

# 6 . S U S T A I N A B L E N A T U R A L H E R I T A G E

## *“Protecting and Improving the Natural Environment”*

### 6.1 INTRODUCTION

**I**n partnership with the Long Point Region Conservation Authority (LPRCA), the Grand River Conservation Authority (GRCA) and the Province, the County strives to protect the natural environment. It is a priority of this Plan to protect, enhance and restore significant natural features and functions, and to reduce the risk to public safety and property from natural hazards, such as flooding and unstable slopes.

### 6.2 WATERSHED MANAGEMENT

Norfolk County contains many streams, ponds and wetlands, which, among other resources, support the natural environment and the existing community. Water management issues arise from the various forms of human activity contemplated by this Plan. 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.

There are important links between land use planning activities and the management of the watersheds. The protection of water resources from contamination and degradation associated with certain land uses and activities is a requirement of the Province and an important element in maintaining the quality of life experienced by both existing residents and businesses, and in supporting future growth. Water resources will be protected throughout the County in accordance with the policies of this Plan.

The County contains two major watershed systems – Big Creek, which drains land in the west and central portions of the County; and the Lynn River draining land along the easterly boundaries. The Long Point Region Conservation Authority manages both watersheds. Additionally a small portion of the northeastern part of the County is managed by the Grand River Conservation Authority. Schedule “D” to this Plan illustrates the major watersheds and associated subwatersheds in Norfolk County.

The following shall be the policy of the County:

- a) The County shall work cooperatively with the MNR and Conservation Authorities in dealing with land management issues within the watersheds, including those that extend beyond the County boundary.
- b) The County shall encourage the preparation of both watershed and subwatershed management plans to facilitate water resource and land use planning on an ecosystem basis. Council recognizes that development and land use change within the County will also require consideration of other matters such as economic, social and growth management factors that may not be addressed in a watershed or subwatershed plan.
- c) The County shall support the Conservation Authorities in the preparation and implementation of the subwatershed studies.
- d) The County shall support initiatives of the Conservation Authorities and other agencies in identifying strategies to protect groundwater resources.
- e) The County shall support appropriate flood control management programs of the Conservation Authorities.
- f) The County shall encourage the protection and restoration of Natural Heritage Features to improve water quality and quantity.
- g) The County shall encourage the protection of species at risk, either aquatic or terrestrial, and species recovery strategies. The County shall support the implementation of the relevant findings of recovery strategies. Implementation of species recovery strategies may include amendments to this Plan.
- h) The County shall require the use of stormwater management facilities downstream of new developments, where appropriate, to mitigate development impacts on stormwater quantity and quality. The County shall promote naturalized and unfenced stormwater management facilities, constructed with gentle slopes. Applications for development may be required to be supported by a stormwater management study.
- i) Applications for development requiring dewatering or using significant amounts of groundwater or surface water from streams, ponds or Lake Erie may be subject to a holding provision in the Zoning By-law in accordance with Section 9.4.2 (Holding Provision), subject to the County receiving confirmation that a Permit to Take Water has been granted by the Ministry of the Environment. 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 County. Examples of such significant water users may include, but are not limited to, the following: golf course uses and commercial water bottling operations. Approvals may also be required from relevant agencies.

- j) Applications for development based on a private water source may be required to submit a detailed hydrogeological study to determine the suitability of the land for groundwater extraction. The hydrogeological study shall be prepared to the satisfaction of the County and the Conservation Authority, in consultation with the Province.
- k) The County shall encourage the reduction of water consumption levels through the promotion of the efficient use of water, in cooperation with the private sector and the community, and may specify appropriate water conservation measures within existing and new development.
- l) The County encourages sound management practices for agriculture which promote proper storage, use, and application of fertilizers, herbicides and pesticides, and where possible, the reduction of their use.
- m) The County shall monitor all active and inactive waste management sites in cooperation with the Ministry of the Environment.
- n) The County supports initiatives of agencies to develop standards, regulations and procedures to prevent spillage of toxic materials. It shall support agencies and firms in the development of appropriate methods and capability to deal with spills with due speed and diligence. Additional safety measures for the storage, transportation and use of toxic materials will be encouraged.

