PART 4

ENVIRONMENTAL AND WATER MANAGEMENT RESOURCE POLICIES

4.1. APPLICABILITY

The polices contained in this Section are intended to be applied generally throughout the Town, and are also intended to complement the Natural Environment policies articulated in Section 2. Where the policies of Section 4 and the policies elsewhere in this Plan conflict, the more restrictive policies shall prevail.

The intent of these policies is to maintain, support and enhance *ecosystem* health in the Town.

4.2. CREEKS AND STREAMS

4.2.1. Function of Creeks and Streams

All of the natural creeks and streams in the Town as shown on the Schedules to this Plan are considered to be environmentally *significant* since they:

- (a) Constitute fish habitat;
- (b) Function as corridors for migrating *wildlife habitat* movement and vegetation dispersal;
- (c) Serve to maintain the quality and quantity of surface and ground water resources; and
- (d) Assist in the improvement of air quality.

It is the intent of this Plan to protect all rivers and streams from incompatible *development* to minimize the impacts of such *development* on their function.

4.2.2. Implementation

In order to protect rivers and streams, the implementing Zoning By-law shall identify and restrict *development* on all lands within a minimum setback of 30 metres from the stable top of the bank of any river or stream characterized by Critical or Type 1 *Fish habitat* as defined by the Ministry of Natural Resources and Forestry. The lands located within this setback are also a regulated area by the Niagara Peninsula Conservation Authority. The implementing Zoning By-law shall identify and restrict *development* on all lands within a minimum setback of 15 metres from the stable top of bank of any river or stream characterized as important or marginal *fish habitat*.

Where otherwise permitted by the policies elsewhere in this Plan, a reduction in the setback from a river or stream as measured from the stable top of the bank shall not require an amendment to this Plan but will require the preparation of an Environmental Impact Study

in accordance with Section 4.7 of this Plan. In no case shall the *buffer* adjacent to Critical *Fish Habitat* be less than 15 metres.

Within the Greenbelt Plan area, setbacks for key hydrological features, identified in Policy 2.4.4(d) of this Plan, will be subject to the vegetation protection provisions of Policy 2.4.7.1.

The cultivation and maintenance of agricultural land will not be prohibited with the abovementioned setbacks and will not be subject to the implementation policies contained in this Section to protect creeks and streams.

4.3. NATURAL HAZARDS

4.3.1. Introduction

Natural hazards are lands that have physical hazards such as *flooding hazard*, steep slopes, *erosion hazards*, *dynamic beach hazards* or other physical conditions.

4.3.2. Policies

- (a) Development shall generally be directed to areas outside of hazardous lands adjacent to Lake Ontario, adjacent to creeks and streams and hazardous sites in the Town.
- (b) Development shall not be permitted within the dynamic beach hazard adjacent to Jordan Harbour and Charles Daley Park, areas that are inaccessible during times of flooding hazards, erosions hazards and dynamic beach hazards unless the site has safe access appropriate for the development and the natural hazard and floodway.
- (c) Development may be permitted within the flooding hazard where the development is limited to uses which must be located within the floodway including flood and erosion control works or minor additions or passive non-structural uses which do not affect flood flows.
- (d) Development shall not be permitted to locate in hazardous lands and hazardous sites where the use is:
 - (i) An institutional use including hospitals, long-term care homes, retirement homes, pre-schools, nursery schools, day care centres and schools;
 - (ii) An essential emergency service provided by fire, police and ambulance stations and electrical substations, and
 - (iii) Uses associated with the disposal, manufacture, treatment or storage of hazardous substances.
- (e) Except as prohibited in policy 4.3.2(b) and 4.3.2(d), *development* and *site alteration* may be permitted in *hazardous lands* and *hazardous sites* where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards and where all of the following are demonstrated and achieved:

- (i) Development and site alteration is carried out in accordance with floodproofing standards, protection works standards and access standards;
- (ii) Vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- (iii) New hazards are not created and existing hazards are not aggravated; and
- (iv) No adverse environmental impacts will result.

4.4. VALLEYLANDS

4.4.1. Purpose

The purpose of establishing valleyland policies is to implement the policies of the Niagara Peninsula Conservation Authority relating to *valleylands*, and the provisions of the Provincial Policy Statement relating to *valleylands*.

