

**SECTION 16 - NATURAL HERITAGE (ENVIRONMENTAL PROTECTION POLICIES)**

**16.1 Objectives**

- 16.1.1 To conserve, maintain, and enhance the quality and integrity of the Natural Heritage features and ecological processes of the Township including air, water, land, and living resources for the benefit of future generations.
- 16.1.2 To preserve and protect all Internationally, Provincially and Locally significant Wetlands and Areas of Natural and Scientific Interest (A.N.S.I.'s) situated within the Township.
- 16.1.3 To prevent the diminishment of ecosystem biodiversity and provide for the long term viability of the Natural Heritage System by approving only those land uses which are demonstrated to be environmentally sound and do not negatively impact natural features or environmental functions.
- 16.1.4 To encourage and promote the use of a variety of planning engineering and resource management approaches and techniques to realize the hydrological, biological, and socio-economic benefits derived from the long term protection of the Natural Heritage System.
- 16.1.5 To ensure the wise use and conservation of the ground and surface water resources of the Township and to maintain and protect the function of sensitive ground water recharge/discharge, aquifer and headwaters areas on a watershed and subwatershed basis.
- 16.1.6 To prevent loss of life, minimize property damage and social disruption through the proper management and regulation of flood plain lands or lands possessing steep slopes, areas of soil or bedrock instability, high water tables, or other constraints or natural hazards.

**16.2 Policies**

**16.2.1 The Natural Heritage System**

The Township's Natural Heritage System is a diverse and environmentally complex system comprised of various natural features or landforms which include extensive provincially and locally significant wetlands, areas of natural and scientific interest, areas of significant biological habitat, aquifer recharge/discharge and headwaters areas, as well as vast forest and woodland areas. When the quality of these individual components, the most notable and largest of which is the internationally recognized Minesing Swamp provincially significant Class 1 Wetland, are taken into consideration

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it is evident that the Natural Heritage System of the Township is truly an outstanding natural legacy and asset.

It is intended that Natural Heritage features and areas are to be protected, maintained, and enhanced and not subject to the impact of incompatible and inappropriate land uses and development. In order to provide adequate protection to especially sensitive and significant environmental features two categories of natural heritage features and areas have been established; areas where “development will not be permitted” (Category 1); and areas where “development may be permitted if it can be demonstrated that it will not negatively impact” the natural features or functions of areas (Category 2). The categorization of environmental significance and sensitivity is determined to various degrees by provincial guidelines, the nature and detail of existing information, municipal criteria, and other agency approaches. *It is acknowledged that the majority of the Natural Heritage System designation lines, shown on the various map schedules of this Plan, have been established through air photograph interpretation and as such may be subject to further interpretation through site specific field testing.* **[Mod. #43 - Jan.28/98] [OMB Order #2575]** It is anticipated that the delineation of the Natural Heritage System will be periodically revised and updated from time to time over the duration of the planning period to take into account new information, provincial guidelines, and agency and municipal approaches.

16.2.1.1 **Definitions**

Natural Heritage (Environmental Protection) - Category 1 Lands may primarily be characterized as undeveloped natural areas of high environmental quality and significance and/or sensitivity. These areas typically will be both publicly and privately owned.

Natural Heritage (Environmental Protection) - Category 2 Lands may be characterized as areas of lesser environmental significance and/or sensitivity, although areas of high environmental quality may also be present. Category 2 Lands also presently contain lands/or waters previously altered or impacted (i.e. former agricultural or aggregate extractive areas) and developed areas which exhibit a variety and mix of existing uses.

(i) **Natural Heritage (Environmental Protection) Category 1 Lands**

Lands designated as Natural Heritage (Environmental Protection) Category 1 Lands on Schedule “A” include environmentally significant lands and/or waters of inherent ecological sensitivity, such as those areas containing the following natural features:

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- Internationally, provincially, and locally significant wetlands (Classes 1 - 7);
- Provincially significant Areas of Natural and Scientific Interest (A.N.S.I.'s) or other combinations of habitat or landform which could be essential for scientific research or conservation education;
- Significant portions of the habitat of threatened and endangered species; and
- Significant natural watercourses and ravines.

