

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

In 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.

6.3 SOURCE WATER PROTECTION

Uncontaminated groundwater resources are essential to Norfolk County. Norfolk's municipal and private water systems are supplied almost exclusively by groundwater resources. 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 groundwater resources is necessary in order to meet both present and future needs of residents, businesses and the natural environment. As groundwater and aquifer contamination is extremely difficult, costly and sometimes impossible to rectify, prevention of contamination is the most realistic strategy. The policies of this Section protect the quality and quantity of water generally supplied by the County's aquifers, and specifically add a measure of protection for the wellheads of the County's water supply system.

6.3.1 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.

6.3.2 Wellhead Protection

The County's wellheads act as the source of groundwater 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. This can be achieved by permitting only those land uses which represent a low level of risk to groundwater quality within Wellhead Protection Areas (WHPAs).

6.3.2.1 Identification of Wellhead Protection Areas (WHPA)

WHPAs are identified on Schedule "D" and represent the WHPAs for the wells servicing County water supplies. A WHPA illustrates four time-related capture zones. These include 0 to 50 days, 50 days to 2 years, 2 to 10 years, and 10 to 25 years. The 0 to 50 day zone represents the highest level of sensitivity, Sensitivity

1, based on the importance of the well to the water supply and the other zones ranked on a descending basis of sensitivity as Sensitivity 2, 3 and 4 respectively.

WHPAs identified on Schedule “D” in proximity to the Norfolk North Hamlet Area represent the WHPAs for the municipal wells serving Tillsonburg in Oxford County. A WHPA illustrates four time-related capture zones that were determined through Oxford County’s Phase II Groundwater protection study, which are slightly different from those used around the wells serving Norfolk County. These include 0 to 2 years, 2 to 5 years, 5 to 10 years, and 10 to 25 years. The 0 to 2 year zone would be ranked as the highest level of sensitivity, Sensitivity 1, based on the importance of the well to the water supply and the other zones ranked on a descending basis of sensitivity as Sensitivity 2, 3 and 4 respectively.

Where a substantial modification to the geographic extent of a WHPA is proposed as a result of further study, or where a County well is abandoned, an amendment to this Plan shall be required. Establishment of a new WHPA shall require an amendment to this Plan.

In determining the location of land within the WHPAs, the following shall apply:

- a) Properties located wholly within a WHPA shall be subject to the restrictions applicable to the sensitivity area rating.
- b) Properties having parts lying within more than one sensitivity rating of a WHPA shall be subject to the restrictions applicable to the more sensitive rating, unless the developed or developable portion of the property is outside of this sensitivity area, in which case the policies of the lesser sensitivity area shall apply.
- c) Properties having parts lying both in and out of a WHPA shall be subject to the restrictions applicable to the sensitive rating of the WHPA affecting the property, unless the developed or developable portion of the property is outside of the WHPA, in which case the WHPA policies do not apply to that portion of the property.

6.3.2.2 Land Use

A WHPA shall be considered as a special protection area within which certain land uses may or may not be permitted in accordance with the following policies, notwithstanding the underlying land use designation.

For the purposes of implementing the policies of Section 6.3.2, land uses which may pose a risk to municipal water supplies are categorized from highest risk posed (Category A) to lowest risk posed (Category C). These lists are based on current knowledge and may be revised by amendment to this Plan as new information becomes available. Uses or activities proposed within WHPAs that are not listed in Categories A, B or C, but are demonstrated to pose a comparable risk to water resources may be subject to the policies of this Section at the discretion of the County, in consultation with the Ministry of the Environment and Conservation Authority.

- a) Category A uses include:

- i) new facilities for the disposal, storage, handling, transfer, processing and/or recycling of any solid or liquid wastes, including landfills and lagoons, but shall not include an expansion to existing County-owned facilities;
 - ii) auto wrecking and salvage yards;
 - iii) disposal of abattoir and rendering wastes;
 - iv) mass burial sites for livestock;
 - v) bulk storage of tires;
 - vi) petroleum products refining and asphalt batching;
 - vii) storage of waste, as defined in Regulation 347 of the *Environmental Protection Act*, as amended;
 - viii) storage of chlorinated solvents;
 - ix) bulk storage of cleaning products, pesticides, herbicides, fungicides and chemicals, excluding on-farm storage for on-farm use and for agricultural production purposes; and
 - x) bulk storage of oil, gasoline or petroleum products, excluding on-farm storage for agricultural production purposes or accessory to a main use on a lot.
- b) Category B uses include:
- i) foundries;
 - ii) non-ferrous and precious metal smelting and refining;
 - iii) metal rolling, casting and extruding operations, including steel pipes and tubes;
 - iv) metal finishing operations (electroplating, electrocoating, galvanizing, painting, application of baked enamel);
 - v) assembly of aircraft and aircraft parts, motor vehicles, truck, bus bodies, trailers, rail cars, mobile homes, ships and boats;
 - vi) vehicle stampings;
 - vii) commercial or industrial dry cleaning of textiles and textile products;
 - viii) leather tanning and finishing;
 - ix) wood and wood product preservation and treatment;
 - x) automobile service stations and gas stations;
 - xi) manufacturing of unfinished fabricated metal products and parts;
 - xii) manufacturing of cable, wire and wire products;

