



natural
environment

This page has been intentionally left blank.

7. Natural Environment

A healthy natural environment is important to us all. It is our natural life-support system, providing the water we drink, the air we breathe and the land we grow our food on. A healthy natural environment is central to our quality of life and economic well-being. It is part of Niagara's appeal to both residents and tourists.

Environmental conservation is a cooperative effort involving landowners and residents, community organizations and all levels of government as outlined in Figure 7-1. In particular, at the municipal level it requires a partnership between the Region and the local municipalities. Implementation will occur through Regional and local initiatives, Planning and Development review, and private and public land stewardship. The policies in this Chapter of the Plan provide the framework for this cooperative effort. They set out the overall context within which an important part of the detailed implementation will occur at the local municipal level.

The **Planning Act**, the Provincial Policy Statement and the Greenbelt Plan, in conjunction with other Provincial policy, legislation and regulations, set out the Provincial framework for environmental planning and conservation. This Chapter of the Plan addresses this Provincial framework in developing a planning approach tailored to specific conditions in Niagara. Thus the environmental conservation provisions of the Greenbelt Plan are integrated into the policies set out below.

Policy Framework

The policy framework is based on maintaining a Healthy Landscape throughout Niagara, while giving particular attention to natural features of special significance within the broader landscape. This Core Natural Heritage System is an essential component of a Healthy Landscape. Implementation measures also are included.

The Healthy Landscape policies apply an *ecosystem* approach based upon the following principles:

- a) *Ecosystem* Health and Sustainability – to ensure healthy, resilient and self –sustaining *ecosystems* over the long term while also meeting human needs.
- b) An Ounce of Prevention – to emphasize better up-front planning to avoid problems.
- c) Environmental Protection Plus Enhancement – to protect the existing environment while supporting environmental restoration.
- d) Stewardship Plus Regulation – to combine support for the stewardship activities of landowners, community groups and public agencies with regulations to maintain *ecosystem* health.
- e) Thinking Globally, But Acting Locally – to address the cumulative effects of individual actions.

FIGURE 7-1

A Healthy Landscape A Shared Responsibility

Ensuring a healthy landscape as our community develops involves individual residents, businesses, community groups and all levels of government. Each has specific roles to play.

- Landowners, Businesses, Local Residents and Community Groups
 - Exercise environmental stewardship (e.g., conserving water and energy; reducing and recycling waste; tree planting and naturalization; good forestry management and protection of natural areas; creation of stream *buffers*; sediment and erosion control).
- Local Municipalities
 - Develop and adopt Local Official Plans and Secondary Plans containing more detailed environmental policies in conformity with Provincial and Regional policies and Plans.
 - Review and approve Zoning By-law Amendments and *development* applications (subdivision plans, site plans, severances and variances) with input from the Region and the *Conservation Authority*.
- The Niagara Peninsula *Conservation Authority*
 - Undertakes land management and stewardship programs
 - Establishes regulations and policies to manage hazards and water resources.
 - Comments to the Region and local municipalities on planning and *development* applications based on Authority policies and regulations plus delegated Federal and Provincial responsibilities, such as natural hazards and *fish habitat* protection.
 - Assists the Region in carrying out certain Provincial review responsibilities such as stormwater management.
- The Region
 - Through the Policy Plan establishes the framework for planning and *development* review in Niagara consistent with Provincial policies and Plans.
 - Implements Provincial policies through its delegated responsibilities for planning and *development* review.
 - Reviews and approves Regional and local Official Plan Amendments.
 - Reviews and comments on planning and *development* applications.
- Federal and Provincial governments
 - Give direction through legislation, regulations, policies and guidelines.
 - Establish Plans to guide *development* (e.g., the Greenbelt Plan and the Niagara Escarpment Plan).
 - Administer specific approvals such as Permits to Take Water.
 - Provide technical assistance to municipalities.

All levels of government work together, with input from the private sector and individual landowners, to develop and implement broad, community-based conservation strategies.

A Guide to the Policies

The Environmental Policies employ a broad Healthy Landscape approach to environmental conservation and restoration:

- Chapter 7.A explains the Healthy Landscape approach. It sets out Objectives and Policies that apply throughout the Region. This Chapter contains broad healthy landscape policies as well as policies dealing specifically with water resources, air quality and climate change, natural communities, land resources, shorelines, and natural hazards.
- Chapter 7.B generally identifies a Core Natural Heritage System consisting of natural areas of special significance. The Healthy Landscape policies apply to these areas and they also are subject to Natural Heritage System Policies concerned with their conservation and protection.
- Chapter 7.C sets out measures to implement the preceding policies.

The Natural System identified in the Provincial Greenbelt Plan is an important component of the broader Healthy Landscape in Niagara. The Greenbelt Natural System is made up of areas of natural heritage, hydrologic and landform features which are often functionally inter-related. It is addressed as part of the Core Natural Heritage System in Chapter 7.B as well as through the broader Healthy Landscape and Implementation Policies. Policies applying specifically to the *Greenbelt Area* do not apply within the Niagara Escarpment Plan Area.

7.A A Healthy Landscape

The Healthy Landscape concept is concerned with *ecosystem* health and environmental sustainability throughout Niagara. It recognizes that environmental conditions in any particular location affect, and are affected by, environmental conditions in the surrounding landscape. Stormwater management on a site will affect, and be affected by, conditions in the surrounding area, whether the site is a residential subdivision or a farm, a golf course or a wetland. The Healthy Landscape approach recognizes that broader landscape level patterns and processes, such as the amount of forest cover in a *watershed*, are important to *ecosystem* health. It recognizes that when the health of any one component, such as air quality, is impaired it will affect the healthy functioning of the *ecosystem* as a whole.

The Healthy Landscape policies first set out an integrated, *ecosystem*-based approach to development and conservation that addresses the interrelationships among air, land, water and plant and animal life and human activities. The planning component of this approach is outlined in more detail in Chapter 7.C.2. The Healthy Landscape policies then address specific environmental concerns in more detail: water resources; air quality and climate change; the living landscape; land resources; shorelines; and natural hazards. The Healthy Landscape policies apply throughout the Region.

Objectives for a Healthy Landscape

- Objective 7.1** To maintain a healthy natural environment for present and future generations.
- Objective 7.2** To conserve Niagara's distinctive natural character.
- Objective 7.3** To apply an *ecosystem*-based approach to planning and decision-making.
- Objective 7.4** To foster and promote cooperation among public agencies, private landowners and community groups.
- Objective 7.5** To support and encourage environmental stewardship and restoration.

Policies for a Healthy Landscape

- Policy 7.A.1** In making decisions concerning planning, *development* and conservation the Region shall employ an *ecosystem* approach addressing:
 - a) The interrelationships among air, land, water, plant and animal life, and human activities;
 - b) The health and integrity of the broader landscape, including impacts on the natural environment in neighbouring jurisdictions; and
 - c) The long term and cumulative impacts on the *ecosystem*.
- Policy 7.A.2** *Development* should maintain, enhance or restore *ecosystem* health and integrity. First priority is to be given to avoiding negative environmental impacts. If negative impacts cannot be avoided then mitigation measures shall be required.
- Policy 7.A.3** New *development*, including infrastructure, should be designed to maintain or enhance the natural features and functions of a site.

- Policy 7.A.4** Where more than one Policy in Chapter 7 applies to a planning application all of the applicable Policies are to be addressed, with the more restrictive Policy applying where there are conflicts.
- Policy 7.A.5** The Region, in partnership with other appropriate stakeholders, shall develop an environmental data base and monitoring program to assess *ecosystem* health and integrity and recommend improvements, where necessary, to this Plan.

7.A.1 Natural Vegetation and Wildlife

The Core Natural Heritage System identified in Chapter 7.B of this Plan contains the most significant natural areas in Niagara and the linkages among them. Natural vegetation and wildlife outside this System also contribute to *ecosystem* health and integrity, and to the quality of life in Niagara. Regional Council supports and encourages conservation and restoration of natural vegetation and wildlife throughout Niagara's urban, rural and *agricultural areas*.

Objectives

- Objective 7.A.1.A** To conserve the natural beauty and distinctive character of Niagara's landscape.
- Objective 7.A.1.B** To maintain, enhance and restore natural vegetation and wildlife.
- Objective 7.A.1.C** To make green space and exposure to nature part of the day-to-day living environment.

Policies

- Policy 7.A.1.1** The Region shall support efforts to achieve the following targets through the *development* and implementation of *watershed* and environmental planning studies and through voluntary landowner stewardship and restoration:
- a) 30% of the land area in the Region in forest cover or *wetland*, with at least 10% of each *subwatershed* in *wetland*; and
 - b) A 30 metre wide naturally vegetated *buffer* along 70% of the length of the *first to third order* streams in Niagara. *Agricultural uses* may continue within this *buffer* and are encouraged to employ best management practices to protect water resources and natural heritage.
- Policy 7.A.1.2** The Region shall support the efforts of landowners to maintain and improve *ecosystem* health by:
- a) Promoting *good forestry practices* and development of Woodland Management Plans;
 - b) Encouraging and supporting natural heritage conservation and restoration, including the planting of native vegetation; and
 - c) Maintaining and implementing a Regional Forest Conservation By-law regulating harvesting, destruction or injuring of trees in *woodlands*. If a local municipality has entered into an agreement pursuant to the **Municipal Act** to adopt a by-law establishing more rigorous standards respecting cutting and destruction of trees the Region may, upon request, delegate its authority to that municipality.