Notwithstanding that all significant natural watercourses and ravines within the Township may not be shown as Natural Heritage (Environmental Protection) - Category 1 Lands on Schedule "A", policies are contained within this section which apply specifically to these areas.

(ii) **Natural Heritage (Environmental Protection) - Category 2 Lands**

Lands delineated as Natural Heritage (Environmental Protection) - Category 2 Lands on Schedule "B" include, but are not limited to, those environmentally significant lands and/or waters of ecological sensitivity, such as those areas containing the following natural features:

- Lands situated adjacent to provincially and locally significant wetlands and other Natural Heritage (Environmental Protection) - Category 1 Lands;
- Unique and significant biologically sensitive wildlife habitat; Forests and Wood lots;
- Natural connections through valley corridors or other linkages between core areas of the Natural Heritage System;
- Groundwater recharge and discharge, aquifer, and shoreline areas; and
- Natural Fish Habitat.

The above noted components of the Natural Heritage System are for the most part shown in the areas delineated as Natural Heritage (Environmental Protection) Category 2 Lands on Schedule "B". Policies contained within this section apply specifically to these areas, however, additional policies are contained in this section which pertain to areas such as aquifer recharge/discharge and headwater areas which have yet to be delineated.

(iii) **Environmental Significance**

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- a) Significant, when used to describe Wetlands and A.N.S.I areas, refers to areas identified by the Ministry of Natural Resources as being provincially significant using evaluation procedures established by the Province.
- b) Significant, when used to describe the majority of natural heritage features or areas, means ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or the Natural Heritage System of the Township according to criteria as determined by the municipality.

(iv) **Incompatible Development and Site Alteration**

Incompatible development includes both development and site alteration that would negatively impact a natural heritage feature or area. The term “development” encompasses those activities which require approval under the Planning Act, and the term “site alteration” applies to activities that alter the landform or vegetative character of a site.

(v) **Negative Impacts**

Negative Impacts refer to those development or site alteration related activities that result in the loss of the natural feature or ecological functions for which the area was identified.

(vi) **Adjacent Lands**

Adjacent Lands may be defined as those lands which may vary in width that are contiguous with and abut Natural Heritage (Environmental Protection) -Category I Lands or lands which abut and are contiguous to significant natural heritage features or areas. Adjacent Lands are those areas which, if developed or subject to site alteration, have a reasonable probability of inducing negative impacts on adjacent natural features and/or the ecological functions of a natural feature or area.

**6.2.1.2 Permitted Uses**

- (i) **Natural Heritage (Environmental Protection) - Category I Lands**

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- a) The natural state of these areas is intended to be preserved and maintained to the greatest extent possible. Permitted uses on lands designated Natural Heritage (Environmental Protection) - Category I Lands as shown on Schedule "A" include existing approved agricultural uses. Other uses include forestry, passive outdoor recreation, scientific research and education, wildlife management, and other activities compatible with the conservation and preservation of the natural flora and fauna.
- b) No buildings or structures shall be allowed in Natural Heritage (Environmental Protection) - Category I Lands other than accessory buildings to permitted uses and those structures necessary for flood or erosion control or for conservation purposes as approved by Council in consultation with the appropriate agencies.

**(ii) Natural Heritage (Environmental Protection) - Category 2 Lands**

- a) Permitted uses on lands delineated on Schedule "B" as Natural Heritage (Environmental Protection) - Category 2 Lands are those uses which are permitted by the underlying land use designation provided that such uses conform to the policies of this Plan.
- b) Existing uses at the date of formal approval of this Plan may be recognized in the Zoning By-Law. The extent of any such existing use will be limited in the By-law to an area sufficient to the siting of such uses.
- c) It is the intention of this plan to direct development primarily to established settlement areas. Development in lands delineated Natural Heritage (Environmental Protection) - Category 2 Lands however may be permitted if it can be demonstrated, to the satisfaction of the municipality in consultation with the applicable commenting agencies and approving authorities, that negative impacts on the ecological features or functions of the components of the Natural Heritage System of the Township will not occur. The anticipated impact of development may be demonstrated by a proponent of development through the completion of an E.I.A. (Environmental Impact Assessment). The study requirements for an E.I.A. are contained in section 16.2.4 of this Plan.

