

CHAPTER 8: ENVIRONMENTAL MANAGEMENT POLICIES

Jurisdiction over environmental matters is divided among different levels of government. Effective environmental planning and stewardship requires the co-operation of several different agencies and organizations, including Federal and Provincial Ministries, the Region, the Township, and the Grand River Conservation Authority. Policies related to the Greenlands Network and *environmental features*, Environmental Constraint Areas, *Watershed* Planning, and *Environmental Impact Statements* are encompassed in this section.

The Township will attempt to adhere to the following principles when practicing environmental management:

- 1) environmental awareness is essential to the development and maintenance of a *sustainable* community.
- 2) environmental standards for development must be established not only to prevent or minimize *adverse environmental impacts*, but also where feasible, to enhance *environmental features* and functions.
- 3) watershed and subwatershed planning is an effective tool for establishing policies in advance of urban development to protect the *environmental features* and functions of a watershed.
- 4) the rich native biodiversity of the Township must actively be *conserved* and enhanced.

8.1 THE GREENLANDS NETWORK

The township contains a diverse range of *environmental features* that form part of a broader Greenlands Network described in the Regional Official Plan. This natural system provides economic, ecological and social benefits and contributes to the overall quality of life in the township. It also supports and enhances air, land and water quality, and maintains biological diversity. The maintenance, enhancement and restoration of the *ecological function* and *hydrological function* of the Greenlands Network is therefore vital.

8.1.1 General Policies

8.1.1.1 The Greenlands Network is comprised of the following elements:

- a) Landscape Level Systems;
- b) Core Environmental Features;
- c) *Fish Habitat*;
- d) Supporting Environmental Features; and
- e) *Environmental Linkages*.

8.1.1.2 *Development applications* or *site alteration* will be prohibited on lands where elements of the Greenland Network have not been adequately identified and

evaluated through a *watershed study* or any other appropriate natural heritage review, until such time as an *Environmental Impact Statement* has been prepared by an owner/applicant in accordance with the policies of this Plan and/or the Regional Official Plan, to identify and evaluate any such elements located on the subject lands and, wherever appropriate, *contiguous* lands.

- 8.1.1.3 The acquisition of elements of the Greenlands Network by the Township, the Region or other public agencies will be promoted wherever feasible.
- 8.1.1.4 Interpretation of the boundaries of the elements that make up the Greenlands Network, as required to support the review of *development applications*, will be achieved through the completion of *Environmental Impact Statements*, *watershed studies*, or other appropriate studies accepted by the Township, the Region and other public agencies having jurisdiction.
- 8.1.1.5 Any boundary interpretations of the Greenlands Networks not generally in conformity with the boundaries shown on Map 7 of this Plan will require an amendment to this Plan and/or the Regional Official Plan as applicable.
- 8.1.1.6 Illegal acts resulting, or having resulted, in a reduction in the form or function of an *environmental feature* within the Greenlands Network, including but not limited to such acts as tree removal, wetland filling or draining, or the diverting of watercourses, will not be recognized as existing conditions within the development review process. Restoration of the damaged area may be required prior to, or as a condition of, approval of any *development applications*.
- 8.1.1.7 Elements of the Greenlands Network that are privately owned are not for use by the public, except at the discretion of the owner.

8.1.2 Landscape Level Systems

- 8.1.2.1 Landscape Level Systems are recognized within the Greenlands Network as large-scale *environmental features* or as significant concentrations of *environmental features*. These areas are designated by the Region on Map 4 of the Regional Official Plan and on Map 7 of this Plan. Landscape Level Systems consist of:
- a) *Environmentally Sensitive Landscapes*;
 - b) Significant Valleys; and
 - c) Regional Recharge Areas.
- 8.1.2.2 The Region may revise the boundaries of Landscape Level Systems through future amendments to the Regional Official Plan. The Township will update the boundaries of these areas in conformity with the Regional Official Plan as part of the five-year review of this Plan. Where there is a discrepancy between the boundaries of Landscape Level Systems shown in this Plan and the Regional Official Plan, the boundaries shown in the Regional Official Plan will be used to implement the policies of this Plan.

- 8.1.2.3 The designation of lands as Landscape Level Systems will not affect *agricultural uses* and associated *normal farm practices* as defined in applicable Provincial legislation and regulations in conformity with this Plan, applicable Zoning By-laws, statutes, policies and regulations of other government agencies, including agricultural drainage through municipal or agreement drains.
- 8.1.2.4 The Township will maintain, enhance or, wherever feasible, restore the scenic qualities of Township Roads within Landscape Level Systems.