Policy 7.A.1.3

Local municipalities shall be encouraged to:

- a) Adopt by-laws protecting trees and *woodlands* not covered by the Regional Forest Conservation By-law or delegate their authority to the Region;
- b) Require preparation and implementation of Tree Saving Plans for new *development*, if needed; and
- c) Integrate natural features and natural vegetation, including the planting of native species, into *development*.

7.A.2 Water Resources

Objectives

Objective 7.A.2.A

To protect, improve or restore the quantity and quality of ground and surface water resources.

Objective 7.A.2.B

To maintain or restore natural stream form and flow characteristics in the region's watercourses.

Policies

Policy 7.A.2.1

Development and *site alteration* shall only be permitted if it will not have negative impacts, including cross-jurisdictional and cross-*watershed* impacts, on:

- a) The quantity and quality of surface and *ground water*;
- b) The functions of *ground water recharge* and discharge areas, aquifers and headwaters;
- c) The natural hydrologic characteristics of watercourses such as *base flow*;
- d) Surface or *ground water* resources adversely impacting on natural features or *ecological functions* of the Core Natural Heritage System or its components;
- e) Natural drainage systems, stream forms and shorelines; and
- f) Flooding or erosion.

Policy 7.A.2.2

Development and *site alteration* shall be restricted in the vicinity of *vulnerable surface* and *ground water features* of importance to municipal water supplies so that the safety and quality of municipal drinking water will be protected or improved.

Policy 7.A.2.3

As *watershed* and *ground water* studies identify surface and *ground water features*, hydrologic functions and natural heritage features and areas necessary for the ecological and hydrologic integrity of Niagara's *watersheds*, the Region shall consider appropriate amendments to this Plan.

Policy 7.A.2.4

Efficient and sustainable use of water resources shall be promoted, including practices to conserve water and protect or enhance water quality.

Policy 7.A.2.5	Combined sewer overflows and sewage treatment plant bypasses have significant environmental impacts. The elimination of sewer overflows and bypasses shall be a Regional priority.
Policy 7.A.2.6	A stormwater management plan and a sediment and erosion control plan prepared and signed by a qualified engineer may be required with a <i>development</i> application depending on: a) The scale and nature of the proposal; and b) Site-specific environmental conditions. A stormwater management plan shall be required with an application for <i>development</i> or <i>site alteration</i> in the Unique <i>Agricultural Areas</i>. Stormwater management plans shall be prepared in accordance with Policy 7.A.2.1, with the Ontario Ministry of the Environment <u>Stormwater Management Planning and Design Manual 2003</u> or its successor, and with <i>watershed</i> and/or environmental planning studies for the area. A stormwater management plan and a sediment and erosion control plan shall not be required for a new mineral aggregate operation or an expansion to an existing operation where these matters are adequately addressed through studies prepared to meet the requirements of the Aggregate Resources Act.
Policy 7.A.2.7	A stormwater management plan submitted with an application for <i>development</i> shall demonstrate that the proposal will minimize vegetation removal, grading and soil compaction, erosion and sedimentation, and impervious services as well as meeting the requirements of Policy 7.A.2.6. <i>Stormwater management facilities</i> shall not be constructed in Core Natural Heritage Areas, <i>Fish Habitat</i> , key hydrologic features, or in required <i>vegetation protection zones</i> in the Unique <i>Agricultural Areas</i> unless permitted under Chapter 7.B of this Plan.
Policy 7.A.2.8	Prior to any planning approvals, new <i>development</i> applications requiring a Provincial Permit to Take Water shall satisfy the Region that the water taking will not have negative impacts on natural <i>ecosystems</i> or the quality and quantity of water to meet existing and planned uses.
Policy 7.A.2.9	<i>Development</i> and <i>site alteration</i> shall not have significant adverse impacts on <i>ground water</i> quality or quantity. In areas where <i>development</i> and <i>site alteration</i> could significantly affect <i>ground water</i> quality or quantity the Region shall require further review of potential impacts.
Policy 7.A.2.10	The Region shall oppose the transfer of water outside the Great Lakes Basin.
Policy 7.A.2.11	The Region recognizes the importance of municipal drains for drainage of agricultural lands and, in some areas, for conveying irrigation water. The Region supports design, construction and maintenance of Requisition and Petition Drains authorized under the Drainage Act in accordance with Best Management Practices to avoid significant detrimental effects on farmland, water resources,

natural areas and fish and *wildlife habitat* and encourages local municipalities to include policies in their official plans to achieve this.

7.A.3 Air Quality and Climate Change

Air pollution is a significant health concern and affects agriculture, natural vegetation and wildlife. Climate change poses significant economic, environmental and health risks. Many of the activities responsible for greenhouse gas emissions also cause other forms of air pollution. Policies elsewhere in this Plan make a significant contribution to reducing emissions by:

- a) Promoting energy efficiency and alternatives to fossil fuel based energy in Regional facilities and operations;
- b) Emphasizing compact, mixed use *development* to reduce the need for travel;
- c) Supporting transit, walking and cycling;
- d) Encouraging waste reduction and diversion, use of landfill gas and water conservation; and
- e) Promoting green space, tree planting and natural heritage conservation.

Objectives

- Objective 7.A.3.A** To reduce air pollutant and greenhouse gas emissions.
- Objective 7.A.3.B** To promote measures that remove and store atmospheric carbon that otherwise would contribute to climate change.
- Objective 7.A.3.C** To adapt to the effects of climate change.

Policies

- Policy 7.A.3.1** The Region shall develop and implement a plan to reduce greenhouse gas emissions from Regional operations by at least 20% below 1994 levels and emissions from the community as a whole by at least 6% below 1994 levels by 2014.
- Policy 7.A.3.2** The Region shall encourage and support energy conservation, district heating and combined heat and power, and alternative and renewable energy sources developed in accordance with Provincial and Federal legislation, policies and regulations.
- Policy 7.A.3.3** The Region shall encourage the Federal and Provincial governments and local municipalities to pursue reductions in air pollutant and greenhouse gas emissions and to develop and implement strategies to adapt to the impacts of climate change.
- Policy 7.A.3.4** Recognizing that some climate change may be unavoidable, the Region shall develop and implement plans to adapt to potential impacts.

7.A.4 Landforms, Geology and Soils

Objectives

- Objective 7.A.4.A** To protect significant landforms and geological features and conserve Niagara's soils.
- Objective 7.A.4.B** To prevent *site alterations* that will have negative environmental impacts or pose hazards to life or property.

Policies

- Policy 7.A.4.1** *Development* and *site alteration* may be permitted within an *Earth Science Area of Natural and Scientific Interest (ANSI)* shown on Schedule C if it has been demonstrated that there will be no *significant negative impacts* on the earth science features for which the area was identified or on *ecological functions* related to the ANSI.
- Policy 7.A.4.2** Where an amendment to Regional or local planning documents or a major *development* is proposed within an Earth Science ANSI adequate information shall be submitted with the application respecting:
- a) Site topography, significant geological features and stratigraphic exposures; and
 - b) Planning and design measures recommended to avoid negative impacts on the feature and its *ecological functions* or, if not possible, to mitigate them.
- Policy 7.A.4.3** Linear public utilities and infrastructure may be permitted within an Earth Science ANSI if there is no reasonable alternative location and they are designed to avoid or minimize negative impacts.
- Policy 7.A.4.4** Where *development* is planned, *site alteration* should not occur without prior planning approval. Regional Council supports *Site Alteration* By-laws and their adoption by local municipalities to regulate:
- a) Placing or dumping of fill;
 - b) Alterations to the grade of land prior to approval; and
 - c) Removal of topsoil.

7.A.5 Shorelines

Objectives

- Objective 7.A.5.A** To maintain and, where possible, improve public access to open space along Niagara's shorelines.
- Objective 7.A.5.B** To maintain Niagara's shorelines in as natural a condition as possible and promote environmental protection, restoration and enhancement.

Policies

- Policy 7.A.5.1** Public access to Niagara's shorelines as shown on Schedule C shall be maintained or enhanced. Road closings that would reduce public access shall not be permitted unless a suitable new access is provided nearby.
- Policy 7.A.5.2** The Region shall support public acquisition of property along Niagara's shorelines for environmental and recreational purposes.
- Policy 7.A.5.3** Landowners shall be encouraged to maintain Niagara's shorelines in a natural state by:
- a) Maintaining or establishing a naturally vegetated *buffer* strip along the shoreline; and
 - b) Using non-structural shoreline protection such as bio-engineering with native vegetation.
- Policy 7.A.5.4** Where major *development* is proposed along Niagara's shorelines:
- a) Public access to the shoreline shall be provided;
 - b) Efforts shall be made to maintain a view of the shoreline from beyond the *development*;
 - c) Where feasible the shoreline should be maintained in, or restored to, a naturally vegetated state; and
 - d) Suitable shoreline lands should be dedicated, where possible, to an appropriate public agency where such lands would provide public benefits or are identified as part of a planned public trail system. Normally these lands shall be located above the stable top of bank.
- Policy 7.A.5.5** *Development* and *site alteration* shall not be permitted in the dune areas along the Lake Erie shoreline unless they are in compliance with other policies in this Plan and it has been demonstrated that they will not have a significant negative impact on the natural features and *ecological functions* of the dunes or on adjacent properties. An Environmental Impact Study in accordance with Policies 7.B.2.2 to 7.B.2.5 shall be required with planning applications in dune areas.