The following policies apply to *valleylands* where the valley bank height is equal to or greater than 3 metres. *Valleylands* are shown on Schedule 'E2'.

4.4.2. Permitted Uses

Permitted uses within *valleylands* as defined by the Niagara Peninsula Conservation Authority shall be restricted to *agricultural uses* and those uses required for public works, utilities and other projects taken by Crown Corporations as well as for unusual circumstances, subject to the approval of the Niagara Peninsula Conservation Authority and the municipality.

4.4.3. General Policies

4.4.3.1. Policies for New Development, Site Alteration, and Lot Creation

No new *development*, *site alteration* or lot creation shall be permitted in areas located within *valleylands* except for projects necessary for bank stabilization or erosion control purposes or to facilitate the uses permitted in accordance with Section 4.4.2. Where *valleylands* are confirmed by the Niagara Peninsula Conservation Authority, such lands are encouraged to be maintained in a natural state with no disturbances to existing vegetation.

Where permitted, all new *development*, *site alteration* and lot creation shall ensure that overland drainage is directed away from valley slopes and that proper construction measures are taken to protect valley vegetation in accordance with Niagara Peninsula Conservation Authority requirements.

4.4.3.2. Policies for New Development, Site Alteration, and Lot Creation on Adjacent Lands

No new *development*, *site alteration* or lot creation shall be permitted within 7.5 metres from the stable top of bank as determined by the Niagara Peninsula Conservation Authority for all new structures including swimming pools and subsurface sewage disposal systems, and for site alterations.

Within Urban Areas and Rural Settlements, a reduced setback may be considered where an existing lot provides insufficient depth to accommodate the required setback provided a geotechnical report is submitted to the satisfaction of the Niagara Peninsula Conservation Authority and the Town.

Where possible, existing vegetation should be maintained within the required setbacks. Vegetation below the top of the valley slope shall not be disturbed.

In areas where the instability of the valleyland slope has been identified by the municipality or the Niagara Peninsula Conservation Authority or where a field investigation reveals evidence of:

- Outward tilting of trees;
- Tow erosion at the base of the slope;
- Slumping, gullying or other visibly evident Erosion process;
- The addition of Fill Material;
- Containing an easily eroding soil type; or,
- Where the angle of the slope is steeper than 3:1.

Proponents proposing *development* on *adjacent lands* shall undertake a geotechnical investigation. This investigation shall be undertaken by a qualified geotechnical engineer and shall be prepared to the satisfaction of the Niagara Peninsula Conservation Authority and the Town. Where a geotechnical investigation has determined that greater setbacks are required, the proponent shall adhere to the greater requirements.

All new *development*, *site alteration* or lot creation on lands adjacent to confirmed *valleylands* shall demonstrate to the satisfaction of the Niagara Peninsula Conservation Authority and the Town that no *negative impacts* on the *valleylands* will result from the adjacent *development*.

New *development*, *site alteration* or lot creation on lands adjacent to confirmed valleyland shall ensure that overland drainage is directed away from valley slopes and that proper construction measures are taken to protect valley vegetation in accordance with Niagara Peninsula Conservation Authority requirements.

Where a plan of subdivision has been submitted for lands adjacent to confirmed *valleylands*, the Town may require the proponent to protect the *valleylands* in perpetuity as part of the approvals process including the dedication of *valleylands* to the Town or other appropriate public agency.

4.4.3.3. Policies for Existing Development on Adjacent Lands

Where existing structures are located within 15 metres of the stable top of bank and a 7.5 metre publicly owned access is not provided adjacent to the valleyland, the following policies shall apply:

- (a) The replacement or addition to existing building(s) or structure(s) may be permitted provided that such addition or replacement does not result in further encroachment into the confirmed valleyland. The submission of a geotechnical assessment by the proponent may be required prior to permitting any development or *redevelopment* on *adjacent lands*. In cases where the building or structure can be reasonably located outside the setback the applicant will be encouraged to do so.
- (b) In cases where existing structures or private roads exist within a confirmed valleyland, reconstruction or alteration may be permitted provided that best efforts are taken to relocate the existing structure outside of the confirmed valleyland, a geotechnical assessment is completed and submitted in accordance with Niagara Peninsula Conservation Authority requirements and that no adverse environmental impacts to existing natural features and functions of the *valleylands* are shown to result.
- (c) The replacement or addition to existing buildings and structures will be encouraged to direct overland drainage away from valley slopes wherever possible. All replacement or addition to existing buildings or structures shall ensure that proper construction measures are taken to protect valley vegetation in accordance with Niagara Peninsula Conservation Authority requirements.