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### 6.3 SOURCE WATER PROTECTION

Uncontaminated surface and groundwater resources are essential to Norfolk County. Norfolk's municipal and private water systems are supplied generally by groundwater resources. Municipal wells serving the Town of Tillsonburg in Oxford County are also located in Norfolk, in proximity to the Norfolk North Hamlet Area. Further, groundwater provides baseflow for the numerous creeks and streams in the County, and acts as a water source for many ponds and wetlands.

The protection, conservation and careful management of surface and groundwater resources is necessary in order to meet both present and future needs of residents, businesses and the natural environment. As groundwater contamination is extremely difficult, costly and sometimes impossible to rectify, prevention of contamination is the most realistic strategy. The Clean Water Act, 2006, was enacted to ensure the protection of municipal drinking water supplies by setting out a risk-based process on a watershed basis to identify vulnerable areas and associated prescribed drinking water threats and issues through the development of Assessment Reports, and develop policies and programs to

eliminate or reduce the risks posed by identified prescribed drinking water threats and relevant local threats through the preparation of Source Protection Plans. This process is otherwise known as Source Protection Planning.

The science-based Assessment Report is the technical basis upon which a Source Protection Plan is developed. The Source Protection Plan contains policies to address prescribed drinking water threats and relevant local threats identified in the Assessment Report. The policies of this Plan are intended to implement and complement the policies of the Source Protection Plans that apply within the County of Norfolk.

The County of Norfolk is located within two Source Protection Plan Areas - The Grand River Source Protection Plan Area and the Long Point Region Source Protection Plan Area. The Long Point Region Source Protection Plan contains policies for the protection of municipal drinking water sources within Norfolk. The policies of the Grand River Source Protection Plan do not apply within the County of Norfolk.

For the purposes of this subsection, the following terms are defined as follows:

**'Activity'** includes a land use. (Source: Clean Water Act, 2006).

**'Drinking water threat'** means an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat. (Source: Clean Water Act, 2006)

**'Significant drinking water threat'** means a drinking water threat that, according to a risk assessment, poses or has the potential to pose a significant risk. (Source: Clean Water Act, 2006)

### 6.3.1 Vulnerable Areas

The County's wellheads act as the source of groundwater for the County water supply systems. Intakes at the Lehman Dam Reservoir and Port Dover and Port Rowan Water Treatment Plants act as the source of surface water for the County water supply systems. These water supplies must be protected from contamination associated with certain land uses in order to secure the long-term protection of a potable water supply for existing and future residents and businesses by permitting only those land uses that do not represent a significant risk to municipal drinking water sources within vulnerable areas.

The Long Point Region and Grand River Assessment Reports have identified vulnerable areas within the County and where certain land uses and activities may pose a risk to the quality of municipal water supplies. Identified vulnerable areas within the County include Wellhead Protection Areas (WHPAs), Surface Water Intake Protection Zones (IPZs), Highly Vulnerable Aquifers (HVAs), and Significant Groundwater Recharge Areas (SGRAs). Issue Contributing Areas (ICAs) have also been identified for some of the County's wellheads.

Assessment Reports have also measured the degree to which these areas are vulnerable through the assignment of a 'vulnerability score'. The term

"vulnerability" describes how easily a source of water can become contaminated with a hazardous material. The vulnerability score of a vulnerable area can have a value up to 10, with 10 being the most vulnerable. The vulnerability score is used, together with a table of drinking water threats published by the Ministry of Environment and Climate Change, to determine whether a drinking water threat is either significant, moderate, or low.

Vulnerable areas are identified on Schedule "D" and identify the WHPAs and ICAs for the wells servicing County water supplies, the Town of Tillsonburg in Oxford County, and the IPZ for the Lehman Dam Reservoir intake. HVAs and SGRAs are identified on Schedule "D" for information purposes only. Should policies specific to HVAs and SGRAs be added to the Source Protection Plans, this Plan shall be amended to conform to the Source Protection Plans.