7.A.6 Natural Hazards

Natural hazards pose risks to life and property. *Development* and *site alteration* shall be directed away from *hazardous lands* and *hazardous sites* where there is an unacceptable risk to public health or safety or to property. *Hazardous lands* are lands that could be unsafe due to naturally occurring processes such as flooding, erosion, slope failure and beach movement. *Hazardous sites* are those that could be unsafe due to naturally occurring physical conditions such as unstable soil or bedrock.

Objectives

- Objectives 7.A.6.A** To minimize the risk of personal injury, loss of life or property damage, public costs and social and economic disruption from natural hazards.
- Objective 7.A.6.B** To ensure that *development* and *site alteration* do not create new hazards, aggravate existing ones, or have negative environmental impacts.

Policies for Natural Hazards

- Policy 7.A.6.1** *Hazardous lands* and sites shall be as identified and mapped by the Niagara Peninsula *Conservation Authority*. Where an application for *development* or *site alteration* is made and such mapping is not available the location and extent of *hazardous lands* or sites shall be as determined by the *Conservation Authority* after considering an appropriate study prepared and signed by a qualified engineer and submitted with the application.
- Policy 7.A.6.2** Local Official Plans and Zoning By-laws shall include maps showing the location and extent of *hazardous lands* and sites as determined by the *Conservation Authority*.
- Policy 7.A.6.3** Along the shorelines of Lake Erie and Lake Ontario:
- a) *Development* and *site alteration* shall not be permitted within the dynamic beach hazard limit; and
 - b) *Development* and *site alteration* may be permitted within the erosion hazard limit and the flooding hazard limit subject to the approval of the *Conservation Authority* conditional on part (a).
- Policy 7.A.6.4** *Development* and *site alteration* may be permitted within *floodplains* if it has been demonstrated to the satisfaction of the *Conservation Authority* that it is in accordance with the *Conservation Authority's* "Fill, Construction and Alteration to Waterways Regulation" (as amended) or its successor, and subject to the *Conservation Authority's* approval.

Policy 7.A.6.5

Along *valleylands* where the valley bank height is equal to or greater than 3 metres the following provisions apply:

- a) A minimum setback of 7.5 metres from the stable top of the valley slope, as identified by the *Conservation Authority*, shall be required for all new structures, including swimming pools and subsurface sewage disposal systems, and for *site alterations*.
- b) Where the *Conservation Authority* finds evidence of slope instability or where the angle of the valley slope exceeds 3:1 (Horizontal Distance: Vertical Distance) a geotechnical report prepared by a qualified engineer shall be submitted with an application for new *development* or *site alteration*. A setback greater than 7.5 metres may be required where the *Conservation Authority* has determined, after considering the geotechnical report, that an increased setback is needed to address site specific conditions.
- c) Within Urban Boundaries the Region supports the maximum use of land for *development* while avoiding hazardous conditions. A reduced setback may be considered where an existing lot provides insufficient depth to accommodate the required setback provided that a geotechnical report submitted by the applicant and approved by the *Conservation Authority* finds that the reduced setback, with mitigative measures, will maintain long term bank stability with no adverse environmental impacts, will not create new hazards or increase existing ones, and that no *development* or *site alteration* will be permitted below the top of the valley bank.
- d) Where possible existing vegetation should be maintained within the setbacks required under this policy. Vegetation below the top of the valley slope shall not be disturbed.
- e) New lots created through plan of subdivision, plan of condominium or consent shall not extend below the top of the valley slope as determined by the *Conservation Authority*. Lands below the top of the valley slope in plans of subdivision and plans of condominium shall be maintained as one block. The Region shall encourage dedication of these lands for conservation purposes either to the appropriate local municipality or to another public agency where there is a willing recipient.

Policy 7.A.6.6

On *hazardous sites development* and *site alteration* will not be permitted unless a geotechnical study, prepared and signed by a qualified engineer, has demonstrated to the satisfaction of the *Conservation Authority* that the requirements of Policy 7.A.6.8 will be met.

Policy 7.A.6.7

On *hazardous lands* and *hazardous sites* the following uses shall not be permitted:

- a) institutional uses associated with hospitals, nursing homes, pre-school, school nurseries, day care or schools;
- b) essential emergency services such as that provided by fire, police and ambulance stations and electrical substations; and
- c) uses associated with the disposal, manufacture, treatment or storage of hazardous substances.

Policy 7.A.6.8

Where under this Plan *development* and *site alteration* may be permitted on portions of *hazardous lands* or sites the *Conservation Authority* must be satisfied that the effects and risk to public safety are minor and can be managed or mitigated so that:

- a) *Development* and *site alteration* will be in accordance with provincial *floodproofing standards*, *protection works standards* and access standards;
- b) Vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- c) New on-site or off-site hazards will not be created or existing ones aggravated; and
- d) No adverse environmental impacts will result.

7.B The Core Natural Heritage System

The Core Natural Heritage System contains environmental features and functions of special importance to the character of the Niagara community and to its ecological health and integrity. The Core Natural Areas within the System are significant in the context of the surrounding landscape because of their size, location, outstanding quality or *ecological functions*. They contribute to the health of the broader landscape, protecting water resources, providing *wildlife habitat*, reducing air pollution and combating climate change. Some contain features of provincial or even national significance, such as threatened or *endangered species*.

Within a settled community such as Niagara, natural areas can become isolated islands of green in a landscape dominated by human activity. Natural areas are healthier and function better if they are connected by naturally vegetated corridors. Corridors support the movement of wildlife and dispersal of plant material, playing a vital role in maintaining *ecosystem* health and integrity.

Landowner stewardship plays a key role in Natural Heritage conservation. Land use regulations also are needed, however, to protect Natural Heritage while at the same time providing for growth and *development*.

The Provincial Greenbelt Plan includes provisions to protect, maintain and enhance the Natural Heritage and Water Resource Systems within the *Greenbelt Area* shown on Schedule C. In this Chapter of the Official Plan the Greenbelt Natural Heritage and Water Resources Systems are treated as components of the broader Regional Core Natural Heritage System. The Provincial Greenbelt Natural Heritage System is shown on the Core Natural Heritage Map included in this Plan. The key natural heritage features within the Greenbelt Natural Heritage System are identified as Environmental Protection Areas or *Fish Habitat* on the Schedule. Key hydrologic features have not been shown on Schedule C but would include those features identified as *Fish Habitat*.

Objectives

- Objective 7.B.1** To maintain, restore and, where possible, enhance the long term ecological health, integrity and biodiversity of the Core Natural Heritage System and its contributions to a Healthy Landscape.
- Objective 7.B.2** To recognize the linkages among natural heritage features and ground and surface water resources.

Policies

- Policy 7.B.1.1** The Core Natural Heritage System consists of:
- a) Core Natural Areas, classified as either Environmental Protection Areas or Environmental Conservation Areas;
 - b) Potential *Natural Heritage Corridors* connecting the Core Natural Areas;
 - c) the Greenbelt Natural Heritage and Water Resources Systems; and
 - d) *Fish Habitat*.

The System generally is shown on Schedule C, which provides an overall indication of provincially and regionally significant natural features and provides the framework for natural heritage planning and *development* review in Niagara. The Niagara Region Planning and Development Services Department should be contacted for more detailed information. Natural heritage features may be further

defined through future studies. Additional Natural Heritage features of local significance may be identified by local municipalities in their planning documents.

Policy 7.B.1.2

Development and *site alteration* within the Core Natural Heritage System, where potentially permitted by policies elsewhere in this Plan, shall be subject to the Healthy Landscape Policies in Chapter 7.A as well as the Core Natural Heritage System Policies.

Policy 7.B.1.3

Environmental Protection Areas include provincially significant *wetlands*; provincially significant Life Science Areas of Natural and Scientific Interest (ANSIs); and significant habitat of endangered and *threatened species*. In addition, within the Greenbelt Natural Heritage System, Environmental Protection Areas also include *wetlands*; significant *valleylands*; significant *woodlands*; significant *wildlife habitat*; habitat of *species of concern*; publicly owned conservation lands; savannahs and tallgrass prairies; and alvars.

Mapping of the significant *habitat of endangered and threatened species* is not included in the Core Natural Heritage Map although much of this habitat may be found within the Environmental Protection and Environmental Conservation areas shown on the Map. Significant *habitat of endangered and threatened species* will be identified through the Planning and Development review process. Where such habitat is identified *development* and *site alteration* shall be subject to the policies for Environmental Protection Areas.

Policy 7.B.1.4

Environmental Conservation Areas include significant *woodlands*; significant *wildlife habitat*; significant habitat of *species of concern*; regionally significant Life Science ANSIs; other evaluated *wetlands*; significant *valleylands*; savannahs and tallgrass prairies; and alvars; and publicly owned conservation lands.