Environmentally Sensitive Landscapes

- 8.1.2.5 *Environmentally Sensitive Landscapes* identify broad areas within the Region with distinct geographical and ecological characteristics and compositions that support and sustain a range of *ecological functions*. A portion of the Region's Laurel Creek Headwaters Environmentally Sensitive Landscape is located within the township as designated on Map 7 of this Plan.
- 8.1.2.6 All *development applications* within *Environmentally Sensitive Landscapes* are subject to all applicable policies of this Chapter and Chapter 7 of the Regional Official Plan.
- 8.1.2.7 Future expansions of the Wellesley Urban Area, Rural Settlement Areas or Rural Employment Areas are not permitted within or into *Environmentally Sensitive Landscapes*.
- 8.1.2.8 The creation of new lots for *non-farm related residential units* within *Environmentally Sensitive Landscapes* is only permitted within Rural Settlement Areas.
- 8.1.2.9 The Township Zoning By-law will not permit the land uses identified in Policy 7.B.10 of the Regional Official Plan within *Environmentally Sensitive Landscapes* outside of Rural Employment Areas and Rural Settlement Areas.
- 8.1.2.10 Where development or *site alteration* is proposed on lands within or *contiguous* to an Environmentally Sensitive Landscape, the owner/applicant will be required to submit an *Environmental Impact Statement* which addresses landscape impacts in addition to any other requirements in accordance with the policies in Section 8.4 of this Plan.
- 8.1.2.11 Where construction of a road on a new right-of-way, widening or upgrading of an existing roadway, construction or upgrading of a trunk sewer, trunk watermain, gas pipeline or electrical transmission line, wastewater treatment facility, waste management facility or *groundwater* taking project is proposed within or *contiguous* to an *Environmentally Sensitive Landscape*, the submission of an *Environmental Impact Statement*, or other appropriate study, in accordance with the policies in Section 8.4, which evaluates landscape level impacts, will be required.
- 8.1.2.12 Nothing in this Plan will prevent the owner of a legal lot of record in an *Environmentally Sensitive Landscape* from obtaining a building permit to construct or enlarge a single detached dwelling, accessory building or *farm*

structure, provided it is in conformity with all other Township, Region and GRCA policies and regulations.

- 8.1.2.13 The designation of an *Environmentally Sensitive Landscape* will not affect existing aggregate extraction and processing operations licensed under the Aggregate Resources Act.

Significant Valleys

- 8.1.2.14 Significant Valleys are designated on Map 7 of this Plan. This designation identifies valleys of the Grand River, Conestogo River, Nith River and Speed River, which are together nationally recognized as a Canadian Heritage River. Significant Valleys comprise the entire river channel within the region and run up to the point where the slope of the valley begins to grade into the surrounding upland.
- 8.1.2.15 All *development applications* within or *contiguous* to Significant Valleys will be in accordance with the policies of this Chapter and Chapter 7 of the Regional Official Plan.

Regional Recharge Areas (Environmental Protection)

- 8.1.2.16 Regional Recharge Areas are designated on Map 7 and Map 8 of this Plan. This designation identifies large *environmental features* consisting of considerable deposits of sand and gravel that allow for the infiltration of substantial quantities of rainfall and snowmelt deep into the ground. Regional Recharge Areas serve to sustain a wide range of aquatic habitats and ecosystems within the Greenlands Network, and also serve to replenish deep underground aquifers that serve as a source for a significant share of the township's drinking water.
- 8.1.2.17 Expansions of the Wellesley Urban Area, Rural Settlement Areas or Rural Employment Areas will not be permitted onto lands designated as Regional Recharge Areas, except as provided for in Policy 8.1.2.18 of this Plan and the policies of the Regional Official Plan.
- 8.1.2.18 Minor expansions of Rural Settlement Areas located within Regional Recharge Areas may be permitted to facilitate the enlargement of an *existing* employment, recreational or institutional use subject to the provisions of the Regional Official Plan. Such expansions will not be permitted where the lands subject to the expansion proposal are also designated as Environmentally Sensitive Landscape.
- 8.1.2.19 *Development applications* within Regional Recharge Areas on lands already designated for urban development in this Plan may be permitted in accordance with the policies of this Plan and Section 7.B of the Regional Official Plan.

8.1.3 Core Environmental Features

- 8.1.3.1 Core Environmental Features identify those *environmental features* that are *provincially or regionally significant*. These features are the most significant

elements of the regional landscape in terms of maintaining, protecting and enhancing *biodiversity* and important *ecological functions*.

- 8.1.3.2 Core Environmental Features are designated by the Region on Map 4 of the Regional Official Plan and on Map 7 of this Plan. This designation applies to lands that meet the criteria set out in the Regional Official Plan as:
- a) Significant Habitat of Endangered or Threatened Species;
 - b) *Provincially Significant Wetlands*;
 - c) Environmentally Sensitive Policy Areas;
 - d) Significant Woodlands; or
 - e) Environmentally Significant Valley Features.
- 8.1.3.3 The Region may revise the boundaries of Core Environmental Features through future amendments to the Regional Official Plan. The Township will update the boundaries of these areas in conformity with the Regional Official Plan as part of the five-year review of this Plan. Where there is a discrepancy between the boundaries of Core Environmental Feature shown in this Plan and the Regional Official Plan, the boundaries shown in the Regional Official Plan will be used to implement the policies of this Plan.
- 8.1.3.4 Where lands have been identified by the *Province*, or through a *watershed study* or other appropriate field studies, including those undertaken in Policy 8.1.1.4, as fulfilling the criteria to be designated as a Core Environmental Feature, an amendment to the Regional Official Plan will be required to designate such lands as part of the Greenlands Network. Until this amendment is approved by the Region, any *development* or *site alteration* proposed within or *contiguous* to the identified feature will be considered premature by the Township, or will proceed on the basis that the lands identified as meeting the criteria as a Core Environmental Feature are protected as though they were a Core Environmental Feature in accordance with the policies of the Regional Official Plan.
- 8.1.3.5 In accordance with Section 8.2 of this Plan, Core Environmental Features will be designated for land use purposes as Environmental Constraint Areas on Maps 3, 4 and 5.1 to 5.10 inclusive of this Plan.
- 8.1.3.6 *Development* or *site alteration* will not be permitted within Core Environmental Features, except for:
- a) forest, fish or wildlife management and conservation;
 - b) flood or erosion control projects demonstrated to be in the public interest and for which no other alternative is feasible;
 - c) minor alterations to legal non-conforming land uses within Core Environmental Features;