A Wellhead Protection Area (WHPA) is the area around a municipal wellhead where land uses and activities have the potential to affect the quality and quantity of water that flows into the well. WHPAs associated with water quality are identified on Schedule "D" as Wellhead Protection Areas A, B and C. Wellhead Protection Area D (WHPA-D) and Wellhead Protection Area E (WHPA-E) for municipal wellheads are also identified on Schedule "D", however the Long Point Region Source Protection Plan does not contain policies that apply to these areas. As a result, the policies of this section do not apply to WHPA-D or WHPA-E. The WHPAs that are considered to be the most vulnerable to surface activities are assigned a vulnerability score of 8 to 10, with the degree of vulnerability generally decreasing the further away from the well. Generally, the WHPAs are modelled based on two factors: the time related capture zones of each well and the vulnerability of the aquifer. The time related capture zones include:

- a 100-metre radius surrounding the well (WHPA-A);
- 2 year travel time for water to enter the well (WHPA-8);
- 5 year travel time for water to enter the well (WHPA-C);
- 25 year travel time for water to enter the well (WHPA-D); and
- 2 hour travel time for surface water to enter a well that is under the direct influence of surface water (WHPA-E).

An Intake Protection Zone (IPZ) applies to municipal surface water supply sources and are areas established around municipal intakes within which a spill or leak may enter the intake too quickly prior to implementing measures to prevent pollutants from entering the municipal water system. The most vulnerable Intake Protection Zone related to the Lehman Dam Reservoir is the Intake Protection Zone 1, identified as the IPZ-1 on Schedule "D". The IPZ-2 for the Lehman Dam Reservoir is also identified on Schedule "D"; however the Long Point Region Source Protection Plan does not contain policies related to this area. As such, the policies of this section do not apply to the IPZ-2.

An Issue Contributing Area (ICA) is an area within a WHPA where the existing or trending concentration of a parameter (i.e. trichloroethylene (TCE), chloride, nitrate, or sodium) or pathogen at a municipal well would result in the

deterioration of the quality of water for use as a source of drinking water. ICAs are not assigned a vulnerability score as they represent an area in which certain activities would pose a significant drinking water threat regardless of the vulnerability of the underlying area. ICAs for nitrate are identified on Schedule "D" and are associated with wellheads serving Simcoe.

### **6.3.2 Land Uses in Vulnerable Areas**

Vulnerable areas identified on Schedule "D" shall be considered special protection areas within which certain land uses involving a significant drinking water threat activity may be prohibited or regulated in accordance with Section 57 and 58 of the Clean Water Act, 2006 and the Long Point Region Source Protection Plan, notwithstanding the uses permitted by the underlying land use designation.

The following policies are intended to prohibit, regulate or restrict land uses involving significant drinking water threat activities from establishing within vulnerable areas in accordance with the Long Point Region Source Protection Plan and to ensure that land uses that are permitted can be established within an acceptable level of risk to surface and groundwater quality.

#### **6.3.2.1 Prescribed Drinking Water Threats**

Land uses and activities which may pose a drinking water threat to municipal water supplies are defined by the Clean Water Act, 2006 as an activity or condition that adversely affects, or has the potential to adversely affect, the quality and quantity of any water that is or may be used as a source of drinking water. Drinking water threats are prescribed by Ontario Regulation 287/07 of the Clean Water Act, 2006, and include the following:

1. Waste disposal sites within the meaning of Part V of the Environmental Protection Act.
2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
3. The application of agricultural source material to land.
4. The storage of agricultural source material.
5. The management of agricultural source material.
6. The application of non-agricultural source material to land.
7. The handling and storage of non-agricultural source material.
8. The application of commercial fertilizer to land.
9. The handling and storage of commercial fertilizer.
10. The application of pesticide to land.
11. The handling and storage of pesticide.
12. The application of road salt.