4.4.3.4. Policies for Existing Lots on Adjacent Lands

Where existing lots are located adjacent to lands located within a confirmed valleyland, a minimum 7.5 metre setback shall be maintained. A reduction of this setback may be permitted in cases of unusual circumstances where an existing lot of record contains insufficient depth to accommodate the required setbacks and where a geotechnical investigation reveals that some infringement within the setback area, together with appropriate mitigative measures, can be accommodated on-site while maintaining bank stability and will result in no adverse long-term environmental impacts. All reductions in setbacks shall be subject to Niagara Peninsula Conservation Authority requirements for *valleylands*.

4.5. WATER RESOURCE MANAGEMENT

4.5.1. Protection of the Resource

At the present time, many of the Town's rural residents obtain drinking water from private water supplies. Residents of *Settlement Areas* obtain water from Regional water systems located in Grimsby and St. Catharines. It is a policy of this Plan to protect, improve or restore the quality and quantity of ground and surface sources of drinking water for future use by ensuring that *development* and *site alteration* does not cause *negative impacts* on water resources, including cross-jurisdictional and cross-*watershed* impacts.

In an effort to protect surface and groundwater resources, objectives of this Plan include:

- (a) Managing the use of water resources in a sustainable manner that ensures their continued availability to future generations;
- (b) Working with the Region, Niagara Peninsula Conservation Authority and the Province to prepare *watershed* and subwatershed plans to assist in the proper management of water as a key resource;
- (c) Protecting existing surface and ground water quality from degradation and to improve and restore water quality where degraded;
- (d) Incorporating source protection objectives into the land use planning process to ensure that the sources of water are not compromised in the future as a result of land use decisions:
- (e) Encouraging the establishment of water conservation measures as a way to meet water supply needs in the same manner that alternatives to create new supplies are investigated;
- (f) Educating the public on the value of protecting the resource and how they can contribute to its protection; and
- (g) Maintain linkages and related functions among ground water features, *hydrologic* functions, natural heritage features and area, and surface water features including shoreline areas.

4.5.2. Impact Assessment

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

- (a) The quality and quantity of the surface and ground water resources;
- (b) The effect of the proposed use on the *groundwater recharge* function;
- (c) The effect of the proposed use on the quality and quantity of drinking water in adjacent private and municipal wells;
- (d) The functions of *groundwater recharge*/discharge areas, aquifers and headwater areas;
- (e) Water budgets for groundwater aquifers and surface water features;
- (f) The natural hydrological characteristics of *watercourses* such as base flow;
- (g) Flooding or erosion; and

(h) Natural drainage systems, stream forms and shorelines.

4.5.3. Vulnerable Groundwater Areas

Vulnerable groundwater areas in the Town which are susceptible to the risk of contamination or adverse impact due to hydrologic and hydrogeological dynamics have been identified by the Niagara Peninsula Conservation Authority and are shown on Schedule 'E3' to this Plan. Where development and/or site alteration requires a planning approval, the Town, in consultation with the Niagara Peninsula Conservation Authority may require the undertaking of a technical study to assess the risk of negative impact on the aquifer. The scope of such a study will be determined through pre-consultation with the Town and Niagara Peninsula Conservation Authority and recommendations from such a study that are related to design or land use will be implemented through zoning or site plan control.

In order to minimize risks posed by land use on this feature, the following uses shall be prohibited on lands identified on Schedule 'E3' as a *vulnerable* groundwater area:

- (a) Generation and storage of hazardous waste or liquid industrial waste;
- (b) Waste disposal sites and facilities, organic soil conditioning sites, and snow storage and disposal facilities;
- (c) Underground and above-ground storage tanks that are not equipped with an approved secondary containment device; and,
- (d) Storage of a contaminant listed in Schedule 3 (Severely Toxic Contaminants) to Regulation 347 of the Revised Regulations of Ontario, 1990 or its successor.