Policy 7.B.1.5

To be identified as significant a *woodland* must meet one or more of the following criteria:

- a) Contain threatened or *endangered species* or *species of concern*;
- b) In size, be equal to or greater than:
 - i. 2 hectares, if located within or overlapping Urban Area Boundaries;
 - ii. 4 hectares, if located outside Urban Areas and north of the Niagara Escarpment;
 - iii. 10 hectares, if located outside Urban Areas and south of the Escarpment;
- c) Contain interior *woodland* habitat at least 100 metres in from the *woodland* boundaries;
- d) Contain *older growth forest* and be 2 hectares or greater in area;
- e) Overlap or contain one or more of the other significant natural heritage features listed in Policies 7.B.1.3 or 7.B.1.4; or
- f) Abut or be crossed by a watercourse or water body and be 2 or more hectares in area.

Policy 7.B.1.6

Key hydrologic features include permanent and intermittent streams, lakes and their littoral zones, seepage areas, springs and *wetlands*. When key hydrologic features are identified through *watershed* or other studies the Region will consider an amendment to this Plan to show those features on a Schedule. In the interim, within the *Greenbelt Area*, if potentially permitted *development* is proposed in an area within the Unique *Agricultural Areas* where key hydrologic features have not been identified, the applicant may be required to identify the hydrologic features on the site of the proposed *development* as well as within 120 meters of the site boundary.

Policy 7.B.1.7

The boundaries of Core Natural Areas, Potential *Natural Heritage Corridors* and *Fish Habitat* are shown on Schedule C. They may be defined more precisely through *Watershed* or Environmental Planning Studies, Environmental Impact Studies, or other studies prepared to the satisfaction of the Region and may be mapped in more detail in local official plans and zoning by-laws. Significant modifications, such as a change in the classification of a Core Natural Area, or a significant change in the spatial extent or boundaries of a feature, require an amendment to this Plan unless otherwise provided for in this Plan. Only minor boundary adjustments to Environmental Protection Areas will be permitted without Amendment to this Plan.

In considering both refinements and significant modifications to the mapping or classification of features shown on Schedule C the Region shall consult with:

- a) the Ministry of Natural Resources respecting changes to Environmental Protection Areas other than in the Greenbelt Natural Heritage System, where consultation shall only be required respecting those Environmental Protection Areas identified as Provincially Significant *Wetlands* or Provincially Significant Life Science Areas of Natural and Scientific Interest; or
- b) the Ministry of Natural Resources and the Department of Fisheries and Oceans or its designate respecting changes to *Fish Habitat*.

Within the *Greenbelt Area* mapping of Core Natural Heritage System components may only be refined at the time that a local official plan initially is brought into conformity with the Provincial Greenbelt Plan.

Policy 7.B.1.8

Where, through the review of a planning application, it is found that there are important environmental features or functions that have not been adequately evaluated, the applicant shall have an evaluation prepared by a qualified biologist in consultation with the Region, the local municipality and, where appropriate, the Ministry of Natural Resources and the Niagara Peninsula *Conservation Authority*. If the evaluation finds one or more natural heritage features meeting the criteria for identification as Core Natural Heritage System components the appropriate Core Natural Heritage System policies shall apply.

Policy 7.B.1.9

If a feature meeting the criteria for identification as a Core Natural Heritage System component is identified through an evaluation under Policy 7.B.1.8 or through other studies, it shall be considered for inclusion in the Core Natural Heritage System through an amendment to this Plan. Where such a feature is identified on lands involved in an ongoing planning application the appropriate Core Natural Heritage System policies shall apply.

Policy 7.B.1.10

Notwithstanding Policies 7.B.1.15 and 7.B.1.20 and the Policies in Chapter 7.A.2, within Environmental Protection Areas, within *Fish Habitat* in the Greenbelt Natural Heritage System, within key hydrologic features within the Unique *Agricultural Areas*, and within any associated *vegetation protection zones* in the *Greenbelt Area*, *development* and *site alteration* shall not be permitted except for the following:

- a) forest, fish and wildlife management;
- b) conservation and flood or erosion control projects where it has been demonstrated that they are necessary in the public interest and other alternatives are not available; and
- c) small scale, passive recreational uses and accessory uses such as trails, boardwalks, footbridges, fences, docks and picnic facilities that will have no significant negative impact on natural features or *ecological functions* of the Core Natural Heritage System.

Where such uses are proposed, the proponent shall be required to prepare an Environmental Impact Study (EIS) to the satisfaction of the Region in accordance with Policies 7.B.2.1 to 7.B.2.5.

Policy 7.B.1.11

Development and *site alteration* may be permitted without an amendment to this Plan:

- a) In Environmental Conservation Areas; and
- b) On adjacent lands to Environmental Protection and Environmental Conservation Areas as set out in Table 7-1 except for those lands within *vegetation protection zones* associated with Environmental Protection Areas in the Greenbelt Natural Heritage System.

If it has been demonstrated that, over the long term, there will be no significant negative impact on the Core Natural Heritage System component or adjacent lands and the proposed *development* or *site alteration* is not prohibited by other Policies in this Plan. The proponent shall be required to prepare an Environmental Impact Study (EIS) in accordance with Policies 7.B.2.1 to 7.B.2.5.

Where it is demonstrated that all, or a portion of, an Environmental Conservation Area does not meet the criteria for designation under this Plan and thus the site of a proposed *development* or *site alteration* no longer is located within the Environmental Conservation Area or adjacent land then the restrictions on *development* and *site alteration* set out in this Policy do not apply.

Table 7 1. Guidelines for Environmental Impact Study Requirements

NATURAL HERITAGE FEATURE	Is an EIS required?	
	<i>Development or site alteration involves lands within the natural heritage feature</i>	<i>Development or site alteration involves adjacent lands</i>
Areas identified as Environmental Protection Area (EPA)		
Provincially Significant Wetland (PSW)	Development not permitted – no EIS	EIS required for development within 120 metres
Provincially Significant Life Science Area of Natural and Scientific Interest (ANSI)	Development not permitted – no EIS	EIS required within 50 metres
Significant Habitat of endangered and threatened species	Where habitat requirements are well defined, development not permitted – no EIS. Where habitat requirements not well defined an EIS is required	EIS required for development within 50 metres. Habitat must be defined in consultation with the MNR
Key natural heritage features within the Greenbelt Natural Heritage System*	Development not permitted – no EIS	EIS required for development within 120 metres
Areas identified as Environmental Conservation Area (ECA)		
Significant Woodlands	EIS required Tree Saving Plan required	EIS required for development within 50 metres
Significant Wildlife Habitat	EIS required	EIS required for development within 50 metres
Significant Habitat of Species of Concern	EIS required	EIS required for development within 50 metres
Critical Fish Habitat (type 1)	EIS required	EIS required for development within 30 metres

Table 7-1 and the Greenbelt Plan:

The Greenbelt Plan provides for some exemptions with respect to *development and site alteration* within the Protected Countryside. Reference the Greenbelt Plan for applicable policies in relation to infrastructure, shorelines, existing uses, renewable and non-renewable resources.

	Other Fish Habitat (type 2 and 3)	EIS required	EIS required for development within 15 metres
	Significant Valleylands	EIS required	EIS required for development within 50 metres
	Other Evaluated Wetland	EIS required	EIS required for development within 50 metres
	Other Features in the Greenbelt Plan		
	Key Hydrologic Feature*	Development not permitted – no EIS	EIS required for development within 120 metres

Policy 7.B.1.12

Notwithstanding Table 7-1, EIS requirements may be waived in accordance with Policy 7.B.2.2 and the waiving requirements outlined in the EIS guidelines.

Policy 7.B.1.13

Where *development* or *site alteration* is proposed in or near a Potential *Natural Heritage Corridor* the Corridor shall be considered in the *development* review process. *Development* should be located, designed and constructed to maintain and, where possible, enhance the *ecological functions* of the Corridor in linking Core Natural Areas or an alternative corridor should be developed. The Potential *Natural Heritage Corridors* are illustrated conceptually on Schedule C. The Region shall undertake a study to further define Corridors within the Core Natural Heritage System.

Policy 7.B.1.14

Notwithstanding other policies in this Plan essential public uses of a linear nature including utilities, communication facilities and transportation routes such as the Niagara – GTA Corridor (the Mid-Peninsula Transportation Corridor) may be permitted within the Core Natural Heritage System or adjacent lands where an Environmental Assessment for the proposed use has been approved under Provincial or Federal legislation.

Policy 7.B.1.15

Within *Fish Habitat* as identified on Schedule C, or adjacent lands as specified in Table 7-1, *development* and *site alteration* may be permitted if it will result in no net loss of the productive capacity of *fish habitat* as determined by the Department of Fisheries and Oceans or its designate. The proponent shall be required to prepare an Environmental Impact Study (EIS) to the satisfaction of the Department of Fisheries and Oceans, or its designate, in accordance with Policies 7.B.2.1 to 7.B.2.5.