- d) *infrastructure* projects in accordance with the policies of the Regional Official Plan; or
- e) *new mineral aggregate operations* in accordance with the policies of the Regional Official Plan.

Any *development application* or *site alteration* for the above uses will require the submission of an *Environmental Impact Statement*, to the satisfaction of the Township, the Region, the GRCA and/or the Province, as appropriate, to determine the mitigation measures to be implemented, as appropriate, through the development review process.

8.1.3.7 *Development applications, site alteration or infrastructure* projects will only be permitted on lands *contiguous* to a Core Environmental Feature where an *Environmental Impact Statement*, or similar study, submitted in accordance with the policies in Section 8.4 has determined to the satisfaction of the Township, the Region, the GRCA and/or the *Province*, as appropriate, that approval of the proposed *development* or *site alteration* would not result in *adverse environmental impacts* on the features and *ecological functions* of the Core Environmental Feature.

8.1.3.8 Except at the discretion of the owner, Core Environmental Features that are privately owned are not for use by the public.

8.1.4 Fish Habitat

8.1.4.1 *Fish Habitat* will be identified through *watershed studies, Environmental Impact Statements* or other appropriate studies accepted by the Township and other public agencies having jurisdiction.

8.1.4.2 *Development* or *site alteration* will not be permitted within *fish habitat*, except in accordance with Provincial and Federal Requirements to the satisfaction of the Federal Department of Fisheries and Oceans, or its delegate.

8.1.4.3 *Watershed studies, Environmental Impact Statements* and other appropriate studies will be used to determine appropriate means to implement fishery policy and the specification of protective mitigation measures.

8.1.4.4 Any requirements imposed through *watershed studies, Environmental Impact Statements* and other appropriate studies must be implemented by the proponent to the satisfaction of the Federal Ministry of Fisheries and Oceans or its delegate.

8.1.5 Supporting Environmental Features

8.1.5.1 Supporting Environmental Features are designated on Map 7 of this Plan. These *environmental features* do not meet the criteria for designation as Landscape Levels Systems or Core Environmental Features but which are locally significant. Supporting Environmental Features play an important role in maintaining the *ecological functions* provided by the Greenlands Network and will be maintained, enhanced or, wherever feasible, restored.

8.1.5.2 Supporting Environmental Features are areas that meet the following criteria:

- a) is recognized by the Ministry of Natural Resources as a locally significant wetland, including all non-provincially significant wetlands designated by the Ministry of Natural Resources and GRCA; or
- b) is identified as a locally significant woodland;
- c) is identified as a locally significant *Environmental Linkage* by a study or studies completed in accordance with Policy 8.1.6.1 of this Plan; or
- d) is identified as a locally significant valley; or
- e) is identified as a locally significant wildlife habitat area; or
- f) is identified as a permanent or intermittent watercourse; or
- g) provides a connection or acts as a buffer or supporting area to *environmental features*, thus maintaining ecological connection between communities; or
- h) performs vital hydrogeological functions, such as serving as headwaters of a stream, groundwater recharge and discharge areas; or
- i) fulfils at least three of the following criteria:
 - i) is a good quality, representative example of a particular type of ecosystem native to the Township;
 - ii) contains uncommon or rare ecological communities such as old growth forests, savannas, prairies, bogs, fens, meadows and so on;
 - iii) is a natural area of over 1.0 hectare (2.5 acres);
 - iv) supports a moderate to high diversity of native species and ecological communities due to varied topography, microclimates, soils, and/or drainage;
 - v) contains nationally, provincially, or regionally significant species;
 - vi) contains “special” physical features (e.g. landforms, springs, fossils);
 - vii) is important or has the potential for ecological research, education and/or passive recreation due to location or features; or
 - viii) has a high aesthetic or scenic value in the Township.