4.6. CORRIDORS AND LINKAGES

Section 2 of this Plan recognizes that the individual features and components of the *natural heritage system* in this Plan forms part of a greater *ecosystem* which is highly dependent on connectivity. In large part, this need for connectivity will be fulfilled in the agricultural area if the Vision, Goals and Objectives and supporting policies of this Plan are achieved and/or implemented over the long-term.

The Towns acknowledges that the Regional Official Plan has illustrated potential corridors and linkages on the Region's Core Natural Heritage Map. The Town will require proponents of new *development* or *site alteration* that is subject to an Environmental Impact Study to assess corridor linkages, and if possible maintain or enhance such linkages. The Town acknowledges that agricultural lands are corridor linkages and when used for *normal farm practices*, will not be subject to this requirement.

4.7. ENVIRONMENTAL IMPACT STUDIES

- (a) 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 Region's 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 the Plan, an EIS shall be prepared to the satisfaction of the Town 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 Town and the NPCA. The Planning Authority, the other commenting body and the NPCA shall work collaboratively throughout the EIS process.
- (b) 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. Waving 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 and the Regional Official Plan may apply.
- (c) 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 other commenting bodies.
- (d) The Planning Authority may require an independent peer review of an EIS, with the costs to be borne by the applicant.
- (e) An EIS is not required for uses authorized under an Environmental Assessment process carried out in accordance with Provincial or Federal legislation.

4.8. REQUIREMENTS FOR AN AGRICULTURAL IMPACT ASSESSMENT

Where non-agricultural *development* is proposed that may have an impact on surrounding *agricultural uses* an Agricultural Impact Assessment shall be required to:

- Identify possible adverse impacts on surrounding agricultural uses;
- Identify and evaluate locational options for the proposed development and demonstrate that the proposed location is the preferred option in terms of minimizing the impact on agriculture; and
- Identify methods of removing or reducing any adverse impacts resulting from the development.

4.9. SOLID WASTE DISPOSAL AREAS

There are 3 closed waste disposal sites in the Town as shown on the Schedules to the Plan. The *development* of new uses or new or enlarged buildings or structures within an assessment area 500 metres from the fill area of a closed site, may be permitted provided an assessment is completed to determine:

(a) The impact of any potential methane gas migration;

- (b) Whether the proposed use will be adversely affected by noise, odour, dust or other nuisance factors from the waste disposal site;
- (c) Potential traffic impacts;
- (d) Whether the proposed use will be adversely affected by ground and surface water contamination by leachate migrating from the waste disposal site; and
- (e) The impact of the proposed use on leachate migration from the landfill site.

The assessment is intended to address these matters and other items outlined in the Province's Guideline D-4, April 1994, or its successor as required to ensure that the proposed land uses are compatible in nature and do not adversely impact upon each other.

The studies required to support a *development* application within the assessment area shall be based on the type and/or scale of the *development* proposed or the studies may be waived as appropriate. The nature of the required studies and their scope shall be determined by the Town in consultation with the Region at the time the *development* is proposed.

All lands within the assessment area shall be subject to a Holding Provision in the Implementing Zoning By-law. The lifting of a Holding Provision permitting the *development* of any new use or new or enlarged buildings or structures within the assessment area shall not occur until The Town is satisfied that all of the studies required by the Town and Region have been completed.

In cases where an amendment to the Official Plan and/or Zoning By-law is required to permit a proposed use, appropriate studies dealing with the matters set out above shall be submitted for the consideration by the Town. An amendment to this Plan will be required for a new waste disposal site.

It is a policy of The Town to encourage the reduction, reuse and recycling of solid waste and the collection and storage of recyclable waste on site to ensure that the amount of waste required being stored in landfills is minimized.

4.10. CONTAMINATED SITES

If the site of a proposed use is known or suspected to be contaminated, the Town shall require the proponent to prepare an Environmental Site Assessment in accordance with Ontario Regulation 101/07 to identify the nature and extent of contamination and develop a remedial plan if required. As a condition of final planning approval, the proponent will be required to submit an acknowledged Record of Site Condition to confirm that the site is suitable for the intended future use.

The Town may place lands which are known to be contaminated in a Holding (H) Zone to restrict *development* until clearance is provided in the form of an acknowledged Record of Site Condition.

4.11. GAS AND PETROLEUM WELLS

Schedule 'E3' identifies the location of gas and petroleum wells in the Town. The status of these wells has been categorized by Provincial authorities as "suspended", "abandoned", "active" or "unknown".

