



7.0 ENVIRONMENTAL POLICIES

7.1 INTRODUCTION

In partnership with the Ausable Bayfield Conservation Authority, Middlesex County and the Province, the Municipality strives to protect the natural environment. It is a priority of this Plan to protect and enhance significant natural features and functions, and to reduce the risk to public safety and property from natural hazards, such as flooding and unstable slopes.

The Open Space Area Land Use Designation and other policies of this Section are designed to address the environmental objectives of this Plan.

7.2 WATERSHED MANAGEMENT POLICIES

7.2.1 General

The Municipality of North Middlesex contains many streams and rivers, which, among other resources, support the natural environment and the existing community. Water management issues arise from the various forms of human activity that this Plan addresses. More demands are being placed on water resources; the effects of which contribute to degraded aquatic communities, the loss of well water supply, aquifer contamination, deteriorating water quality, flooding and erosion. Integrating land management and the protection of water allows for the continuance of a healthy environment, solid economic development and healthy communities.

The protection of water resources from contamination and degradation associated with certain land uses and activities is an important element to maintaining the quality of life experienced by both existing residents and businesses, and to support future growth. Water resources will be protected through the stormwater management policies of Sections 8.3.5 and 9.7.3, and any other relevant policies of this Plan.

The Municipality contains two major watershed systems – Parkhill Creek, which drains lands in the northwest and central portions of the Municipality; and the Ausable River, draining lands along the easterly, southerly and extreme westerly boundaries. The Ausable Bayfield Conservation Authority manages both watersheds. Appendix B to this Plan illustrates the major watershed and associated subwatersheds in North Middlesex.



7.2.2 Policies

The following policies relate to linkages between watershed management and the Official Plan.

- a) The Municipality will work cooperatively with the Conservation Authority in dealing with land management issues within the Ausable River Watershed that extend beyond the Municipal boundaries.
- b) The Municipality will encourage both the preparation of watershed and subwatershed management plans to assist in water resource and land use planning on an ecosystem basis. Council recognizes that development and land use change within the Municipality will also require consideration of other matters such as economic and growth management factors that may not be addressed in a watershed or subwatershed plan.
- c) The Municipality will encourage the protection of species at risk, either aquatic or terrestrial, and species recovery strategies. The Municipality will support the implementation of the relevant findings of recovery strategies. This may include amendments to this Plan.
- d) The Municipality will support the Conservation Authority in the preparation and implementation of the subwatershed studies.
- e) The Municipality will support initiatives of the County, the Conservation Authority and other agencies in identifying strategies to protect groundwater resources. To protect groundwater resources, certain uses may be restricted in identified areas of high groundwater vulnerability. An amendment to this Plan shall be required to address any use restrictions related to the protection of groundwater resources.
- f) Applications for proposals requiring access to significant amounts of groundwater or surface water from streams or ponds will only be considered by the Municipality where the applicant has illustrated that the Ministry of the Environment has been consulted, and that the Ministry is considering an application for a water taking permit. For the purposes of this policy, significant means water requirements that exceed what would be usually expected to sustain normal farming practices such as those found within the Municipality. Examples of such significant water users may include (but are not limited to) the following: golf course uses, commercial water bottling operations and intensive agricultural uses. Approvals may also be required from relevant agencies.



- g) Applications for development that need a private water source may be required to submit a detailed hydrogeological study to determine the suitability of the lands for groundwater extraction. The hydrogeological study will be prepared to the satisfaction of the Municipality, Conservation Authority and the County, in consultation with the Province.

7.3 NATURAL ENVIRONMENT POLICIES

7.3.1 General

As a component of implementing the watershed management policies, it is the policy of this Plan to conserve natural heritage features and functions, wherever possible. The Official Plan separates natural environmental considerations into three categories:

- a) Hazard Lands, as illustrated on Schedule “A” to this Plan;
- b) Environmentally Significant Features identified on Schedule “A” to this Plan; and
- c) Lands identified as Natural Heritage Features, as illustrated on Schedule “C” to this Plan.