- 8.1.5.3 The submission of an *Environmental Impact Statement* for review by the Township in consultation with the Region and the GRCA will be required for all development proposed within or adjacent to a Supporting Environmental Feature, not already prohibited through GRCA Policy. For the purposes of interpretation of this policy, "adjacent" will be defined as lands within 50 metres of the boundary of the Supporting Environmental Feature
- 8.1.5.4 Where an *Environmental Impact Statement* demonstrates that the proposed development will not result in *adverse environmental impacts* upon *environmental features* and functions of a Supporting Environmental Feature identified in this Plan, the Township may, subject to appropriate conditions, approve or recommend approval of the application without amendment to this Plan.
- 8.1.5.5 Where an *Environmental Impact Statement*, submitted in accordance with the policies of Section 8.4, demonstrates that development may have an *adverse environmental impact* upon the *environmental features* and functions of a Supporting Environmental Feature, the Township will undertake one of the following:
- a) negotiate an agreement with the owner of the land requiring conditions of approval, or dedication of land to protect lands supporting the environmentally significant features and functions of the Supporting Environmental Feature;
 - b) request the *Province*, the Region, or the GRCA to use powers within their jurisdiction to enable acquisition or protection of the Supporting Environmental Feature;
 - c) encourage public and/or private agencies to acquire all or the affected portion of the Supporting Environmental Feature;
 - d) require a Conservation Easement; or,
 - e) refuse the application.
- 8.1.5.6 Where a Supporting Environmental Feature is subsequently designated by the Region as a Landscape Level Feature or a Core Environmental Feature, the provisions of Policies 8.1.2 and Policy 8.1.3 will apply, respectively.
- 8.1.5.7 Where lands are identified through a *watershed study* or other appropriate field study as fulfilling the criteria for a Supporting Environmental Feature designation in accordance with Policy 8.1.5.2, an amendment to this Plan will be considered to designate such lands as a Supporting Environmental Feature.
- 8.1.5.8 Where the Township, in consultation with Region and/ or the Grand River Conservation Authority determines that the preparation of an Environmental Impact Statement, for development proposed in or adjacent to a Supporting Environmental Feature, would serve no useful purpose, it may waive the requirement to complete such a study, subject to terms and conditions of approval that the Township may deem appropriate to conserve natural features.

- 8.1.5.9 The interpretation and definition of the boundaries of a Supporting Environmental Feature and *contiguous* lands will be determined in consultation with the *Province*, the Region and the GRCA.
- 8.1.5.10 Supporting Environmental Features that are privately owned are not for use by the public, except at the discretion of the owner.
- 8.1.5.11 The Township will, in consultation with the *Province*, the Region, the GRCA and affected landowners, provide for the protection, enhancement or, wherever feasible, restoration of *Environmentally Significant Recharge Areas* and *Environmentally Significant Discharge Areas*, not fulfilling the criteria for designation as Regional Recharge Areas.
- 8.1.5.12 Where *Environmentally Significant Discharge Areas* and/or *Environmentally Significant Recharge Areas* sustain a Core Environmental Feature as documented through a study prepared in accordance with the policies of the Regional Official Plan, the Township will:
- a) not permit development or *site alteration* within or *contiguous* to the *Environmentally Significant Discharge Areas* and/or *Environmentally Significant Recharge Areas*, except where it has been determined to the satisfaction of the Region and/or other applicable agencies that the development or *site alteration* would not result in *adverse environmental impacts* on the features and *ecological functions* of the Core Environmental Feature; and
 - b) ensure that any proposed public *infrastructure* projects will avoid *Environmentally Significant Discharge Areas* and *Environmentally Significant Recharge Areas*, wherever feasible. Where it is not feasible to avoid these areas, the construction of the *infrastructure* project will be designed to maintain the *hydrologic functions* that sustain Core Environmental Features.
- 8.1.5.13 Lands within river or stream valleys, *floodplains*, *wetlands*, watercourses, lakes or *hazardous lands*, or lands within 120 metres of *Provincially Significant Wetlands* and *wetlands* greater than or equal to two hectares, or lands within 30 metres of *wetlands* less than two hectares, are regulated by the GRCA. Development or *site alteration* within these Regulated Areas will require a permit from the GRCA in accordance with the applicable regulations approved under the Conservation Authorities Act.

8.1.6 Environmental Linkages

- 8.1.6.1 *Environmental Linkages* are areas intended to provide opportunities for plant and animal movement within and between *environmental features*, support hydrological and nutrient cycling, and contribute to the overall ecological integrity of the Greenlands Network. The Township, in consultation with the Region, GRCA and other stakeholders, will assist in identifying *Environmental Linkages* through appropriate studies as determined by the Region or GRCA.

- 8.1.6.2 The Township will require the incorporation of any *Environmental Linkages*, identified in accordance with the policies of this Plan and the Regional Official Plan, into the design of new development to maintain, enhance or, wherever feasible, restore the *Environmental Linkages* within and between *environmental features*.
- 8.1.6.3 The Township will enhance *Environmental Linkages*, where appropriate, by restoring natural habitat on lands owned by the Township.
- 8.1.6.4 The Township will encourage the naturalization of inactive sections of parks and open space areas under the jurisdiction of other agencies and in private ownership, wherever appropriate, to enhance *Environmental Linkages*.

8.2 ENVIRONMENTAL CONSTRAINT AREAS

Environmental Constraint Areas identify lands that will be generally restricted from development. These lands contain physical characteristics that could be unsafe to development due to naturally occurring hazards, such as flooding, erosion or slope failures. To prevent the loss of life and minimize property damage and social disruption, this Plan seeks to direct development away from these natural occurring hazards, except where it is determined to be appropriate and safe. The GRCA is a key partner in this effort through the administration of its policies and regulations under the Conservation Authorities Act.

The Environmental Constraint Areas designation is also applied to the Core Environmental Features identified in this Plan. These Core Environmental Features may or may not be subject to naturally occurring hazards, but will be protected from development to maintain, protect and enhance their *biodiversity* and important *ecological functions*.