Gas and Petroleum resources shall be protected for long-term use. The Town will support the subsurface storage and retrieval of gas or other hydrocarbons, subject to Provincial regulations, but only if they do not adversely affect current legal land uses or *development* and *Natural heritage system* policies in this Plan.

The Town will consult with the Province:

- (a) When new non-petroleum *developments* are proposed within 300 metres of an existing well site as identified on Schedule 'E3'; and
- (b) Where assistance is needed in the rehabilitation or closure of well sites, specifically where non-producing wells represent a public health hazard.

Where applicable, the Town and/or the Region will require that improperly non-producing wells that are known or discovered on lands during *development* to be properly plugged, capped or otherwise made safe in accordance with Provincial requirements as a condition of a Planning Act approval or as a pre-consultation requirement.

The Town supports the use of technology, such as directional drilling for the exploration and production of subsurface resources from a well site that is located on lands adjacent to a natural heritage area as identified on Schedules 'E1' to 'E3' to this Plan.

New wells and associated works are prohibited from causing any surface or subsurface ecological disturbance to the natural heritage system identified on Schedules 'E1' to 'E3' of this Plan where the exploration and associated works are proposed within natural features or within the *adjacent lands* of such features.

4.12. LAND USE COMPATIBILITY

It is recognized that some uses may be sensitive to the odour, noise, vibration or other emissions associated with highways, and various type of industries. It is a policy of this Plan that incompatible land uses be separated or otherwise buffered from each other. Where a proposed *development* is located adjacent to a potentially incompatible land use, an assessment (Phase I and II) of the compatibility of the proposal may be required by The Town undertaken in accordance with current guidelines and criteria established by the Ministry of Environment and Climate Change.

Such a study shall be prepared to the satisfaction of the Town and the appropriate agencies and shall include recommendations on how the impacts can be mitigated. The approval of *development* proposals shall be based upon the achievement of adequate distances and the recommendations of the required studies.

The Implementing Zoning By-law may utilize a Holding Provision on certain properties where incompatible land uses are located in close proximity to each other to ensure that the intent of this Section is met before *development* occurs.

4.13. ENERGY CONSERVATION AND CLIMATE CHANGE

4.13.1. Introduction

It is the intent of this Plan to support energy efficiency and improve air quality by encouraging the reduction of energy consumption, endorsing the *development* of compact and mixed-use neighbourhoods and by promoting innovative forms of alternative and renewable energy, in land use and development patterns.

4.13.2. Objectives

- (a) To promote sustainability practices which reduce air pollution and greenhouse gas emissions.
- (b) To encourage energy conservation and the use of renewable energy resources.

4.13.3. Policies

- (a) In order to reduce energy consumption, reasonably compact forms of *development* shall be maintained in conjunction with efficient pedestrian, bicycle and vehicular transportation networks.
- (b) When considering built forms, *development* which results in extensive loss of sunlight to *adjacent land* use shall be discouraged.
- (c) The Town will encourage on site alternative and/or *renewable energy systems* to service the on-site operation.
- (d) The Town shall encourage and support energy conservation, district heating and combined heat and power, and alternative and renewable energy sources developed in accordance with applicable legislation, policies and regulations.
- (e) The Town will encourage and facilitate the application of energy conservation measures in the design and construction of new buildings and in the rehabilitation and upgrading of existing buildings and structures.
- (f) In order to encourage and facilitate energy conservation, energy efficient buildings design including passive solar energy again, increased insulation, energy star appliances, alternative energy systems and conformity with LEED certification or similar construction shall be encouraged in all new buildings.
- (g) Site plan control may be used to incorporate energy conservation measures into the final design. Such measures may include orientation and design of new buildings to maximize passive solar gain and to minimize energy loss through appropriate

construction standards and landscaping designed to moderate seasonal climatic variation.

- (h) The Town may consider flexibility in zoning and site plan in order to accommodate variances in building orientation, landscape designs, lot coverage and other site or building characteristics which provide for increase energy efficiency.
- (i) The Town encourages minimizing *negative impacts* from a changing climate by promoting the ecological benefits provided by nature and agricultural lands.
- (j) The Town encourages the integration of green roofs into energy and water conservation strategies.