If development occurs without regard to these constraints and considerations, loss of life, property damage or degradation of the natural environment may occur. Delineation of these environmental features has been derived, in a conceptual manner, from mapping provided by the County of Middlesex and Ausable Bayfield Conservation Authority, in consultation with the Ministry of Natural Resources. These features must be given due consideration in the development, redevelopment and alteration of land within the identified areas. The delineation of these environmental considerations may be refined through the preparation of a detailed Environmental Impact Study (EIS), pursuant to Section 9.7.1 of this Plan.

7.3.2 Hazard Lands

Schedule “A” defines as Hazard Lands those lands that are susceptible to flooding or erosion, have steep slopes or soil instability, or exhibit other hazards, including human-made hazards. The following policies shall apply to Hazard Lands.

- a) No new development shall be permitted on Hazard Lands other than uses associated with the management of the Hazard Lands.



- b) An Environmental Impact Study in accordance with Section 9.7.1 of this Plan shall be required for all development proposals within or abutting lands identified as Hazard Lands.
- c) Land proposed for development that is subject to the policies of this Section shall be subject to site plan control in accordance with Section 9.6.6 of this Plan. The site plan shall relate specifically to the implementation of the findings of the EIS. The site plan shall correctly and precisely delineate those lands impacted by flooding or erosion and identify how the proposed development and/or redevelopment will ensure no damage or degradation of the environment.

7.3.2.1 Flooding Hazards

Flood plains within the Municipality are identified as Hazard Lands on Schedule "A". It is the intent of the Municipality to work cooperatively with the Ausable Bayfield Conservation Authority in the management of flood plains to ensure proper land use, minimize the level of risk to life, property damage and social disruption from flooding, and minimize the need for large capital expenditures for flood protection purposes. In North Middlesex, there are three approaches to flood plain management. The following policies deal with these approaches.

a) Thedford Klondyke Marsh

The Thedford Klondyke Marsh affects lands subject to flooding along the Ausable River, Ausable River Cut and Old Ausable Channels. The Thedford Klondyke Marsh shall be subject to Special Policy Area 7.4.3.

b) Two-Zone Approach

The two-zone flood plain approach shall be employed within the Ailsa Craig Urban Settlement Area. The floodway is defined as a hydraulic floodway as determined from channel capacity and floodwater storage requirements. The flood fringe is the area between the Regional Storm floodline and the hydraulic floodway. The general provisions of the Provincial and Ausable Bayfield Conservation Authority flood plain management policy shall apply.

a) One-Zone Approach

The one-zone flood plain approach shall be employed for all remaining lands subject to flooding hazards in the Municipality.



7.3.3 Environmentally Significant Features

Schedule “A” identifies Environmentally Significant Features, being those lands that display sensitive features including significant wetlands, significant portions of the habitat of endangered and threatened species, and major watercourses, including major municipal drains. The following policies shall apply to Environmentally Significant Features.

- a) Development and site alteration shall not be permitted on Environmentally Significant Features. Notwithstanding any interpretation of Schedule “A”, such areas shall be deemed to be designated Open Space Area, and subject to the policies of Section 7.4.1.a and 7.4.2.b in particular, and any other relevant policies of this Plan.
- b) An Environmental Impact Study in accordance with Section 9.7.1 of this Plan shall be required for all development proposals in, adjacent to or abutting areas identified as Environmentally Significant Features.
- c) Development proposals adjacent to or abutting an Environmentally Significant Feature shall not result in a negative impact on the natural areas and functions or ecological processes of the Feature. The extent of adjacent lands shall be defined as illustrated on the following table.

Environmentally-Significant Feature	Boundary Definition	Extent of Adjacent Lands	Conditions under which development and site alteration may be permitted
Provincially significant wetlands	Classes 1, 2 or 3 wetland, based on evaluation carried out in accordance with Ministry of Natural Resources procedures.	120 metres	EIS demonstrates that there will be no negative impacts on the natural features and their sustaining ecological or hydrologic functions.
Habitat of threatened or endangered species	As defined by Provincial or Federal authorities or an accredited professional.	50 metres	EIS demonstrates that there will be no negative impacts on the habitat values upon which the species depend directly and indirectly, and any related ecological functions.