First priority will be given to avoiding harmful alteration or destruction of *fish habitat* by redesigning or relocating the proposal or mitigating its impacts. A naturally vegetated *buffer* zone, a minimum 30 metres in width as measured from the stable top of bank, generally shall be required adjacent to Critical *Fish Habitat* as defined by Ministry of Natural Resources. A minimum 15 metre *buffer* from the stable top of bank shall be required adjacent to Important or Marginal *Fish Habitat* as defined by that Ministry. A narrower *buffer* may be considered where the EIS has

demonstrated that it will not harm fish or *fish habitat*, but in no case shall the *buffer* adjacent to Critical *Fish Habitat* be less than 15 metres.

Agricultural cultivation does not require planning approval and is not subject to these requirements.

Policy 7.B.1.16

The Region recognizes that the primary function of the Municipal Drains shown on Schedule C is to provide drainage for agricultural lands. These drains also may be used to convey irrigation water for agricultural use. The Region supports ongoing drain maintenance in accordance with the Federal Department of Fisheries and Oceans' Class Authorization System for Agricultural Municipal Drains. Where *development*, *site alteration* or building is proposed adjacent to a Municipal Drain a *buffer* zone a minimum 15 metres in width measured from the stable top of bank shall be required to provide access for drain maintenance, protect the integrity of the drains and protect environmental health. A narrower *buffer* may be permitted where it has been demonstrated to the satisfaction of the local municipality and the Niagara Peninsula *Conservation Authority* that there will not be a *significant* negative impact on the maintenance and functioning of the drain.

Policy 7.B.1.17

The Region shall encourage the Provincial and Federal governments to develop and implement programs to address crop damage from wildlife.

Policy 7.B.1.18

Where *development* or *site alteration* is approved in or adjacent to the Core Natural Heritage System new lots thus created shall not extend into either the area to be retained in a natural state as part of the Core Natural Heritage System or the *buffer* zone identified through an Environmental Impact Study prepared in accordance with Policies 7.B.2.1 to 7.B.2.5. The lands to be retained in a natural state and the adjacent *buffer* zone shall be maintained as a single block and zoned to protect their natural features and *ecological functions*. The Region shall encourage the local municipalities, the *Conservation Authority* and other appropriate public and private conservation organizations to assume ownership of these lands.

Policy 7.B.1.19

Where *development* or *site alteration* is approved within the Core Natural Heritage System or adjacent lands as set out in Table 7-1 the applicant shall submit a Tree Saving Plan maintaining or enhancing the remaining natural features and *ecological functions*. The Plan shall be prepared in accordance with the Regional Forest Conservation By-law and the local tree conservation by-law as appropriate and its implementation monitored by a member of the Ontario Professional Forestry Association.

Policy 7.B.1.20

Development and *site alteration* may be permitted within the Greenbelt Natural Heritage System if it is not prohibited by other Policies in this Plan and it has been demonstrated through an Environmental Impact Study prepared in accordance with Policies 7.B.2.1 to 7.B.2.5 that:

- a) Connectivity along the system and between Environmental Protection Areas, *Fish Habitat* and key hydrologic features is maintained, or where possible, enhanced;
- b) The removal of natural features not identified as Environmental Protection

- Areas, *Fish Habitat* or key hydrologic features will be avoided;
- c) The disturbed area of any site does not exceed 25 percent, and the impervious surface 10 percent, of the total developable area, except for recreational uses and mineral resource uses. With respect to golf courses, the disturbed area shall not exceed 40 percent of the site;
 - d) At least 30 percent of the total developable area of the site will remain or be returned to *natural self-sustaining vegetation*, recognizing that standards for mineral aggregate operations, wayside pits and quarries are established through the Non-Renewable Resources Policies in the Greenbelt Plan; and
 - e) Buildings or structures are planned to optimize the compatibility of the proposal with the natural surroundings.

Existing and new agricultural, agricultural-related and *secondary uses* are permitted within the Greenbelt Natural Heritage System and are not subject to the conditions set out in this Policy but are subject to the other Policies in this Plan.

Policy 7.B.1.21

Within the *Greenbelt Area* establishment of a self-sustaining, *vegetation protection zone* shall be required where new *development* or *site alteration* is approved within 120 metres of:

- a) An Environmental Protection Area or *Fish Habitat* within the Greenbelt Natural Heritage System; or
- b) A key hydrologic feature anywhere within the Unique Agricultural Areas.

The *vegetation protection zone* shall be of sufficient width to protect the natural heritage or hydrologic feature from adverse environmental impacts of the *development* or *site alteration* as determined through an Environmental Impact Study prepared in accordance with Policies 7.B.2.1 to 7.B.2.5 and shall be established and maintained as *natural self-sustaining vegetation*.

Policy 7.B.1.22

The *vegetation protection zone* required under Policy 7.B.1.21 shall be a minimum 30 metres wide in the case of *wetlands*, seepage areas and springs, *fish habitat*, permanent and intermittent streams, lakes and *significant woodlands*.

Policy 7.B.1.23

Notwithstanding Policies 7.B.1.21 and 7.B.1.22 new buildings and structures for agricultural uses adjacent to Environmental Protection Areas or *Fish Habitat* within the Greenbelt Natural Heritage System or key hydrologic features within the Unique Agricultural Areas shall provide a 30 metre wide *vegetation protection zone* but will not be required to establish natural, self-sustaining vegetation if the land is, and will continue to be, used for agricultural purposes.

Policy 7.B.1.24

New or expanding infrastructure within the Unique Agricultural Areas shall avoid Core Natural Areas, *Fish Habitat* and key hydrologic features unless need has been demonstrated and it has been established that there is no reasonable alternative. Where new or expanding infrastructure crosses the Greenbelt Natural Heritage System or intrudes into or results in the loss of a Core Natural Area, *Fish Habitat* or key hydrologic feature, including related landform features, planning, design and construction practices shall minimize negative impacts and disturbance on the feature or its related functions, and where reasonable, maintain or improve

connectivity among Core Natural Areas, *Fish Habitat* and key hydrologic features and their *vegetation protection zones*.

Policy 7.B.1.25

Within the Unique Agricultural Areas in the *Greenbelt Area* infrastructure serving the agricultural sector, such as an agricultural irrigation system, may need certain elements to be located within a Core Natural Area, *Fish Habitat* or a key hydrologic feature or within the *vegetation protection zone* of such a feature. In such instances, these elements of the infrastructure may be established within the feature itself or its associated *vegetation protection zone* but all reasonable efforts shall be made to keep such infrastructure out of Core Natural Areas or *Fish Habitat* or key hydrologic features or the *vegetation protection zones*.

Policy 7.B.1.26

Subject to other policies in this Plan an expansion to an existing use located within an Environmental Conservation Area or *Fish Habitat* or adjacent lands to a Core Natural Heritage System Component as identified in Table 7-1 may be permitted if it will have no *significant* negative impact on the natural feature or its *ecological functions*. If the expansion involves a substantial *intensification* in land use or increase in the land area devoted to the use the proponent shall prepare an Environmental Impact Study in accordance with Policies 7.B.2.1 to 7.B.2.5.

Policy 7.B.1.27

Agricultural uses existing as of the date of adoption of this Policy may continue within the Core Natural Heritage System and adjacent lands as identified in Table 7-1. New farm buildings or structures and expansions to existing farm buildings or structures are permitted within Environmental Conservation Areas except for *wetlands* in the Unique Agricultural Areas, within *Fish Habitat* other than in the Greenbelt Natural Heritage System and within lands adjacent to a Core Natural Heritage System Component as identified in Table 7-1, subject to the other Policies in this Plan and the following provisions:

- a) if the proposal is small in scale, and it has been demonstrated that there is no reasonable alternative, that the proposal is directed away from the feature to the maximum extent possible and negative impacts on the natural feature and *ecological functions* have been minimized; or
- b) if the proposal is large in scale, involving a major *intensification* in land use or a major increase in land area, it is subject to Policies 7.B.1.10 to 7.B.1.12, 7.B.1.15 to 7.B.1.16 and 7.B.1.26.

Policy 7.B.1.28

In the Greenbelt Natural Heritage System, subject to the other Policies in this Plan, expansions to existing farm buildings and structures may be permitted within *Fish Habitat* and within Environmental Protection Areas other than Provincially *Significant Wetlands* and Life Science Areas of Natural and Scientific Interest and *significant habitat of endangered and threatened species* provided that:

- a) if the proposal is small in scale, there is no reasonable alternative, the expansion has been directed away from the feature as much as possible and negative impacts on the natural feature and *ecological functions* have been minimized; or
- b) if the proposal is large in scale, involving a major *intensification* in land use or a major increase in land area, it is subject to Policies 7.B.1.10 to 7.B.1.12, 7.B.1.15 to 7.B.1.16 and 7.B.1.26.