- 8.2.1 Environmental Constraint Areas are designated on Map 3 of this Plan. This designation applies to the Core Environmental Features identified on Map 7 of this Plan, and to *hazardous lands* and *hazardous sites* identified and regulated by the GRCA. The Township will update the boundaries of Environmental Constraint Areas in consultation with the Region and the GRCA as part of the five-year review of this Plan.
- 8.2.2 Permitted uses within the Environmental Constraint Areas designation may include agriculture, conservation, passive recreational uses, and forestry and wildlife management. Additional uses may be permitted within the buffer and setback areas subject to such uses conforming to the policies contained in Sections 8.1 and 8.2 of this Plan.
- 8.2.3 Lands identified on Map 3 as being within the Environmental Constraint Area designation will be zoned in the Township Zoning By-Law to prohibit new buildings and structures. Setbacks from lands shown as Environmental Constraint Areas will be established and/or modified where appropriate, in consultation with the Grand River Conservation Authority.
- 8.2.4 Where Environmental Constraint Areas contain all or portion an element of the Greenlands Network identified in this Chapter, the restrictive policies will apply.

8.2.5 Within Environmental Constraint Areas, *development* or *site alteration* will not be permitted within:

- a) *hazardous lands* which are impacted by *flooding hazards* and/or *erosion hazards*;
- b) erosion access allowances, which will not be less than six metres; and
- c) *hazardous sites*;

except where:

- i) a special policy area has been approved by the *Province*; or
- ii) the *development* is limited to land uses that, by their nature, must locate within the *floodway*, including flood and/or erosion control works, structures necessary for conservation, water supply, wastewater management, or minor additions or passive non-structural uses which do not affect flood flows and meet all applicable GRCA policies; or
- iii) a *two-zone policy area* has been designated in accordance with the policies of the Regional Official Plan to permit development or *site alteration* in the *flood fringe*, and the effects and risk to public safety are minor so as to be managed or mitigated in accordance with the *Province's* standards, as determined by the demonstration and achievement of all of the following:
 - a) development or *site alteration* is carried out in accordance with *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 hazards are not created and existing hazards are not aggravated; and
 - d) no *adverse environmental impacts* will result.

8.2.6 Notwithstanding Policy 8.2.5, development proposing the following land uses will not be permitted within *hazardous lands* and *hazardous sites*:

- a) an institutional land use associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities or the young during an emergency as a result of flooding, failure of *floodproofing standards* or *protection works standards*, or erosion;
- b) an essential emergency service such as that provided by fire, police and ambulance stations and electrical substations, which would be

unacceptably impaired during an emergency as a result of flooding, the failure of *floodproofing standards* or *protection works standards*, or erosion;

- c) land uses associated with the disposal, manufacture, treatment or storage of *hazardous chemicals and/or substances*;
- d) fully enclosed underground parking facilities unless otherwise permitted in GRCA policy; and,
- e) new private sewage disposal systems.

8.2.7 Structures which are replaced or reconstructed as a result of fire or other unusual loss will be constructed and/or flood proofed to the satisfaction of the GRCA.

8.2.8 Subject to Policy 8.2.5, minor expansions and alterations may be made to existing buildings and structures located within that portion of *hazardous lands* or *hazardous sites* identified by the GRCA as Regulatory *Floodplain*, provided that:

- a) it is approved by the GRCA;
- b) it has received the appropriate Development, Interference with Wetlands and Alterations to Shorelines and Watercourses permit;
- c) no new habitable floor space is created below the elevation of the first floor, no new basement is proposed, and any crawl space is non-habitable and designated to facilitate services only; and
- d) the renovations, additions, and/or alterations are flood proofed in accordance with the requirements of the GRCA; and
- e) all other applicable GRCA policies are met.

8.2.9 Outdoor storage is prohibited within that portion of *hazardous lands* or *hazardous sites* identified by the GRCA as Regulatory *Floodplain*.

8.2.10 An amendment to this Plan will not be required for minor revisions to the boundaries of the *hazardous lands* and *hazardous sites* designations, where such revisions are supported by technical studies approved by the GRCA.

8.2.11 The acquisition of *hazardous lands* or *hazardous sites* by the Township or other public agencies will be promoted wherever feasible.

8.2.12 The Township will require detailed hydrogeological and/or geotechnical studies to assess potential risks to persons, buildings, structures, or public *infrastructure* occasioned by *groundwater discharge* or high water tables prior to development. Such studies should demonstrate that engineering solutions designed to protect structures from the effects of *groundwater discharge* and high water tables will be effective, will not require significant on-going maintenance to remain effective, and will not divert or impede natural *groundwater* flows so as to create hazards or annoyances to *adjacent lands* and buildings. Where *discharge constraint*

areas are identified in the above studies, they will be identified through an amendment to this Plan and/or in Community Plans.

8.3 WATERSHED PLANNING

A component of environmental management is Watershed Planning for drainage basins. This provides a unique opportunity to understand the characteristics of ground and surface water resources, evaluate interrelated natural habitats, identify appropriate locations for development, and establish measures to prevent adverse impacts on natural systems. Watershed planning also recognizes that the region and township are part of a larger natural system.