Environmentally-Significant Feature	Boundary Definition	Extent of Adjacent Lands	Conditions under which development and site alteration may be permitted
Watercourses and Municipal drains without mapping or regulations from ABCA	The top of bank of the watercourse or drain as defined in consultation with the ABCA.	Lands within 15 metres of the top of bank, or a feature defined by Section 7.3.4 of this Plan.	EIS demonstrates no negative impacts upon any present natural feature and their sustaining ecological functions.

7.3.4 Natural Heritage Features

The Provincial Policy Statement encourages the protection and enhancement of natural heritage features. Natural Heritage Features are identified on Schedule “C” to this Plan. The delineation of these features is based on the Middlesex County Natural Heritage Study. These Natural Heritage Features are generally not designated in the Official Plan. Notwithstanding this, the following policies shall apply.

- a) Natural Heritage Features identified on Schedule “C” to this Plan shall be subject to the policies of the underlying land use designation and the policies of this Section of the Plan.
- b) Development or site alteration proposed within or on lands adjacent to a Natural Heritage Feature(s) shall be subject to the completion of an Environmental Impact Study, in accordance with Section 9.7.1 of this Plan. Development or site alteration within or adjacent to such features will be prohibited unless it can be shown that there will be no unmitigated impacts on the form or function of such Features. The extent of adjacent lands shall be defined as illustrated on the following table.

Natural Heritage Feature	Boundary Definition	Extent of Adjacent Lands	Conditions under which development and site alteration may be permitted
fish and their habitat	A setback of 30 metres from the highwater edge of an aquatic habitat or as defined through the EIS. The definition of fish habitat can be affected by an EIS.	30 metres from the highwater mark	EIS indicates there will be no harmful alteration, disruption or destruction of habitat upon which the fishery depends directly and indirectly; or where authorization has been obtained under the <i>Fisheries Act</i> , or that habitat will be fully replaced to provide full compensation for the effects of the development.



Natural Heritage Feature	Boundary Definition	Extent of Adjacent Lands	Conditions under which development and site alteration may be permitted
locally significant wetlands	Wetland evaluation carried out according to procedures established by MNR. Classes 4 through 7 are locally significant.	50 metres	EIS demonstrates there will be no negative impacts on the natural features and the ecological or hydrologic functions that sustain them.
woodlands	All woodlands 4 hectares or greater in area and all woodlots of any size straddling or immediately adjacent to a watercourse.	Dripline plus 10 metres	EIS demonstrates there will be no negative impacts on the natural features of the woodlands and the ecological functions that sustain them.
valley lands (not included in Schedules	Conservation Authority regulatory lines, flood plain mapping or unstable slope mapping where available or the edge of any other associated natural heritage feature, whichever is greater.	Stable top-of-bank, determined in consultation with the Conservation Authority	EIS demonstrates there will be no negative impacts on the natural features of the valley lands and the ecological functions that sustain them.
significant natural areas and wildlife habitat	as defined by MNR.	50 metres	EIS demonstrates there will be no negative impacts on wildlife or their habitat.
areas of natural and scientific interest (ANSI)	as defined by MNR or ABCA.	50 metres	EIS demonstrates there will be no negative impacts on the ANSI and the ecological or geological functions that sustain them.

7.3.5 General Environmental Policies

The following general policies relating to the natural environment apply to the Municipality.

- a) Subject to Provincial and Federal statutes, regulations and the County Tree Cutting By-law, the policies of this Plan do not limit the continuation of existing agricultural uses within or adjacent to Natural Heritage Features.
- b) This Plan encourages the retention of woodlots or portions of woodlots that are not identified on Schedule “C”. It is further encouraged that wherever possible and appropriate, trees be replanted to replace trees removed if a development proceeds. This Plan encourages the preservation or replanting of roadside and fence-line shrubs and trees, and riparian area vegetation, wherever possible and appropriate in the context of new development.