- Policy 7.B.1.29** If a proposed single residential lot is to be located entirely within lands adjacent to a Core Natural Heritage System Component as identified in Table 7-1 the requirement for an Environmental Impact Study may be waived if the *Planning Authority* is satisfied that standard mitigation measures can avoid negative impacts on the natural features and *ecological functions* of the Core Natural Heritage System Component and adjacent lands.
- Policy 7.B.1.30** A new residence and accessory uses may be permitted on an existing lot of record located in whole or in part within an Environmental Conservation Area, *Fish Habitat* or adjacent lands thereto as set out in Table 7.1 if they are located, designed and constructed to minimize negative impacts on the natural features and *ecological functions* of the Component and adjacent lands.
- Policy 7.B.1.31** Where a new mineral aggregate operation or an expansion to an existing operation is proposed outside the Greenbelt Natural Heritage System within an Environmental Conservation Area, a Potential *Natural Heritage Corridor* or *Fish Habitat* or within adjacent lands as set out in Table 7-1 the Environmental Impact Study will include consideration of:
- a) Whether the following will be maintained or enhanced before, during and after mineral aggregate extraction,
 - i) connectivity among Core Natural Areas and hydrologic features; and
 - ii) *significant* hydrologic features and functions; and
 - b) How *significant* natural heritage features and *ecological functions* that would be affected will be replaced, on or off site, with features and functions of equal or greater ecological value that are representative of the natural *ecosystem* in that particular setting or ecodistrict.
- Policy 7.B.1.32** Notwithstanding other policies of this Plan, within the Greenbelt Natural Heritage System:
- a) No new mineral aggregate operations and no wayside pits and quarries, or any ancillary or accessory use thereto, will be permitted within:
 - i) *Significant wetlands*;
 - ii) Significant habitat of endangered species and threatened species; and
 - iii) *Significant woodlands* unless the *woodland* is occupied by young plantation or early successional habitat as defined by the Ministry of Natural Resources. In this case, the application must demonstrate that the specific provisions of Policies 7.B.1.33 (b), (c) and 7.B.1.34 (c) have been addressed and will be met by the operation.

For the purposes of this Policy *significant woodland* means an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history. The Provincial Ministry of Natural Resources will identify criteria to determine whether a *woodland* is *significant*.

Where a *woodland* is located on a site proposed for a new mineral aggregate operation, or on adjacent lands, the applicant shall have an evaluation of the *woodland's* significance prepared by a qualified biologist based on the above definition. The evaluation shall be prepared to the satisfaction of the Region, the local municipality and the Ministry of Natural Resources.

- b) An application for a new mineral aggregate operation or new wayside pit or quarry may only be permitted in other Environmental Protection Areas, *Fish Habitat* and key hydrologic features and any *vegetation protection zones* associated with such features where the application demonstrates:
 - i) How ground and *surface water features* and their associated functions will be protected or enhanced; and
 - ii) That the specific provisions in Policies 7.B.1.33 (b), (c) and 7.B.1.34 (c) have been addressed, and that they will be met by the operation; and
- c) Any application for a new mineral aggregate operation, or expansion of an existing mineral aggregate operation shall demonstrate through an Environmental Impact Study prepared in accordance with Chapter 7.B.2, or through an equivalent study prepared to meet the requirements of the **Aggregate Resources Act**:
 - i) How connectivity among Core Natural Heritage System features and key hydrologic features will be maintained before, during and after the extraction of mineral aggregates;
 - ii) How the operator could immediately replace any habitat that would be lost from the site with equivalent habitat on another part of the site or on adjacent lands; and
 - iii) How ground and *surface water features* will be protected or enhanced; and
- d) Expansion of an existing mineral aggregate operation may be permitted in the Greenbelt Natural Heritage System, including Core Natural Heritage System features and key hydrologic features, and in any associated *vegetation protection zone*, only if the expansion is consistent with the Provincial Policy Statement.

Policy 7.B.1.33

When operators are undertaking rehabilitation of mineral aggregate operation sites within the Unique Agricultural Areas in the *Greenbelt Area* the following provisions apply:

- a) The disturbed area of a site will be rehabilitated to a state of equal or greater ecological value, and for the entire site, long-term ecological integrity will be maintained or restored, and to the extent possible, improved;
- b) If there are Core Natural Heritage System features or key hydrologic features on the site, or if such features existed on the site at the time of application:
 - i. The health, diversity and size of these features will be maintained or restored and, to the extent possible, improved to promote a net gain of ecological health; and
 - ii. Any permitted extraction of mineral aggregates that occurs in a feature will be completed, and the area rehabilitated, as early as possible in the life of the operation.
- c) Aquatic areas remaining after extraction are to be rehabilitated to aquatic enhancement representative of the natural *ecosystem* in that particular setting or ecodistrict, and the combined terrestrial and aquatic rehabilitation shall meet the intent of 7.B.1.33 (b).

Policy 7.B.1.34

Final rehabilitation of mineral aggregate operations in the Greenbelt Natural Heritage System shall meet these additional provisions:

- a) Where there is no underwater extraction, an amount of land equal to that under natural vegetated cover prior to extraction, and no less than 35% of each license, is to be rehabilitated to forest cover, which shall be representative of the pre-existing natural *ecosystem* in that particular setting or ecodistrict;
- b) Where there is underwater extraction, no less than 35% of the non-aquatic lands of each license is to be rehabilitated to forest cover, which shall be representative of the natural *ecosystem* in that particular setting or ecodistrict; and
- c) Rehabilitation will be implemented so that the connectivity of the Core Natural Heritage System and the key hydrologic features on the site and on adjacent lands will be maintained or restored, and to the extent possible, improved.

Policy 7.B.1.35

In supporting *ecological restoration* by the Niagara Peninsula *Conservation Authority* and other groups, priority shall be given to those projects that will maintain or enhance the features of the Core Natural Heritage System and water resources.

Policy 7.B.1.36

This Chapter of the Plan also shall apply when *development* or *site alteration* is proposed on lands in Niagara adjacent to a *significant* natural area in an adjoining municipality that is designated in that municipality's Official Plan or by the Ministry of Natural Resources.

7.B.2 Environmental Impact Studies

- Policy 7.B.2.1** An Environmental Impact Study (EIS) required under this Plan shall be submitted with the *development* application and shall be prepared and signed by a qualified biologist or environmental planner in accordance with the Environmental Impact Study Guidelines (EIS Guidelines) adopted by Regional Council. An EIS shall be prepared to the satisfaction of the appropriate *Planning Authority*, in consultation with the NPCA and the other commenting body. Within Settlement Areas as delineated in this Plan, an EIS shall be prepared to the satisfaction of the appropriate local municipality in consultation with the Region and the NPCA. Outside of Settlement Areas, an EIS shall be prepared to the satisfaction of the Region, in consultation with the appropriate local municipality and the NPCA. The *Planning Authority*, the other commenting body and the NPCA shall work collaboratively throughout the EIS process.
- Policy 7.B.2.2** The appropriate *Planning Authority*, in consultation with the NPCA, shall review the proposed *development* or *site alteration* in accordance with the waiving requirements in the EIS Guidelines to determine whether an EIS is required or whether requirements can be waived. Waiving the requirement for an EIS may be subject to conditions. If an EIS is waived, other requirements as outlined in the EIS Guidelines and other policies in this Plan may apply.
- Policy 7.B.2.3** The scope and content of the EIS shall be determined in accordance with the EIS Guidelines by the appropriate *Planning Authority*, in consultation with the NPCA and the other commenting body.
- The draft terms of reference shall be prepared by the consultant and reviewed by the NPCA, the Region and the local municipality. It shall be the responsibility of the appropriate *Planning Authority* to approve the terms of reference.
- Policy 7.B.2.4** The *Planning Authority* may require an independent peer review of an EIS, with the costs to be borne by the applicant.
- Policy 7.B.2.5** An EIS is not required for uses authorized under an Environmental Assessment process carried out in accordance with Provincial or Federal legislation.

7.C Implementation Measures

Policy 7.C.1 Plans of subdivision that had received draft approval as of the date of adoption of this Policy are not subject to the Policies in Chapters 7.A and 7.B. If draft approval lapses or is withdrawn the Policies will apply to subsequent planning applications involving the subject lands. Where significant modifications to a draft plan are proposed such that the plan is recirculated for comment the revised plan should be designed to reduce significant negative impacts on the Core Natural Heritage System and adjacent lands.

7.C.1 Regional Operations

Niagara Region will lead by example and demonstrate environmental responsibility in the following ways.

Policy 7.C.1.1 In all its operations the Region shall strive to maintain a healthy natural environment and protect, enhance or restore Niagara's natural heritage.

Policy 7.C.1.2 The Region shall minimize the consumption of energy and resources in its own operations and reuse and recycle energy and resources wherever possible.

Policy 7.C.1.3 The Region shall practice good stewardship by:

- a) Managing Regionally owned lands within or adjacent to the Core Natural Heritage System to maintain, restore or enhance the System's natural features and *ecological functions*;
- b) Maintaining a program of tree planting and naturalization on Regional properties and roads. Where trees must be removed at least two trees shall be planted for every tree removed, normally using native species from seed sources climatically similar to Niagara.

Policy 7.C.1.4 The Region shall endeavour to reduce the use of pesticides for cosmetic purposes by:

- a) Phasing out pesticide use on Regionally-owned properties by January 1, 2007;
- b) Promoting alternatives to the use of pesticides; and
- c) Supporting and facilitating adoption of local municipal by-laws reducing or eliminating the use of pesticides for cosmetic purposes.

Policy 7.C.1.5 The Region shall reduce the quantity of salt used on Regional roads to protect agriculture, water resources and natural vegetation and wildlife.

Policy 7.C.1.6 The Region shall give priority to energy based on sources other than fossil fuels to meet its own energy needs and collect methane gas generated by Regional landfills for heating and/or generation of electricity.