13. The handling and storage of road salt.
14. The storage of snow.
15. The handling and storage of fuel.
16. The handling and storage of a dense non-aqueous phase liquid (DNAPL).
17. The handling and storage of an organic solvent.
18. The management of runoff that contains chemicals used in the de-icing of aircraft.
19. An activity that takes water from an aquifer or surface water body without returning the water to the same aquifer or surface water body.
20. An activity that reduces the recharge of an aquifer.
21. The use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard.

#### **6.3.2.2 Land Use & Activity Prohibitions, Regulations and Restrictions within Vulnerable Areas**

Significant drinking water threats within vulnerable areas are either prohibited or regulated by the Long Point Region Source Protection Plan policies. The significance of a prescribed drinking water threat depends on the circumstances of the activity and where the activity is occurring within a vulnerable area.

Notwithstanding the land uses permitted by the underlying land use designation in this Official Plan:

- a) Permitted land uses that involve a significant drinking water threat within a vulnerable area identified as a WHPA-A, WHPA-B, WHPA-C, IPZ-1 or ICA in Schedule "D" to this Plan may be either prohibited or regulated by the Long Point Region Source Protection Plan.
- b) Any application for development, redevelopment, or site alteration for any land use, except solely residential uses, within a Wellhead Protection Area A, B or C; Intake Protection Zone 1; or Issue Contributing Area where a drinking water threat could be significant shall only be deemed complete under the Planning Act if submitted with a Section 59 Notice issued by the Risk Management Official, in accordance with the Clean Water Act, 2006, where applicable in accordance with the Long Point Region Source Protection Plan.
- c) 6.3.2.2 b) shall also apply to the approval of any Building Permit application.
- d) The County's Risk Management Official shall determine whether a new land use or activity is, or involves, a significant drinking water threat in accordance with the Clean Water Act, 2006 and whether the use or activity is prohibited or regulated through a Risk Management Plan in accordance with the Long Point Region Source Protection Plan. 6.3.2.2 b) and 6.3.2.2 c) shall not apply if the applicant can demonstrate, to the

satisfaction of the Risk Management Official, as the case may be, that a significant drinking water threat activity will not be engaged in.

- e) The Risk Management Official may provide guidance to assist the County in screening applications for development, redevelopment or site alteration.

### 6.3.2.3 Septic Systems and Holding Tanks

- a) New and replacement small on-site septic systems and/or holding tanks shall be located on the same property as the land use relying on the system but sited outside the limits of a WHPA with a vulnerability score of 10 or nitrate ICA as identified on Schedule "D" to this Plan.

Notwithstanding the above, where no municipal sanitary sewers exist and where septic systems already exist within a WHPA with a vulnerability score of 10 or nitrate ICA, all new or replacement small septic systems on properties where they would be a significant drinking water threat shall be located as far as practically possible from the wellhead while remaining in compliance of the Building Code.

- b) New development that relies on a large on-site septic system and/or holding tank shall be prohibited within a WHPA with a vulnerability score of 10 or nitrate ICA as identified on Schedule "D" to this Plan where the system and/or holding tank would be a significant drinking water threat.
- c) For the purposes of this policy, the following definitions shall apply:
  - i. Septic system and/or holding tank: systems that store and/or treat human waste on-site and shall include, but not be limited to, greywater systems, cesspools, leaching bed systems and associated treatment units, and holding tanks, and shall not include sewage treatment plants.
  - ii. Small system: a system with a design flow of less than or equal to 10,000 litres per day and subject to approval under the Building Code Act or the Ontario Water Resources Act. These systems are primarily located on rural residential properties or un-serviced settlement areas.
  - iii. Large system: a system with a design flow of greater than 10,000 litres per day and regulated under the Ontario Water Resources Act. These systems may be located at a school, campground or larger business property.

### 6.3.2.4 Abandoned Wells

Prior to new development, proponents may be required to carry out an investigation for abandoned water, oil and gas wells within any WHPA-A, B, C or IPZ-1 and provide for the proper sealing or plugging of same, in accordance

with relevant Provincial legislation and regulations, where this activity would a significant drinking water threat.