- c) The Municipality encourages the use of MNR's *Natural Heritage Reference Manual* for the completion of an EIS, referenced in Section 9.7.1 of this Plan, to ensure that development proposals are consistent with the Natural Heritage Features policies.
- d) Council encourages opportunities that may arise with development proposals for creating new habitats, natural vegetation regeneration, conserving natural landforms and functions, for preserving and enhancing groundwater and surface water resources, and for promoting environmental education and interpretation.
- e) Where components of the Natural Heritage Features are held in private ownership, nothing in this Plan requires that these lands be free and available for public use, and the identification of lands will not oblige the Municipality, or other public agencies to purchase these lands.
- f) Council will, to the extent feasible, ensure that required maintenance of existing drains is carried out in a manner that mitigates impacts upon components of the Municipality's Natural Heritage Features.
- g) When considering applications or initiating projects in rural areas under the *Drainage Act* or *Ontario Water Resources Act* for drainage works, Council must be satisfied that the works will be engineered and constructed to ensure no negative impact on components or related ecological functions of the Municipality's Natural Heritage Features. Such consideration will include completion of an Environmental Impact Study (EIS) or an environmental appraisal carried out under the *Drainage Act*.

7.4 OPEN SPACE AREA LAND USE DESIGNATION

The following policies relate to those lands designated Open Space Area on Schedule "A".

7.4.1 Permitted Uses

Uses permitted on lands designated Open Space Area Land Use Designation on Schedule "A" are as follows.

- a) The predominant use of land shall be for the preservation and conservation of land and/or environment, as well as for the provision of outdoor recreational and educational opportunities, subject to the policies of Section 7.4.2
- b) Uses such as agriculture, forestry, parks and recreation shall be permitted, subject to the policies of Section 7.4.2. Approval for



development of these uses shall depend on the particular physical and environmental constraints of any given site.

- c) Uses accessory to any of the permitted uses in the Open Space Area Land Use Designation are permitted, subject to the policies of Section 7.4.2. The accessory uses shall be defined in the Zoning By-law.
- d) The specific uses permitted shall be established in the Zoning By-law.

7.4.2 Policies

The following policies shall apply to the Open Space Area Land Use Designation.

- a) Lands designated Open Space Area should be managed in such a fashion as to complement adjacent land uses and protect such uses from any physical hazards.
- b) Development and site alteration shall be prohibited on lands identified as Environmentally Significant Features on Schedule “A”.
- c) Agriculture, parks, recreation and forestry operations on lands designated Open Space Area should maintain the unique natural characteristics of such lands, where possible and appropriate.
- d) The use of lands designated Open Space Area shall not contribute to problems of erosion, flooding, pollution or the deterioration of the natural environment.
- e) Buildings and structures shall be permitted on lands designated Open Space Area provided that they are clearly incidental and/or accessory to the main permitted use, but not in hazard lands, unless the buildings or structures are required for flood control, municipal services and/or utilities. Structures such as those required for flood control, municipal services and/or utilities shall be permitted on hazard lands, provided engineering studies acceptable to the Municipality and Ausable Bayfield Conservation Authority indicate that any hazard, natural or otherwise, can be overcome, or if the Conservation Authority determines that the isolated parcel of land is not hazardous. Where major physical alterations are necessary to overcome the hazards, an amendment to this Plan will be required. Where a detailed EIS shows that an area is non-hazardous, and provided that the Conservation Authority confirms this in writing, then an alternative use consistent with the surrounding uses may be considered through a Zoning By-law Amendment.



- f) Where Open Space Area lands are under private ownership, it shall not be construed that these lands shall be free and open to the general public, nor that the Municipality or any other public agency shall acquire them.

7.4.3 Special Policy Area – Thedford Klondyke Marsh Flood Plain

The following policies shall apply to proposed development in the area identified as Special Policy Area 7.4.3 on Schedule “A”. The general provisions of the Provincial and Ausable Bayfield Conservation Authority flood plain management policies apply with the following exceptions and additions.

- a) Agriculturally related buildings or structures at existing agricultural operations will be permitted providing they are suitably flood-proofed.
- b) Storage of toxic or explosive materials will be required to be located above the regulatory flood datum as determined in consultation with the Ausable Bayfield Conservation Authority.
- c) Residential development shall only be permitted on existing vacant lots of record, provided the structures are flood-proofed to the regulatory flood datum as determined in consultation with the Conservation Authority.
- d) The creation of new lots for the purposes of non-agricultural residences shall not be permitted in the Site Specific Policy Area.
- e) The Municipality shall not approve any plans of subdivision within the Site Specific Policy Area.
- f) The minimum floor elevation of any accessory structures shall be determined in consultation with the Conservation Authority.