- xiii) manufacturing of jewellery and silverware;
 - xiv) manufacturing of engines, engine parts, steering and suspension parts, wheels and brakes;
 - xv) manufacturing of agricultural, commercial and industrial machinery;
 - xvi) manufacturing, packaging, crating or bottling of resins, paints, varnish, printing inks, adhesives, and dyes;
 - xvii) manufacturing of plastics and reinforced fibreglass plastic;
 - xviii) manufacturing of pharmaceuticals and medicines;
 - xix) manufacturing of electronic components such as semiconductors, printed circuit boards and cathode ray tubes;
 - xx) manufacturing of wet electrical equipment and wet batteries;
 - xxi) finishing and dyeing of textiles;
 - xxii) transportation terminals for chemicals or hazardous substances;
 - xxiii) bulk storage of road salt;
 - xxiv) uncovered storage and handling of road salt;
 - xxv) snow storage and disposal facilities; and
 - xxvi) transformer stations.
- c) Category C uses include:
- i) automated production of baked goods, dairy, canned goods, frozen foods, processed food and meat;
 - ii) automated manufacturing of soft drinks, distilleries, breweries and wine making;
 - iii) dead stock removal operations;
 - iv) photographic developing facilities (other than accessory to other retail uses);
 - v) printing of newspaper, packaging, paper and books;
 - vi) repair of industrial equipment;
 - vii) repair of motor vehicles, aircraft, water craft, rail vehicles, trucks, buses and machinery;
 - viii) golf courses;
 - ix) airports, train and public transit terminals;
 - x) medical, health and other laboratories (other than clinics generally associated with commercial plazas);

- xi) contractor's yard defined as an outdoor area used by a general contractor for the outdoor storage of vehicles, machinery, equipment or materials contractor's yard defined as an outdoor area used by a general contractor for the outdoor storage of vehicles, machinery, equipment or materials;
- xii) funeral homes;
- xiii) cemeteries;
- xiv) manufacturing of rubber products;
- xv) manufacturing of electrical appliances, equipment, motors, lighting fixtures, lamps;
- xvi) manufacturing of electric light bulbs and tubes;
- xvii) manufacturing of dry batteries;
- xviii) manufacturing of soaps and toiletry preparations;
- xix) manufacturing of plastic and foam parts and products;
- xx) furniture, casket, cabinet and other wood products manufacturing and assembly; and
- xxi) manufacturing of coated glass.

For the purpose of interpreting the Category A, B and C uses listed above, manufacturing shall be defined as the production, compounding and processing of raw, semi-processed, fully processed or recycled goods or materials. Manufacturing does not include assembly of such goods or materials.

6.3.2.3 Existing Uses, Enlargements, Extensions or Change of Uses

- a) Existing land uses that are categorized as:
 - i) A, B or C land uses within Sensitivity 1 WHPAs; and
 - ii) A or B land uses within Sensitivity 2 WHPAs.

will be recognized as legal non-conforming uses. It is the intent of this Plan that once these uses cease to exist, such legal non-conforming status will be lost and conformity with the policies of this Plan and the provisions of the Zoning By-law shall be required.

- b) In addition to the policies of Section 9.6.3.1 (Minor Variances) of this Plan, the Committee of Adjustment considering applications under Section 45(2) of the *Planning Act* shall have regard to the manner in which uses have been classified into Category A, B and C uses when determining if a proposed use is more compatible than the existing use. When considering enlargements, extensions, or a change of use, conditions shall be imposed that will minimize the degradation of groundwater and/or surface water quality as appropriate.

6.3.2.4 Prohibited Uses/Removal – Storage Tanks

Underground storage tanks (USTs) and any related in-ground process involving the piping of chemicals and lubricants, sumps such as dry wells and machine pits and automotive repair pits shall not be permitted within Sensitivity 1 or 2 WHPAs. Above ground storage tanks (ASTs) shall only be permitted with secondary containment in Sensitivity 1 and 2 WHPAs.

Prior to the approval of new development, proponents shall be required to carry out an investigation for underground storage tanks within any WHPA and provide for the removal of same in accordance with the appropriate MOE regulations, guidelines and procedures.

6.3.2.5 Use & Performance Requirements

- a) All Category A uses listed within Section 6.3.2.2 (Land Use) shall not be permitted on land with Sensitivity 1, 2, 3 and 4 WHPAs.
- b) All Category B uses listed within Section 6.3.2.2 (Land Use) shall not be permitted on land with Sensitivity 1, 2 and 3 WHPAs.

Notwithstanding the policy prohibiting Category B uses above, new and expanding Category B uses may be permitted in Sensitivity 2 and 3 WHPAs, subject to the performance requirements as detailed in Subsection d) below provided such land uses are permitted within the underlying land use designation.

- c) All Category C uses listed within Section 6.3.2.2 (Land Use) shall be prohibited on land with Sensitivity 1, 2 and 3 WHPAs.