Policy 7.C.1.7 The Region, recognizing that excessive, unnecessary or misdirected outdoor lighting can have adverse impacts on the environment, the economy and human health as well as on the quality of the night sky, will investigate outdoor lighting and develop a strategy to address it.

Policy 7.C.1.8 The Region shall aim to divert 65% of waste from landfill by 2012 through waste reduction, recycling and composting.

7.C.2 Integrated Environmental Planning and Development Review

The *ecosystem* approach set out in Policy 7.A.1 provides the framework for environmental planning and *development* review. The environmental planning process involves:

1. *Watershed* Studies to guide *development* and conservation at a broad landscape level;
2. Environmental Planning Studies providing more detailed guidance for smaller areas such as communities or neighbourhoods; and
3. The preparation of site-specific studies for individual *development* applications.

These studies are linked to specific stages in the planning and *development* review process.

Watershed and Environmental Planning Studies will recommend policies for incorporation in Regional and local planning documents for use in *development* review at the site-specific level. Site specific studies for individual *development* applications, where needed, will be expected to address these policies. For small scale *development* proposals, such as individual severances, site-specific studies may not be needed where these policies can be met through appropriate design and construction measures.

Policy 7.C.2.1 The Region, in partnership with the Niagara Peninsula *Conservation Authority* and appropriate local municipalities, shall ensure that *Watershed* Studies are prepared for major *watersheds* in consultation with landowners, community groups and other public agencies and shall include:

- a) Inventory, analysis and assessment of ecological features and functions affecting the *watershed*;
- b) Identification of key issues and objectives;
- c) A water budget and water conservation plan;
- d) Recommendations on actions needed to maintain and enhance *ecosystem* health and integrity, including policies to be incorporated into municipal planning documents; and
- e) Identification of *subwatershed* boundaries and establishment of guidelines and terms of reference for additional studies if needed.

Policy 7.C.2.2

Where major changes in land use or municipal plans are proposed for an area, such as an urban boundary expansion or a secondary plan, an Environmental Planning Study (EPS) shall be prepared. It shall address the guidelines and terms of reference established through relevant *watershed* plans and shall include:

- a) An environmental inventory and assessment;
- b) A recommended environmental management strategy to maintain, enhance and restore ecological health and integrity within the study area;
- c) A recommended *development* plan identifying where *development* may take place, environmental features and functions to be maintained or restored, and appropriate policies;
- d) Recommendations for amendments to Regional and local planning documents; and
- e) A monitoring plan to assess environmental health during and after *development*.

An Environmental Planning Study shall not be required for an individual site-specific *development* proposal.

Policy 7.C.2.3

Environmental Planning Studies also may be prepared with the assistance of the Ministry of Natural Resources or its designate to support Federal and Provincial management and recovery plans for threatened and *endangered species*.

Policy 7.C.2.4

Watershed and Environmental Planning Studies shall be implemented through amendments to Regional and local official plans, as appropriate, and through secondary plans and zoning by-laws providing guidance and direction for:

- a) The review of applications for *development* or *site alteration*;
- b) Servicing and infrastructure proposals; and
- c) The Region's support for environmental stewardship, restoration and other measures.

Policy 7.C.2.5

When a significant *development* such as a golf course, a residential subdivision or a large commercial, industrial or institutional *development* is proposed that requires a number of different environmental studies a report shall be submitted with the application providing an integrated review of the environmental issues and the interrelationships among them. Such a report shall not be required where an equivalent review has been prepared for the proposal under Federal or Provincial legislation such as the **Environmental Assessment Act** or the **Aggregates Resources Act** review.

Policy 7.C.2.6

Within the area covered by the Niagara Escarpment Plan the requirements of that Plan, as amended from time to time, shall prevail.

Policy 7.C.2.7

Notwithstanding Policy 7.C.2.6, where Regional or local municipal planning policies conform with the policies of the Niagara Escarpment Plan but are more restrictive, those Regional or local policies shall take precedence.

- Policy 7.C.2.8** In order to provide more effective means to ensure that measures to protect the natural environment identified through the planning process are properly implemented the Region:
- a) Shall encourage local municipalities to ensure that *development* within the Core Natural Heritage System and adjacent lands is subject to either subdivision or site plan approval; and
 - b) May require an applicant to enter into a *development* agreement or conservation easement, or provide financial security, to ensure implementation of mitigation measures.

Policy 7.C.2.9 Local municipalities shall be encouraged to employ such measures as parkland dedications, density bonuses, transfer of *development* rights, land acquisition and exchange, holding provisions and conservation easements to facilitate environmental conservation in the *development* process, including the protection of Core Natural Areas.

7.C.3 Supporting Stewardship

Policy 7.C.3.1 The Region, in partnership with other organizations, shall encourage landowners to use environmentally-sensitive measures to protect and enhance natural heritage and water resources.

Policy 7.C.3.2 The Region shall encourage farmers to prepare and implement Environmental Farm Plans and shall support Provincial and Federal funding for the Environmental Farm Plan program and similar programs.

Policy 7.C.3.3 The Region shall encourage the Federal and Provincial governments to support environmental stewardship through programs such as:

- a) The Conservation Land Tax Incentive Program;
- b) The Managed Forest Tax Incentive Program; and
- c) Tax relief for ecological gifts under the Federal **Income Tax Act**.

Policy 7.C.3.4 The Region shall:

- a) promote *natural landscaping* and use of native plants from seed sources climatically similar to Niagara and encourage others to do likewise, and
- b) discourage planting of invasive non-native species.

Policy 7.C.3.5 The Region shall:

- a) recognize that the Provincial government has delegated responsibility for hazard land management to the Niagara Peninsula *Conservation Authority*; and
- b) encourage the Authority as an important partner to focus on land and water management, ownership of conservation lands, environmental stewardship and restoration and landowner education supporting the municipal planning program for *development* and conservation.

7.D Recreation and Open Space

Objectives for Recreation and Open Space

- Objective 7.D.1.A** To ensure sufficient recreational, open space and park areas within the Region to meet the leisure needs and desires of present and future residents and visitors.

Policies for Recreation and Open Space

- Policy 7.D.1** The Region considers that its major role in recreation and open space should be related to co-ordination of the activities of the various public agencies involved, especially when the areas are of regional significance or transcend the boundaries of individual local municipalities. The Region recognizes the greater role and function of Recreation and Open Space in supporting a vast array of festivals, events, recreational and leisure opportunities throughout the region.
- Policy 7.D.2** The Region recognizes that the primary role of local municipalities in the field of recreation and open space should be the *development* of policies and programs for the acquisition, use, management and distribution of recreation and open space areas which best serve the needs of the residents of that municipality.
- Policy 7.D.3** The Region may provide funding for land acquisition in cases where this cannot be accomplished through other agencies. Wherever possible, acquisition programs shall be in co-operation with other agencies and shall use available cost-sharing programs.
- Policy 7.D.4** The Region will evaluate the potential of all public lands including property owned by the St. Lawrence Seaway Management Corporation, the Federal Department of National Defense, the public utilities, and the Region for recreation and open space uses. Those lands considered desirable for recreation and open space uses should be retained in public ownership with the operational responsibility transferred through lease or other agreements if necessary to the appropriate recreation, conservation or park agency.
- Policy 7.D.5** Publically-owned lands with recreational potential will be explored for their potential to be used for multiple complimentary uses recognizing both the needs of the public agency owning the lands and the desirable recreational uses. The possibility of developing a walking or riding trail system using public *utility* rights-of-way and the St. Lawrence Seaway Management Corporation lands will be explored.
- Policy 7.D.6** The Region supports and encourages continued liaison between local, provincial and federal governments or, other relevant agencies, and the Region in the acquisition, use and management of recreation and open space lands and the development of recreation programs and activities.
- Policy 7.D.7** A continuous pedestrian route generally following the Bruce Trail is to be protected along the Niagara Escarpment, recognizing and protecting the rights of the property owners involved.

Policy 7.D.8

The Niagara Escarpment Plan sets out the policies and framework for a Niagara Escarpment Parks System stretching from Queenston to Tobermory. The Parks System is the responsibility of, and coordinated by the Ministry of Natural Resources and includes in excess of 135 existing and proposed parks and open space areas managed by several public agencies. The Bruce Trail is an essential component of the Parks system linking parks and natural features. Reference should be made to the Niagara Escarpment Plan for details of the Parks and Open Space system. The following is a list of the Escarpment Parks within the Niagara Region:

- Beamer Memorial Conservation Area
- Mountainview Conservation Area
- Cave Springs
- Ball's Falls Conservation Area
- Louth Conservation Area
- Rockway Conservation Area
- St. John's Conservation Area
- Short Hills Provincial Park
- Thirty Mile Creek
- Welland Canal
- Woodend Conservation Area
- Queenston Quarry
- Woolverton Conservation Area
- Queenston Heights (Brock's Monument)

7.E Source Water Protection

Introduction

The Source Protection Plan for the Niagara Peninsula Source Protection Area (SPP) protects existing and future sources of drinking water in Niagara by ensuring that activities that are identified as drinking water threats under the *Clean Water Act* and associated regulations either never become a significant threat, or cease to be a significant threat to drinking water. The *Source Protection Plan* evaluated six water treatment plants and determined there are *significant threats* related to land uses associated with the DeCew Falls water treatment plant in the City of Thorold, Port Colborne water treatment plant in the City of Port Colborne, and the Niagara Falls water treatment plant in the City of Niagara Falls. The following *source water* protection policies are organized according to the water treatment plant *intake protection zones* for which *significant drinking water threats* have been identified in the *Source Protection Plan*. These water treatment plants and associated *intake protection zones* are identified as an overlay on Schedule H to this Plan. The underlying land use designations on Schedule H continue to apply.

