growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation.

Hydrologic Function: The functions of the hydrological cycle that include the occurrence, circulation, distribution, and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.

Inert Fill: Earth or rock fill, or material of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances.

Ingress/egress: The ability to access a property or residence by land.

Interference in any way (CO Interpretation): Any anthropogenic act or instance which hinders, disrupts, degrades, or impedes in any way the natural features or hydrologic and ecologic functions of a wetland or watercourse.

Jetty: A structure that projects from the land out into water.

Large Inland Lakes: Waterbody that has a surface area equal to or greater than 100 square kilometers where there is no measurable or predictable response to a single runoff event.

Major Development: New structures, additions, or restorations greater than 46 square metres (500 square feet).

Major Stabilization Work: stabilization works that have been approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC through a detailed engineering design that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

Minor Addition: An addition to an existing structure that does not exceed 46 square metres (500 square feet) and shall not result in an increase in the number of dwelling units. Attached covered structures including decks and garages will be considered habitable space. All new floor space shall be considered when determining the additional floor space including all storeys.

Minor Alteration: Alteration of a watercourse not exceeding 20 square metres (215 square feet).

Minor Development: A small addition to an existing building or accessory building that does not exceed 15 square metres (160 square feet) and does not increase number of dwelling units in a hazard land. Uncovered decks that are anchored using established techniques and are less than 46 square metres (500 square feet) are also considered minor development.

Minor Fill: A volumetric amount of fill not exceeding 20 cubic metres (26 cubic yards).

Moderate Development: *Minor additions*, detached accessory buildings and above ground pools that do not exceed 46 square metres (500 square feet). Uncovered decks larger than 46 square metres (500 square feet) are also considered moderate development. All moderate development (excluding uncovered decks) will be considered cumulative and will not exceed the 46 square metres (500 square feet). If cumulative moderate development exceeds 46 square metres (500 square feet) *major development* definitions apply.

Moderate Stabilization Work: stabilization works for banks/bluffs two metres or less in height and placement of appropriately sized stone a volumetric amount equivalent of up to one cubic metre per one linear metre of shoreline or stream bank if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

Non-Habitable: Detached structure not intended for dwelling in (i.e. garage, uncovered deck, picnic shelter, sun shelter, gazebo, pergola, boathouse)

Not Apparent (unconfined) river and stream valleys: Valleys in which a river or stream is present but there is no discernible valley slope or bank that can be detected from the surrounding landscape. For the most part, unconfined systems are found in fairly flat or gently rolling landscapes and may be located within the headwater areas of drainage basins. The river or stream channels contain either perennial (i.e., year round) or ephemeral (i.e., seasonal or intermittent) flow and range in channel configuration from seepage and natural channels to detectable channels.

Offsetting: Measures that are undertaken to counterbalance unavoidable impacts to the ecosystem. Offsetting should be identified through an Environmental Impact Study and considered only when all other options have been deemed not feasible.

One Zone Concept: An approach whereby the entire floodplain, as defined by the regulatory flood, is treated a one unit, and all development is prohibited or restricted.

Regulated Lands: The area within which development, interference and alteration activities are regulated by the Conservation Authority.

Regulatory floodplain: See definition of flooding hazard

Retaining Wall: A vertical structure designed to resist the lateral pressure of soil and water behind it.

Revetment: A vertical or inclined facing of rip-rap or other material protecting a soil surface from erosion.

Rip-rap: A layer of stone to prevent the erosion of soil.

Routine permit applications: are activities that are documented through another approval process (DART Protocol) or are determined to have limited impacts on the control of flooding, erosion, dynamic beaches, or unstable soil or bedrock (i.e. non-habitable buildings and structures that are less than 10 m² in size).

Rubble: Waste fragments of stone, brick etc. from old houses; pieces of undressed stone used especially as backfill for walls; loose angular stones; water worn stones.

Scour: Local lowering of a streambed by the erosive action of flowing water.

Sedimentation: The deposition of detached soil particles.

Sewage Disposal System: A system which contains the entire sewage envelope, including both primary and secondary beds, mantle, septic tanks, and reserve areas, as per the requirements of the Ontario *Building Code Act* or the Ministry of the Environment and Climate Change.

Significant Wetland: An area identified as provincially significant by the Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

Static water level: The 100 year peak or flood level with a one chance in one hundred of occurring in any given year, without the influences of wave uprush, seiche, ship-generated waves, ice-piling, or other water-related hazards

Storey: The portion of a building;

- a) that is situated between the top of any floor and the top of the floor next above it, or
- a) that is situated between the top of the floor and the ceiling above the floor, if there is no floor above it.

Surficial erosion: The physical removal, detachment, and movement of soil at the ground surface due to water or wind.

Structure: Any material, object or work erected either as a unit or constructed or assembled of connected or dependant parts or elements, whether located under, on, and/or above the surface of the ground.

Top-of-bank: The point at which the slope of a valley or shoreline meets the horizontal plain of the adjacent table-land.

Two Zone Floodway-Flood Fringe Concept: An approach whereby certain areas of the floodplain are considered to be less hazardous than others such that development potentially could occur. The flood fringe defines that portion of the floodplain where development may be permitted, subject to appropriate floodproofing. The floodway defines that portion of the floodplain wherein development is limited. This concept is only implemented after a comprehensive study to evaluate implications has been completed.

Watercourse: means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs.

Watershed: An area that is drained by a river and its tributaries.

Wetland: Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Periodically soaked or wet lands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands for the purposes of this definition.

Note: Additional definitions may be found in the MNR Technical Guidelines, Natural Heritage Guidelines and the Provincial Policy Statement under the Planning Act.