Notwithstanding the policy prohibiting Category C uses above, new and expanding Category C uses may be permitted in Sensitivity 2 and 3 WHPAs, subject to the performance requirements as detailed in Subsection d) below provided such land uses are permitted within the underlying land use designation.

- d) The following performance requirements shall apply to new or expanding Category B and C uses, where permitted within WHPAs:
 - i) the preparation of a disclosure report specifying the nature of the proposed use, its associated required services and facilities, the activities and operations to be conducted on-site and the substances to be used or stored on-site;
 - ii) the preparation of a detailed hydrogeological study, in consultation with the MOE, using acceptable protocols that predicts the net groundwater and/or surface water quality impacts likely to occur on the subject property, or down gradient properties and on the County well. The cumulative impacts of development in the WHPA will also be addressed in the report. The study report shall include mitigation measures for the design, construction and post-construction monitoring of the proposed use and where the impacts of

these cannot be adequately mitigated within an acceptable risk to groundwater and surface water quality to the satisfaction of the County, the use shall not be permitted;

- iii) the preparation of a spill prevention and contingency plan outlining design measures, facilities and procedures to avoid and mitigate the effects of spillage of any contaminants; and
- iv) based on all of the above, it shall be demonstrated to the satisfaction of the County that the proposed use(s) can be established on the subject property within an acceptable level of risk to groundwater.

In the review of a development proposal within a WHPA, a scoped assessment may be used based on site conditions and background information to determine if a comprehensive hydrogeological study is required. Depending on the findings of this scoped approach, the completion of a hydrogeological study, as noted above, may be required.

The cost of the disclosure report, the hydrogeological study and the spill prevention and contingency plan shall be borne by the proponent, along with the cost of any County peer review of the documents.

6.3.2.6 Abandoned Wells

Prior to new development, proponents will be required to carry out an investigation for abandoned water, oil and gas wells within any WHPA and provide for the proper sealing/plugging of same, in accordance with relevant Provincial legislation and regulations.

6.3.2.7 Aggregate Resources

New sand and gravel pits or the expansion of existing sand and gravel pits may be permitted within Sensitivity Area 2, 3 and 4 Wellhead Protection areas. The impacts of all sand and gravel extraction operations on land within Sensitivity Area 2, 3 or 4 Wellhead Protection Areas shall be assessed by the proponent and found by the County to be acceptable relative to potential adverse effects on the quantity and quality of surface water and groundwater and on municipal and domestic water supplies and groundwater recharge and discharge areas.

6.3.2.8 Development Criteria

- a) Development may be permitted in a Wellhead Protection Area where the use is permitted in the underlying land uses designation, where it is not a prohibited use under Section 6.3.2.2 (Land Use) of this Plan, and, where it meets the required performance standards of Section 6.3.2.5 (Use and Performance Requirements).
- b) The cost of any studies or investigations required as a condition of development shall be borne by the proponent, along with the cost of any County peer review of the documents.

- c) Where stormwater or drainage controls are required for any development, such studies shall be integrated with source protection measures for WHPAs.
- d) In addition to meeting the requirements for water quality, any proponent of development shall meet the water quantity requirements of this Plan.
- e) Consideration will be given to the technical merit of a development proposal as well as to how its approval will serve to enhance water quality or source protection.
- f) The County may consult with any technical agency deemed appropriate in the review of a development proposal in a WHPA.

6.3.2.9 Best Management Practices

Best management practices will be promoted in farming, other industries and commercial enterprises as a means to minimize the risk of land use activities in and around a WHPA. This would include voluntary initiatives such as the completion of Environmental Farm Plans, spill and contingency planning and implementing measures beyond that required by legislation and regulation.

6.3.2.10 Monitoring

The County or a delegated authority shall maintain a data base of information collected as part of the development review process and such information may be used to enhance the decision making process for future applications made under the provisions of this section.

The County may undertake to implement a program to establish a system of sentinel monitoring wells within County WHPAs in order to help identify contaminants in the groundwater before they reach the municipal well.

6.3.2.11 Adjacent Land

Despite the above policies, other land uses may be limited outside of the WHPA, but in the general vicinity where they are considered to have a potential impact on source protection.

6.3.2.12 Zoning By-law

The Zoning By-law shall incorporate appropriate requirements to implement the policies for wellhead protection. More specifically, the Zoning By-law shall implement the use prohibitions, performance requirements and other policies described. Provisions may be made in the By-law to prohibit uses. The Zoning By-law may set out minimum distance separations between a County well and any incompatible land use, building or structure where the use is located within a WHPA or is in the vicinity of a WHPA.

A Zoning By-law Amendment shall be required for any use not prohibited in a WHPA, subject to satisfying the policies of this Plan, and, more specifically, the criteria outlined above.

6.3.2.13 Site Plan Control

Site plan control will be required as a condition of the approval of any use of land within a WHPA. Site plan control shall be used 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.

6.4 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.

6.4.1 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.

6.4.2 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.
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.

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
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.
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.

6.4.3 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.

6.4.4 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.

6.5 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.