### **6.3.3 Implementation and Interpretation**

#### **6.3.3.1 Education and Outreach**

The County may develop and implement education and outreach programs directed at any, or all, significant prescribed drinking water threats, where such programs are deemed necessary and/or appropriate by the County, and/or required by the policies of the Long Point Region Source Protection Plan, subject to available funding. Such programs shall include, but not be limited to, increasing awareness and understanding of the prescribed drinking water threats and promotion of best management practices.

#### **6.3.3.2 Monitoring**

The County shall provide a report to the Source Protection Authority, by February 1st of each year, summarizing the actions taken to implement the policies of the Long Point Region Source Protection Plan, where specifically required by the policies.

The Risk Management Official shall provide a report to the Source Protection Authority, by February 1<sup>st</sup> of each year, summarizing the actions taken to implement the policies of the Long Point Region Source Protection Plan, in accordance with the Clean Water Act, 2006 and associated regulations.

#### **6.3.3.3 Site Plan Control**

Site plan control may be used, in accordance with the County Site Plan Control By-law as a means of incorporating mitigating and remedial measures, proper siting and containment of storage facilities, lot grading and drainage and site design plans identified through the development review process.

#### **6.3.3.4 Conflict with Source Protection Plan**

In the event of conflict between a significant threat policy of a Source Protection Plan and the policies of this Plan, the policies of the Source Protection Plan shall prevail.

#### **6.3.3.5 Review of Source Protection Plans**

Source Protection Plans shall be reviewed in accordance with the Clean Water Act, 2006. Future reviews of Source Protection Plans may result in a change in the vulnerability scoring or the geographic extent of an existing vulnerable area. The establishment of a new municipal water supply source will result in the establishment of a new vulnerable area. Abandonment of a municipal water supply source will indicate the need to remove the corresponding vulnerable area associated with the supply source.

Changes to the extent or vulnerability of an existing vulnerable area, or the establishment of a new vulnerable area, as a result of a review and amendment to a Source Protection Plan will require an amendment to this Plan.

## 6.4 AQUIFER PROTECTION

Aquifers need to be protected across the County to ensure a clean and plentiful groundwater supply for County and private water systems, as well as to provide baseflow for creeks and streams, and water sources for ponds and wetlands.

The following shall be the policy of Council:

- a) Removal of possible sources of contamination such as unused fuel tanks, will be promoted through the Ministry of Consumer and Business Services and in cooperation with the Ministry of the Environment.
- b) The County may investigate the use of alternative road de-icing methods, as road salt has been identified as a potential cause of groundwater contamination.
- c) The County supports action against groundwater polluters. Educational programs which assist in reducing point and non-point pollution sources will be supported.
- d) Where there is a public health concern, the Haldimand-Norfolk Health Unit shall seek appropriate abatement procedures for faulty sewage disposal systems or improperly located or maintained wells.
- e) The County shall consider the development and utilization of sewage systems with denitrification capabilities.
- f) Assurance that groundwater quality and quantity will not be negatively impacted shall be required for approval of applications for development.
- g) The County shall support the efforts of the Long Point Region Conservation Authority and the Grand River Conservation Authority to establish a Source Water Protection Plan for the County. The County recognizes that a subsequent amendment to this Plan may be required to implement the Water Supply Source Protection Plan.

## 6.5 NATURAL HERITAGE SYSTEMS

It is the policy of this Plan to conserve Natural Heritage Features and functions and protect such features and areas from incompatible development, wherever possible. The Official Plan separates land-based environmental considerations into three categories:

- a) Provincially Significant Features, as described in Section 6.4.1 (Provincially Significant Features), and Section 4.4 (Provincially Significant Wetlands Designation);

- b) Natural Heritage Features, as described in Section 6.4.2 (Natural Heritage Features), and identified on Schedule “C” to this Plan; and
- c) Hazard Lands, as designated and described in Section 4.3 (Hazard Lands Designation) and designated on Schedule “B” to this Plan.