**16.2.1.3 General Policies**

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- (i) Where land designated or delineated Natural Heritage System is under private ownership this Plan does not indicate that this land will necessarily remain as such indefinitely, nor shall it be construed as implying that such areas will be purchased by the Township or a public agency or are free and open to the general public and that unlimited outdoor recreation activities will be permitted.
- (ii) The re-designation of lands situated adjacent to Natural Heritage (Environmental Protection) - Category I Lands or adjacent to environmentally significant lands/waters as defined by Section 16.2.1.1. of this Plan shall generally be discouraged. In the event that an application to re-designate such lands is made, the applicant shall undertake an E.I.A. (Environmental Impact Assessment) completed by a professional qualified in the field of environmental sciences to the satisfaction of the Township and other approval agencies.
- (iii) The re-designation of **(deletion of “of undisturbed natural portions”)** **[Mod. #44 - Jan.28/98]** Natural Heritage (Environmental Protection) - Category 2 Lands of the Township for development may require an E.I.A. (Environmental impact Assessment) to be completed by a professional qualified in the field of environmental sciences to the satisfaction of the Township and other approval agencies.
- (iv) Non-Conforming uses within the Natural Heritage System may be recognized in the Zoning By-law implementing this Plan. The extent of such use will be limited to an area sufficient to the siting of the use. Council shall discourage the extension of non-conforming uses in these areas.
- (v) It is not the intent of this Plan to limit the ability of existing agricultural land uses to continue even when such uses presently occur within a natural feature or area, or on adjacent lands, provided that they are consistent with the policies of this Plan or the Zoning By-law. Agricultural uses include; the growing of crops, including nursery and horticultural crops; raising of livestock and other animals for food, or fur, including poultry and fish; aquaculture; agro-forestry; maple syrup production; and associated on-farm buildings and structures.
- (vi) An amendment to this Plan will not be required for changes to the Natural Heritage (Environmental Protection) - Category I Lands designation or those areas delineated as Natural Heritage (Environmental Protection) -Category 2 Lands, if the changes are deemed to be insignificant by Council in consultation with the commenting agencies. Where boundaries are in question, the municipality shall consult with the applicable agency/ies to determine the necessity of an amendment to this plan. If an amendment is

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deemed unnecessary the Township shall proceed with an amendment to the Zoning By-law.

- (vii) In the absence of more detailed mapping, Natural Heritage System boundaries shall be used as guides for the implementation of the policies contained within this Plan. The municipality should amend the Schedules of the Official Plan and Comprehensive Zoning By-law to incorporate more detailed mapping of components of the Natural Heritage System when such mapping becomes available.

**16.2.1.4 Policies**

**16.2.1.4.1 Natural Heritage (Environmental Protection) - Category I Lands**

**16.2.1.4.1 a) Wetlands**

- (i) The Township contains parts or all of 15 different Wetlands and Wetland Complexes. The following policies shall apply to protect all Wetlands (Classes 1- 7) and unclassified Wetlands in the Township.
- (ii) Development shall not be permitted in Wetlands which are designated Natural Heritage (Environmental Protection) -Category I Lands on Schedule "A" to this Plan. Development shall also not be permitted in any unclassified Wetlands not shown on Schedule "A" to this Plan.
- (iii) No development shall be permitted within 30 metres (98 feet) of a provincially significant Class 1 - 3 Wetland or 15 metres (49 feet) of a locally significant Class 4 - 7 Wetland. Where the boundary of a Wetland is undefined or unclear, it will need to be defined in consultation with the applicable commenting and approval agencies.
- (iv) The municipality may assist stakeholders and others with implementing the recommended actions of the Minesing Swamp Management Plan (1995) or its successor.
- (v) The Township shall encourage the development of Management Plans for other Wetlands or Wetland Complexes in consultation with the applicable approving and commenting agencies.
- (vi) Wetlands shall be placed in a Zone in the implementing Zoning Bylaw which protects them in accordance with these policies.