The policies of Chapter 7.E must be read with the Regional Official Plan in its entirety and in conjunction with the Niagara Peninsula *Source Protection Plan*, the Assessment Report and the Explanatory Document which provides the context and rationale for the land use policies and in identifying *significant threats* and eliminating these drinking water threats for the DeCew Falls, Port Colborne and Niagara Falls water treatment plant *intake protection zones*. The policies of Chapter 7.E must also be read in conjunction with other applicable plans and legislation.

Objectives for Source Water Protection

- Objective 7.E.1.A** To protect existing and future municipal drinking water sources in the Niagara Region.
- Objective 7.E.1.B** To ensure that activities identified as drinking water threats either never become a significant threat or, if the activity is already taking place, the activity ceases to be a significant threat.
- Objective 7.E.1.C** To work collaboratively in promoting the stewardship of drinking water supplies in consultation with the *Province*, the Niagara Peninsula *Conservation Authority*, local municipal partners, other organizations and key stakeholders.
- Objective 7.E.1.D** To implement education and outreach programs which describe and promote best management practices and good stewardship of drinking water resources as required under the Niagara Peninsula *Source Protection Plan*.

Policies for Source Water Protection

7.E.1 DeCew Falls Water Treatment Plant

Policy 7.E.1.1

The placement of untreated septage to land is considered a *significant drinking water threat* in the DeCew Falls *Intake Protection Zone 1*. New *waste disposal sites* for the application of untreated septage to land shall not be permitted within the DeCew Falls Intake Protection Zone 1.

Policy 7.E.1.2

The discharge from new *stormwater management facilities* is considered a significant threat where the storm sewer drainage area is at least 100 ha in size with the predominant land use being commercial or industrial. New *stormwater management facilities*, which meet these criteria, are not permitted to discharge within the DeCew Falls Intake Protection Zone 1. New industrial or commercial land uses which meet the 100 ha storm sewer drainage criteria are not permitted within the DeCew Falls Intake Protection Zone 1. For the purposes of this policy, new industrial or commercial land uses include industrial or commercial uses which are not currently designated as such in the local municipal Official Plan.

Policy 7.E.1.3

The discharge from *wastewater treatment plants* or combined sewer overflows, or discharge of industrial effluent is considered a significant threat as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 22 and Table 48 in Appendix C of the Assessment Report (2013). New *combined sewers*, wastewater treatment facilities, and *industrial effluent systems* are not permitted where they would be a significant threat within the DeCew Falls Intake Protection Zone 1.

Policy 7.E.1.4

Any planning or building application made for a land use other than Residential in the DeCew Falls Intake Protection Zone 1 may require a Section 59 notice from the *Risk Management Official*. The requirements of the notice will be determined through the application screening process.

Properties where untreated septage is applied to land are considered 'waste disposal sites' under Part V of the Environmental Protection Act (EPA). Untreated septage is typically produced from the clean-out of residential septic system tanks.

The Niagara Peninsula Source Protection Plan, Assessment Report and Explanatory Document are available at: <http://www.sourceprotection->

7.E.2 Port Colborne Water Treatment Plant

Policy 7.E.2.1	The placement of untreated septage to land is considered a <i>significant drinking water threat</i> in the Port Colborne Intake Protection Zone 1 and Intake Protection Zone 2. New <i>waste disposal sites</i> for the application of untreated septage to land shall not be permitted within the Port Colborne <i>Intake Protection Zone 1</i> and <i>Intake Protection Zone 2</i> .	The application screening process will look at whether an application may relate to the application of agriculture source material, the storage of agriculture source material, livestock grazing/pasturing and farm animal outdoor confinement areas in DeCew Falls IPZ 1 or; the storage of pesticides in Port Colborne IPZ 1 or for the application of pesticides in the Port Colborne IPZ 1 and IPZ 2.
Policy 7.E.2.2	Any planning or building application made for a land use other than Residential in the Port Colborne <i>Intake Protection Zone 1</i> and 2 may require a Section 59 notice from the <i>Risk Management Official</i> . The requirements of the notice will be determined through the application screening process.	
Policy 7.E.2.3	The storage of road salt is considered a significant threat in the Port Colborne <i>Intake Protection Zone 1</i> , if stored outside with no cover, in amounts greater than 5,000 tonnes. Future open storage of road salt greater than 5,000 tonnes is not permitted within the Port Colborne <i>Intake Protection Zone 1</i> .	
Policy 7.E.2.4	The storage of snow, and the contaminants associated with it, is considered a significant threat in the Port Colborne <i>Intake Protection Zone 1</i> if stored in quantities greater than 1 hectare in area. Future storage of snow greater than 1 hectare in area is not permitted within the Port Colborne <i>Intake Protection Zone 1</i> .	
Policy 7.E.2.5	The discharge from <i>wastewater treatment plants</i> or combined sewer overflows, or discharge of industrial effluent is considered a significant threat as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 20, Table 21, Table 46, and in Table 47 in Appendix C of the Assessment Report (2013). New <i>combined sewers</i> , wastewater treatment facilities, and <i>industrial effluent systems</i> are not permitted where they would be a significant threat within the Port Colborne <i>Intake Protection Zone 1</i> and <i>Intake Protection Zone 2</i> .	
Policy 7.E.2.6	The discharge from <i>stormwater management facilities</i> is a significant threat where the storm sewer drainage area is at least 10 ha in size with the predominant land use being commercial or industrial. An application for commercial or industrial <i>development</i> or the expansion, extension, or alteration of existing <i>stormwater management facilities</i> or the expansion of an existing commercial or industrial <i>development</i> , in instances where the <i>Risk Management Official</i> and the Region's Chief Planning Official deem such an expansion may pose a significant threat to municipal drinking water, within the Port Colborne <i>Intake Protection Zone 1</i> and <i>Intake Protection Zone 2</i> , shall be accompanied by a stormwater management plan that demonstrates and implements best management practices related to managing stormwater runoff to the satisfaction of the Region's Chief	

Planning Official and City of Port Colborne, in consultation with the *Risk Management Official*, such that the *development* does not pose a significant threat to municipal drinking water.

- Policy 7.E.2.7** The storage, and application to land of *agricultural source material*, and the lands used for livestock grazing/pasturing, farm animal yards and outdoor confinement areas, are considered *significant threats* in the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*. New agricultural land uses are not permitted within the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*.

7.E.3 Niagara Falls Water Treatment Plant

- Policy 7.E.3.1** The application of untreated septage to land is considered a *significant drinking water threat* in the Niagara Falls *Intake Protection Zone 1*. New *waste disposal sites* for the application of untreated septage to land shall not be permitted within the Niagara Falls *Intake Protection Zone 1*.

- Policy 7.E.3.2** The discharge from new *stormwater management facilities* is considered a significant threat where the storm sewer drainage area is at least 100 ha in size with the predominant land use being commercial or industrial. New *stormwater management facilities*, which meet these criteria, are not permitted to discharge within the Niagara Falls *Intake Protection Zone 1*. New industrial or commercial land uses which meet the 100 ha storm sewer drainage criteria are not permitted within the Niagara Falls *Intake Protection Zone 1*. For the purposes of this policy, new industrial or commercial land uses only includes industrial or commercial uses which are not currently designated as such in the local municipal Official Plan.

- Policy 7.E.3.3** The discharge from *wastewater treatment plants* or combined sewer overflows, or discharge of industrial effluent is considered a significant threat as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 22 and Table 48 in Appendix C of the Assessment Report (2013). New *combined sewers*, wastewater treatment facilities, and *industrial effluent systems* are not permitted where they would be a significant threat within the Niagara Falls *Intake Protection Zone 1*.

- Policy 7.E.3.4** The storage, handling, and application to land of *agricultural source material*, and the lands used for livestock grazing/pasturing, farm animal yards and outdoor confinement areas, are considered *significant threats* in the Niagara Falls *Intake Protection Zone 1*. New agricultural land uses are not permitted within the Niagara Falls *Intake Protection Zone 1*.

7.E.4 Implementation and Monitoring Policies

Policy 7.E.4.1 Local municipalities shall amend their Official Plans and implementing Zoning By-laws to conform to the policies of Section 7.E of this Plan within three years from the date the Niagara Peninsula *Source Protection Plan* comes into effect (October 1, 2014).

Policy 7.E.4.2 The Region will monitor and report on the measures taken to implement the significant threat policies in accordance with the Niagara Peninsula *Source Protection Plan*, which shall address the following:

- a) Number of *development* applications in *Intake Protection Zones*;
- b) Pre-consultation meetings related to the Niagara Peninsula *Source Protection Plan*;
- c) Number of *Risk Management Plans* reviewed and approved; and
- d) Steps taken to improve education and research.