The Township recognizes the direct relationship between human activities and impacts on water and other natural resources. *Watershed studies* help assess the nature of impacts from development on ecosystem features and functions by assessing the interconnections between human activities and environmental resources. They also provide recommendations concerning land use planning actions and conditions of development approval the Township can implement to prevent or minimize those impacts.

8.3.1 General Policies

8.3.1.1 The Township will participate in co-operation with other municipalities, the public, landowners, the Grand River Conservation Authority, the Region, Provincial Ministries and other interested agencies in the completion of watershed studies for watersheds within the Township.

8.3.1.2 Priorities and guidelines for the completion of publicly funded watershed studies will be determined in accordance with Policy 7. F. 2 of the Regional Official Plan.

8.3.1.3 The Township will consider amendments to this Plan to implement appropriate recommendations from watershed studies.

8.3.1.4 The Township will consider applicable recommendations of watershed studies not implemented through amendment to this Plan, during the development approval process.

8.3.2 Watershed Studies

8.3.2.1 Policies relating to specific *watershed studies* will be considered by future amendment to this Plan.

8.3.2.2 The Township will support, and participate in, Regional initiatives to undertake *watershed studies* under the policies of the Regional Official Plan. Such studies are intended to both minimize *adverse environmental impacts*, including cross-jurisdictional and cross-*watershed* impacts, and to maintain, enhance or, wherever feasible, restore the Greenlands Network. Such studies will also be used to direct enhancement of the water system, maintenance or improvement of the health of watercourses and to identify natural hazards.

8.3.2.3 The Township will consider amendments to this Plan to implement appropriate recommendations from watershed studies.

8.3.2.4 The Township will consider applicable recommendations of *watershed studies* not implemented through amendment to this Plan, during the development approval process.

8.3.2.5 *Watershed studies* will be used to identify potential impacts of change on:

- a) water budget;
- b) peak run off flows;
- c) run off volumes;
- d) time distribution of stormwater runoff;
- e) flood levels and velocities;
- f) *floodplain* storage;
- g) existing storm water management facilities;
- h) capacities of existing downstream works;
- i) *floodplain* buildings and structures;
- j) erosion and sedimentation of stream systems;
- k) surface water quality;
- l) *groundwater* quantity and quality;
- m) water supply aquifer;
- n) infiltration, recharge, discharge;
- o) baseflow;
- p) *wetlands*;
- q) significant *woodlands* and other ecosystems;
- r) *significant* flora and fauna, including rare, endangered, and threatened species and associated habitat;
- s) aquatic habitat and fisheries;
- t) recreation;
- u) consideration and recommendation of rehabilitation measures for a system which is already impacted; and,

- v) other environmental aspects determined by the *watershed study*.

8.3.2.6 The Township, the *Province*, the Region, and the GRCA, in consultation with affected landowners and the general public, will jointly determine the terms of reference for *watershed study*. At a minimum, the terms of reference for *watershed study* will include:

- a) identification, maintenance, restoration and, wherever feasible, enhancement of *environmental features*, *groundwater features*, surface water features and *ecological functions* which are necessary for the ecological and hydrological integrity of the *watershed*;
- b) identification, maintenance, enhancement and, wherever feasible, restoration of *Environmental Linkages* among *environmental features* and *ecological functions*, *groundwater features* and surface water features;
- c) determination of areas where development or *site alteration* will be prohibited to:
 - i) protect actual and potential municipal water services and identified *vulnerable areas*; and
 - ii) maintain, or, enhance wherever feasible, restore sensitive and *vulnerable* surface water and *groundwater features*, and their *hydrologic functions*, and *floodplains*;
- d) protection of the quality, quantity, distribution and direction of flow of existing surface and *groundwater* processes;
- e) identification of stormwater management practices that maintain or enhance the quality, quantity and distribution of stormwater including infiltration measures, and minimize stormwater volumes and contaminant loads;
- f) identification of areas where site specific *Environmental Impact Statements* may be required for the review of *development applications* in accordance with the policies of the Regional Official Plan. Wherever feasible, a *watershed study* should partially fulfill the *Environmental Assessment* requirements for major *infrastructure* works to be located within that *watershed*, and/or comprehensive *Environmental Impact Statements* for all or part of the *watershed*; and
- g) develop a monitoring plan and define roles and responsibilities for pre-, during- and post-construction monitoring to determine and address the impact of development on the Greenlands Network and surface and *groundwater* resources.

8.3.2.7 The Township will require the finalization of a *watershed study* prior to adopting any Community Plans or amendments to this Plan that would permit significant areas of development within a *watershed*.

- 8.3.2.8 Where a *watershed study* relates to matters of Regional interest, the Township will ensure that the relevant portions of the watershed study are first approved by the Region, prior to Township Council adoption of an Official Plan amendment or Community Plan that would implement the recommendations of the *watershed study*.
- 8.3.2.9 The Township will amend this Plan, as required, to provide for the implementation of appropriate recommendations from *watershed study* in this Plan, and as part of the development review process.
- 8.3.2.10 Policies relating to the Firella Creek Watershed study will be considered by future amendment to this Plan.