If development occurs without regard to these constraints and considerations, degradation of the natural environment may result and public safety may be jeopardized. Delineation of these Natural Heritage Features is based on data provided by the Natural Areas Inventory, Long Point Region Conservation Authority, the Grand River Conservation Authority and the Ministry of Natural Resources. These features shall be protected for the long-term and 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 (Environmental Impact Study) of this Plan.

Norfolk County shall work in coordination with its Environmental Advisory Committee and Heritage Committee to document, conserve, protect and enhance these lands; and educate the public regarding the County’s natural heritage systems. The Norfolk Environmental Advisory Committee shall also be responsible for EIS review on behalf of the County, and development application pre-consultation where the natural heritage systems are potentially impacted.

### **6.5.1 Provincially Significant Features**

Provincially Significant Features include Provincially Significant Wetlands (PSWs), and significant habitat of endangered species and threatened species. Provincially Significant Wetlands are designated on Schedule “B”, as described in Section 4.4 (Provincially Significant Wetlands Designation). Schedule “C” delineates the PSWs and approximates the adjacent 120 metres in the context of the Natural Heritage Features. In accordance with common practice relating to such features, the significant habitat of endangered species and threatened species are not illustrated on the schedules to this Plan.

The following shall be the policy of the County:

- a) Development and site alteration shall not be permitted in a Provincially Significant Feature.
- b) Development and site alteration shall generally not be permitted on land adjacent to a Provincially Significant Feature, unless the ecological function of the adjacent land has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions that cannot be adequately mitigated. The extent of adjacent land shall be defined as indicated in Table 3. An Environmental Impact Study (EIS) in accordance with Section 9.7.1 (Environmental Impact Study) of this Plan shall be required for all development proposals adjacent to or abutting areas identified as Provincially Significant Features.
- c) Provincially Significant Wetlands identified on Schedules “B” and “C” to this Plan shall be subject to the policies of Sections 4.4 (Provincially

Significant Wetlands Designation), as appropriate, and the policies of this Section of the Plan.

- d) Significant habitat of endangered species and threatened species are not illustrated on either Schedules “B” or “C”, and shall be delineated in accordance with Table 3. The Ministry of Natural Resources approves the identification of significant habitat of endangered species or threatened species. The County shall refer to the Natural Heritage Information Centre database and, in consultation with the Province and the appropriate Conservation Authority, shall determine where the policies of Sections 6.4.1(a) and (b) apply. The County and the Ministry of Natural Resources shall develop a protocol for the County to screen applications for areas likely to be significant habitat of endangered species or threatened species.

**Table 3 – Land Subject to EIS Policies Adjacent to Provincially Significant Features**

NO DEVELOPMENT OR SITE ALTERATION WITHIN BOUNDARY OF FEATURE		ADJACENT LAND DEFINITION	
Provincially Significant Feature	Boundary Definition	Extent of Adjacent Land	Conditions under which Development and Site Alteration may be Permitted on Adjacent Land
Provincially Significant Wetlands	Based on evaluation carried out in accordance with Ministry of Natural Resources procedures, and as illustrated on Schedules “B” and “C”.	120 metres	EIS demonstrates that there will be no negative impacts on the natural features and their sustaining ecological or hydrologic functions.
Significant habitat of endangered species and threatened species	As defined by Provincial or Federal authorities.	100 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.

## 6.5.2 Natural Heritage Features

The Provincial Policy Statement encourages the protection and enhancement of Natural Heritage Features. Schedule “C” identifies some of the significant Natural Heritage Features, being land that represents the legacy of the natural landscape of the area and as a result has important environmental and social value. Natural Heritage Features are not designated by the Plan and are not illustrated on Schedule “B”.