**16.2.1.4.1 b) Areas of Natural and Scientific Interest (A.N.S.I.'s)**

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- (i) For the purposes of this Plan “Areas of Natural and Scientific Interest” (A.N.S.I.’s) are areas of land/or water containing natural landforms or features which have been identified as provincially significant using evaluation procedures established by the province, as amended from time to time. These areas possess valuable characteristics related to the appreciation or function of the natural environment, scientific study or education.
- (ii) The Township contains two identified Area of Natural and Scientific Interest (A.N.S.I.) areas known as the Fergusonvale North and the Minesing Swamp A.N.S.I.’s. These areas are of provincial significance and overlap to varying degrees with Wetlands and are designated on Schedule “A” to this Plan as Natural Heritage (Environmental Protection) - Category I Lands. Development shall not be permitted in Areas of Natural and Scientific Interest which are designated Natural Heritage (Environmental Protection) - Category I Lands on Schedule “A” to this Plan.
- (iii) No development shall be permitted within 30 metres (98 feet) of any A.N.S.I Area. Where the boundary of an A.N.S.I. is undefined or unclear, it will need to be defined in consultation with the applicable commenting and approval agency/ies.
- (iv) The Township shall support and encourage the development of a Management Plan for the Fergusonvale North A.N.S.I. in consultation with the applicable approval and commenting agencies.
- (v) Areas of Natural and Scientific Interest shown on Schedule A of this Plan and designated as Natural Heritage (Environmental Protection) Category I Lands, shall be placed in a Zone in the implementing Zoning By-law which protects them in accordance with these policies.

**16.2.1.4.1**

**c) Significant Habitat of Endangered and Threatened**

- (i) For the purposes of this section endangered species means any native species, as listed in the Regulations under the Endangered Species Act. Threatened species means any native species at risk of becoming endangered through all or a portion of its Ontario range if the limiting factors are not reversed.
- (ii) Natural areas within the Township not yet identified or recognized may be inhabited by endangered or threatened species for all or part of their life cycle. It is the policy of this Plan to prohibit development in areas of habitat of endangered or threatened species.

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- (iii) Where a development proposal may have the potential to cause negative impacts to significant habitat of endangered and threatened species and where a recovery/management plan has been prepared, the Township shall implement, as conditions of approval, the relevant habitat protection sections in the area to which the development proposal applies.
- (iv) Where a development proposal may have the potential to cause negative impacts to significant habitat of endangered and threatened species and where a recovery/management plan has not been prepared, the Township shall follow the protocol for the identification of the significant portions of the habitat of Endangered and Threatened Species and may require the applicant to identify and confirm through the completion of an E.I.A., the location, size, amount, configuration, and quality of the habitat requiring protection.
- (v) As conditions change or new information becomes known in regard to areas of habitat of endangered species, these lands/or waters may be designated Natural Heritage (Environmental Protection) Category I Lands on Schedule “A” of this Plan.
- (vi) Areas of Significant Habitat of Endangered and Threatened Species shall be placed in the appropriate Zoning category to ensure no development or site alteration.

16.2.1.4.1 d) **Significant Ravines and Watercourses**

- (i) It is the policy of this Plan that ravines and watercourses be kept in as natural a state as possible and not developed. Development is not permitted in steep sloped areas of ravines and along watercourses. For the purposes of this section steep sloped areas are defined as areas with slopes of greater than 3:1.
- (ii) A minimum setback distance of 20 metres (65 feet) from the top of a watercourse or ravine bank is required for all buildings or structures and septic systems and swimming pools. A reduction in the setback may be considered by the municipality for an existing lot of record if a satisfactory geotechnical investigation by a qualified soils consultant addressing slope stability is received. Prior to Council rendering a decision on the application, written comments from the appropriate agencies shall be submitted to the Township which clearly state the recommendations on the matter with reasons.

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- (iii) Significant watercourses and ravines shall be placed in a Zone in the implementing Zoning By-law which protects them in accordance with these policies.

16.2.1.4.1 e) **Snow Valley [OPA #13 OMB approved Jan. 27/03]**

The significance and importance of “adjacent lands” to the integrity of the Minesing Swamp is recognized. As such, development and site alteration will not be permitted by the Official Plan on lands within 120 metres of the Swamp, nor upon those lands in varying width located below 205 metres G.S.C.D. to the edge of the swamp. All lands located below the 205 metre contour elevation have been designated Natural Heritage (Environmental Protection) Category 1 on Schedule ‘A-12” to the Official Plan.