8.4 ENVIRONMENTAL IMPACT STATEMENTS

An *Environmental Impact Statement* is a document describing the effects of proposed activities on the environment. "Environment," in this case, is defined as the natural and physical environment and the relationship of people with that environment. This means that the "environment" considered in an *Environmental Impact Statement* includes land, water, air, structures, living organisms, environmental values at the site, and the social, cultural, and economic aspects. An "impact" is a change in consequence that results from an activity. Impacts can be positive or negative or both. An *Environmental Impact Statement* describes impacts, as well as ways to "mitigate" impacts. To "mitigate" means to lessen or remove negative impacts. Therefore, an *Environmental Impact Statement* is a document that describes the impacts on the environment as a result of a proposed action. It also describes impacts of alternatives as well as plans to mitigate the impacts.

8.4.1 General Policies

- 8.4.1.1 An *Environmental Impact Statement* may be required to identify and evaluate the potential effects of a proposed development or *site alteration* on elements of the Greenlands Network, and recommend means of preventing, minimizing or mitigating these impacts, as well as enhancing or restoring the quality and connectivity of elements of the Greenlands Network. An *Environmental Impact Statement* may also be used to identify and evaluate elements of the Greenlands Network and interpret the boundaries of these elements. The Township, the *Province*, the Region, and the GRCA will co-ordinate the requirements for the preparation of *Environmental Impact Statement*.
- 8.4.1.2 Any *Environmental Impact Statement* required under Policy 8.4.1.1 will be prepared in accordance with the provisions of the Regional Greenlands Network Implementation Guideline.
- 8.4.1.3 The Township may require the submission of a single comprehensive *Environmental Impact Statement* where:
- a) development or *site alteration* is proposed on multiple *contiguous* properties containing elements of the Greenlands Network;

- b) a Community Plan or other comprehensive *community planning process* is being undertaken; or
- c) Environmental Studies are required to support the proposed expansion of the Wellesley Urban Area, Rural Settlement Area, or Rural Employment Area boundaries; or
- d) the extent of a *development application* and its anticipated impacts on the Greenlands Network are anticipated by the relevant agency(ies) to be substantial.

8.4.1.4 The need for, and scope of the *Environmental Impact Statement*, will be determined in collaboration with the Region, the *Province*, and the GRCA by:

- a) the *Province*, for *development* or *site alteration* potentially affecting Significant Habitat of Endangered or Threatened Species, or;
- b) the Region, for *development* or *site alteration* potentially affecting:
 - i) Landscape Level Systems, not including Significant Valleys;
 - ii) Core Environmental Features; or
 - iii) *Environmentally Significant Discharge Areas* and/or *Environmentally Significant Recharge Areas* that sustain Core Environmental Features.
- c) the GRCA for Significant Valleys, *Provincially Significant Wetlands* located outside Environmentally Sensitive Policy Areas and *wetlands* not identified as provincially significant, including unevaluated *wetlands*;
- d) the Township for *development applications* potentially affecting Supporting Environmental Features and other elements of the Greenlands Network; and
- e) the Federal Department of Fisheries and Oceans, or its delegate, for *fish habitat*.

8.4.1.5 The submission of an *Environmental Impact Statement* will not be required by the Township where an *Environmental Assessment* or alternative environmental review is being undertaken as part of a comprehensive planning process, provided the *Environmental Assessment* or alternative environmental review fulfils the requirements of an *Environmental Impact Statement*.

8.4.2 Environmental Impact Statements for Supporting Environmental Features

8.4.2.1 Where an *Environmental Impact Statement* is required for Supporting Environmental Features in accordance with Policy 8.1.5.3, it will be prepared by a qualified professional and submitted with the *development application* to the Township for review in consultation with the Region. Where the Supporting

Environmental Feature is a Locally Significant Wetland, the Township will consult with the GRCA.

8.4.2.2 *Environmental Impact Statements* for development affecting Supporting Environmental Feature will be prepared in accordance with the Regional Greenlands Network Implementation Guideline.

8.4.2.3 Where the Township, in consultation with the Region and the GRCA determines that the preparation of an *Environmental Impact Statement*, for development proposed in or adjacent to a Supporting Environmental Feature, would serve no useful purpose, the Township may waive the requirement to complete such a study, subject to terms and conditions of approval that the Township may deem appropriate to *conserve* natural features.

8.4.3 Environmental Impact Statements for Fish Habitat

8.4.3.1 Any development proposed *contiguous* to designated *fish habitat*, will require the preparation and submission of an *Environmental Impact Statement* for review by the Federal Department of Fisheries and Oceans, or its delegate.

8.5 ENVIRONMENTAL STEWARDSHIP

8.5.1 Biodiversity

The Township highly values its rich *biodiversity*, and will encourage the conservation and enhancement of the native diversity of the natural environment.

8.5.1.1 The Township will co-operate with the Region in the development and maintenance of an environmental database to document the occurrence and distribution of significant species and other features.

8.5.1.2 The Township will encourage the use of native species appropriate to the Township and will discourage the use of non-native or invasive species in accordance with the Regional list of Native Trees and Shrubs and Non-Native Species, when planning within or *contiguous* to the Greenlands Network.

8.5.1.3 The Township will, where feasible, promote the use of native species of trees, shrubs and prairie vegetation for plantings along Township Roads.

8.5.2 Managing Woodland Resources

8.5.2.1 The Township, in collaboration with the Region, will minimize the impact of development on *woodlands* by proposing alternative locations for proposed land uses and/or through the implementation of appropriate mitigation measures.