The following shall be the policy of the County:

- a) Natural Heritage Features identified on Schedule “C” and/or Table 4 to this Plan shall be subject to the policies of the underlying land use designation, as shown on Schedule “B”, and the policies of this Section of the Plan.
- b) Development or site alteration proposed in, or adjacent to, a Natural Heritage Feature(s), whether illustrated on Schedule “C” or only described in Table 4, shall be subject to the completion of an Environmental Impact Study, in accordance with Section 9.7.1 (Environmental Impact Study) of this Plan. Development or site alteration in, or adjacent to, such features shall not be permitted unless it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions that cannot be adequately mitigated. The extent of adjacent land shall be defined as indicated in Table 4.

**Table 4 – Extent of Land Adjacent to a Natural Heritage Feature**

Natural Heritage Feature	Boundary Definition	Extent of Adjacent Land	Conditions under which development and site alteration may be permitted
Fish habitat (not included on Schedule “C” to this Plan)	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> , and that habitat will be fully replaced to provide full compensation for the effects of the development.
Locally significant wetlands	Wetland evaluation carried out according to procedures established by MNR.	120 metres	EIS demonstrates there will be no negative impacts on the natural features and the ecological or hydrologic functions that sustain them.

**Table 4 – Extent of Land Adjacent to a Natural Heritage Feature**

Natural Heritage Feature	Boundary Definition	Extent of Adjacent Land	Conditions under which development and site alteration may be permitted
Unevaluated wetlands within the Grand River Conservation Authority's area of jurisdiction, as identified on Schedule "D-1" (not included on Schedule "C" to this Plan)	Evaluated in accordance with the GRCA's wetland policy	120 metres	EIS demonstrates there will be no negative impacts on the natural features and the ecological or hydrologic functions that sustain them.
Significant Woodlands	Based on evaluation criteria established and conducted by Norfolk County, as illustrated on Schedule "C".	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.
Watercourses (without mapping or regulations from LPRCA or GRCA)	The top of bank of the watercourse or drain as defined in consultation with the County and LPRCA or GRCA.	Land within 15 metres of the top of bank, or a feature defined by Section 4.3 of this Plan.	EIS demonstrates no negative impacts upon any present natural feature and their sustaining ecological functions.
Significant Valleyland (not included on Schedule "C" to this Plan)	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 LPRCA or GRCA	EIS demonstrates there will be no negative impacts on the natural features of the valley land and the ecological functions that sustain them.
Significant natural areas and wildlife habitat, including Carolinian Canada Sites	As defined by MNR, and/or by the County in the future Natural Heritage System Strategy, further to Section 6.4.3 (Natural Heritage System Strategy).	50 metres	EIS demonstrates there will be no negative impacts on wildlife or their habitat.
Natural Areas, as identified in the Natural Areas Inventory	As defined by the County Natural Areas Inventory.	50 metres	EIS demonstrated there will be no negative impacts on the natural feature and their sustaining ecological functions.

**Table 4 – Extent of Land Adjacent to a Natural Heritage Feature**

Natural Heritage Feature	Boundary Definition	Extent of Adjacent Land	Conditions under which development and site alteration may be permitted
Areas of natural and scientific interest (ANSI)	As defined by MNR.	50 metres	EIS demonstrates there will be no negative impacts on the ANSI and the ecological or geological functions that sustain them.

- c) Subject to Provincial and Federal statutes, regulations and the County Forest Conservation By-law, the policies of this Plan do not limit the continuation of existing agricultural uses within or adjacent to Natural Heritage Features.
- d) This Plan encourages the retention of woodlots or portions of woodlots. It is further encouraged that wherever possible and appropriate, trees be replanted to replace trees removed if a development proceeds. This Plan encourages the conservation or replanting of roadside and fence-line shrubs and trees, and riparian area vegetation, wherever possible and appropriate in the context of new development.
- e) The County shall require consultation with the Norfolk Environmental Advisory Committee and the use of MNR's *Natural Heritage Reference Manual* for the completion of an EIS, referenced in Section 9.7.1 (Environmental Impact Study) of this Plan, to ensure that development proposals are consistent with the Natural Heritage Features policies.
- f) Council encourages opportunities that may arise with development proposals for creating new habitats, natural vegetation regeneration, conserving natural landforms and functions, for protecting and enhancing groundwater and surface water resources, and for promoting environmental education and interpretation.
- g) 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 land will not oblige the County, or other public agencies to purchase the land.