8.5.2.2 The Township will consider the importance of *woodlands* during the development review process, giving consideration to:

- a) the potential impact of the proposed land use on the *ecological functions*, productivity or potential productivity of the *woodland* for commercial timber production;
- b) the impact of the proposed land use on the extent and distribution of *woodland* cover in the in which the subject land is situated; and
- c) opportunities to restore or re-establish productive forest habitats consisting of native species following the completion of the proposed development.

8.5.2.3 The Township will consider the adoption of a Tree Preservation By-law to prohibit or regulate the destruction or injuring of trees in *woodlands* less than four hectares in area.

8.5.3 Land Stewardship

8.5.3.1 The Township, in co-operation with the Region, encourages landowners to maintain, enhance or, wherever feasible, restore *environmental features* on their property through measures including conservation easements, buffers and wherever appropriate, fencing.

8.5.3.2 The Township will endeavour to secure ownership of elements of the Greenlands Network in conjunction with recreational areas, and to prepare management plans for these lands to maintain, enhance or, wherever feasible, restore their *ecological functions*.

8.5.3.3 The Township will implement the use of native trees and shrubs, as identified by the Region, when planting within or *contiguous* to elements of the Greenlands Network, and will encourage individuals and agencies to do likewise.

8.5.3.4 The Township will, wherever feasible and appropriate, use species native to the region in plantings along Township Roads and on the grounds of Township facilities, stormwater management facilities and park naturalization projects.

8.6 SOURCE WATER PROTECTION

The township is reliant on groundwater resources to supply the majority of its drinking-water. Protecting existing and future sources of drinking-water from incompatible land uses and from contamination that could hinder groundwater recharge is essential to maintaining human health, economic prosperity and a high quality of life. The Township will maintain and wherever feasible, enhance the quality and quantity of water infiltration and recharge to groundwater aquifers. The Township will support the Region in implementing land use planning decisions to protect the quality and quantity of drinking-water resources, and to limit development and *site alteration* that could adversely affect drinking-water supplies drawn from the Grand River and from groundwater resources.

8.6.1 Source Water Protection Areas

- 8.6.1.1 Source Water Protection Areas are designated on Map 8 of this Plan. These areas are significant in that they contribute water, or are in close proximity to municipal water service wells and surface water intakes that are *vulnerable* to contamination and/or depletion from incompatible land uses. Within the township, Source Water Protection Areas consist of: 1) *Wellhead Protection Sensitivity Areas*; 2) High Microbial Risk Management Zones; and 3) Regional Recharge Areas.
- 8.6.1.2 *Wellhead Protection Sensitivity Areas* are classified from 1 to 8, as designated on Map 8 of this Plan. This classification allows for varying degrees of management relative to the *vulnerability* of the underlying groundwater to contamination, the importance of the well to the capacity of the municipal water services, and the length of time groundwater within the area will take to reach the municipal water service well.
- 8.6.1.3 High Microbial Risk Management Zones identify areas where the underlying groundwater is the most *vulnerable* to disease causing organisms. These zones surround municipal water service wells supplied by Groundwater Under the Direct Influence of Surface Water (GUDI). GUDI wells draw groundwater that is directly connected to and dependant upon, surface water in locations where contaminants in the surface water may not be filtered adequately by the overlying soil or subsurface before entering the well.
- 8.6.1.4 Regional Recharge Areas identify areas that will be protected from land use practices and *hazardous chemicals and/or substances* that could negatively impact the quality and quantity of water within and available to the aquifers that contribute to municipal water services.
- 8.6.1.5 The Township will review and update its Zoning By-Law to prohibit land uses that may pose a risk to Source Water Protection Areas in accordance with Chapter 8 of the Regional Official Plan.
- 8.6.1.6 *Development applications* within Source Water Protection Areas will be reviewed in accordance with the source water protection policies outlined in Section 8A of the Regional Official Plan.
- 8.6.1.7 New water taking will not be permitted for any new or expanding uses within the Wellesley Urban Area.
- 8.6.1.8 New water taking in quantities greater than 50,000 litres per day may be permitted outside of the Wellesley Urban Area and Source Water Protection Area designations through a site specific zoning by-law amendment, provided that the application is substantiated by further study in accordance with Regional Official Plan Policy 8.A.7.
- 8.6.1.9 Where the policies in the Regional Official Plan require one or more studies to be submitted in support of a *development application*, such studies will be completed in accordance with the Section 8A of the Regional Official Plan and the Regional Implementation Guideline for Source Water Protection Studies to

the satisfaction of the Region. Studies submitted by the owner/applicant will demonstrate that the proposed use will not negatively impact the quantity and/or quality of drinking-water resources in Source Water Protection Areas for the *development application* to receive approval.

- 8.6.1.10 The Township, in consultation with the Region, the *Province* and the GRCA will provide advice to land owners to promote good stewardship practices for lands and water within Source Water Protection Areas.
- 8.6.1.11 The Township will, in collaboration with other public agencies having jurisdiction, provide input into and implement the *Province's* Source Water Protection Plan.
- 8.6.1.12 The Township will amend this Plan to conform to an approved Provincial Source Protection Plan, as required.