### 6.5.3 Natural Heritage System Strategy

The County may undertake a Natural Heritage System Strategy to identify, map and detail Natural Heritage Features, including the form and function of the identified features, and to identify linkages and connections between these features. The Natural Heritage System Strategy shall foster an understanding that identified Natural Heritage Features have ecological ties to other natural and physical features in the broader landscape. This approach shall be fostered through ecosystem and watershed-based planning. This system reinforces the protection, restoration and enhancement of identified Natural Heritage Features

and promotes the overall diversity and interconnectivity of Natural Heritage Features and areas. Policies related to the Natural Heritage System Strategy shall be incorporated into this Plan by amendment.

The County recognizes that a natural heritage system would benefit from public ownership to ensure protection of the features and to provide for public access, where appropriate. The County shall consider all options for the acquisition of environmental and Natural Heritage Feature land, including:

- a) Dedication;
- b) Assistance from other levels of government, agencies and charitable foundations;
- c) The bonusing provisions of the *Planning Act* for table land linkages, subject to the other relevant policies of this Plan;
- d) Density transfers for table land linkages;
- e) Land exchange;
- f) Long-term lease;
- g) Easement agreements;
- h) Land trusts; and
- i) Placing conditions on development approval.

Notwithstanding the preceding, the identification of land as part of a natural heritage system strategy does not obligate the County to acquire or purchase any land containing Natural Heritage Features.

#### **6.5.4 Long Point Biosphere Reserve**

The Long Point Biosphere Reserve, as illustrated on Schedule “C”, is a United Nations Educational, Scientific and Cultural Organization (UNESCO) recognized World Biosphere Reserve. This unique feature is recognized as being significant on a global level due to the sustainable management approach adopted for the Reserve, which reflects the human interface with the area’s unique mix of ecological systems. The Reserve includes a mix of wetlands and Carolinian species as well as a staging and stop-over point for migrating waterfowl and land birds, integrated with human settlement and recreational areas. Portions of the Long Point Biosphere Reserve Core Area are also recognized as a Provincially Significant Wetland, and as such, are afforded the protection from development as detailed in Sections 4.4 (Provincially Significant Wetlands Designation) and 6.4.1 (Provincially Significant Features).

It shall be the policy of the County that the Long Point sand spit, which is part of the Long Point Biosphere Reserve Core Area, and more specifically defined as the area east of Long Point Provincial Park, shall be protected in its natural state. No development shall be permitted on the Long Point sand spit.

## 6.6 AIR QUALITY

Air quality may be improved by reducing emissions of noxious gases, particulates, and dust. There are many emission sources but primary contributors include industrial operations and motor vehicles.

The following shall be the policy of the County:

- a) The County encourages Provincial and Federal initiatives to develop and enforce improved emission standards for motor vehicles and industrial operations.
- b) The County encourages Provincial and Federal efforts to negotiate international agreements to reduce acid rain and the importation of ozone, complex hydrocarbons and other air carried pollutants.
- c) The County supports government programs and encourages industries to substantially reduce the production of chemical products known to have negative impacts on air quality.
- d) The presence of trees in Urban Areas improves air quality and reduces energy use through shading and protection as well as having aesthetic value. The County shall prepare and adopt an urban forestry program for the maintenance and planting of trees.
- e) The County shall undertake tree planting, landscaping, and naturalization initiatives, where appropriate, on County property to improve air quality.
- f) The County is committed to a program of replacing trees that must be removed from County road allowances. The Ministry of Transportation is encouraged to enact a similar program along Provincial Highways.
- g) The County shall strive to create a transit-supportive, compact urban form consisting of mixed uses and efficient transportation networks.