16.2.1.4.2 **Natural Heritage (Environmental Protection) - Category 2 Lands**

16.2.1.4.2 (a) **Lands Adjacent to Category I Lands**

- (i) Development proposals for lands situated within 120 metres (394 feet) of Wetlands may be permitted by the Township subject to the completion of an Environmental Impact Assessment (E.I.A.) to the satisfaction of the Township and applicable commenting agencies. Notwithstanding the above, no development shall be permitted within 30 metres (98 feet) of a provincially significant Class 1-3 Wetland or 15 metres (49 feet) of a locally significant Class 4-7 Wetland in accordance with Section 16.2.1.4.1 (a) (iii) of this Plan. The study shall demonstrate that the proposal will not result in any of the following:
  - (a) loss of Wetland functions;
  - (b) loss of contiguous Wetland;
  - (c) the potential for the proposal to introduce subsequent development pressure which will lead to a future loss of Wetland areas or functions; and
  - (d) conflict with local Wetland management practices or an approved Management Plan.
- (ii) Development proposals for lands situated within 65 metres (213 feet) of A.N.S.I. Areas and/or the habitat of threatened or endangered species may be permitted by the Township of Springwater subject to the completion of an Environmental Impact Assessment (E.I.A.) to the satisfaction of the Township and applicable commenting agencies. Notwithstanding the above, no development shall be permitted within

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30 metres (98 feet) of an Area of Natural and Scientific Interest (ANSI) in accordance with Section 16.2.1.4.1 b) (iii) of this Plan. The study shall demonstrate that the proposal will not negatively impact the viability of the habitat or the natural features or ecological functions for which the area is identified.

16.2.1.4.2 (b) Significant Biologically Sensitive Wildlife Habitat

- (i) The Township possesses extensive areas containing terrestrial and aquatic flora and fauna typical of the Great Lakes mixed forest region. It is the policy of this Plan to maintain the biodiversity and integrity of the Natural Heritage System through the protection and management of significant biologically sensitive wildlife habitat. For the purposes of this section significant biologically sensitive wildlife habitat may include those areas where species concentrate at a vulnerable point in their annual or life cycle, areas which are important to migratory or non-migratory species, rare or specialized habitats, and habitats of species of conservation concern excluding endangered or threatened species.
- (ii) In the Township significant biologically sensitive wildlife habitat refers specifically to deer wintering yards, fish spawning and nursery areas, and waterfowl production and staging areas. These land/or water areas have been identified by the Ministry of Natural Resources and are situated within the Natural Heritage System as defined by Schedule "B" of this Plan. Specific areas are delineated in Figure 6 of the Background Report to this document.
- (iii) Development may be permitted within 50 metres (164 feet) of and in significant biologically sensitive wildlife habitat subject to the completion of an Environmental Impact Assessment (E.I.A.) to the satisfaction of the Township and applicable approval and commenting agencies. The study shall demonstrate that the proposal will not negatively impact the viability of the habitat or the ecological value and functions for which the area is identified. The study shall contain the following information:
  - a) a biological assessment of the extent and characteristics of the habitat area that may be affected;
  - b) an analysis of the potential impact of the proposal on the biological viability of the habitat area;

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- c) a strategy whereby the design, construction and operation of the proposal will maintain the environmental quality of the habitat and preserve the biological viability of the affected habitat area; and
  - d) a method for the replacement or compensation for any used or converted portions of the significant biologically sensitive wildlife habitat which will, generally be equal to the ecological functions of the areas converted from the former natural habitat use.
- (iv) The Township, where reliable information on habitat use is lacking, may encourage and co-operate with wildlife conservation groups, non-governmental organizations, or interested agencies to promote the undertaking of inventories, habitat assessments, and other information gathering activities.
- (v) It is the policy of this Plan to promote and encourage the continuation of study of the biological aspects of the Natural Heritage System of the Township over the duration of the planning period. The purpose of the additional studies would be to ensure the adequate protection of the biodiversity and viability of the Natural Heritage System through the further evaluation and identification of the attributes of the specific system components. Study topics may include, but are not limited to, the following issues and matters:
  - a) The identification of species of regional and local conservation concern and their corresponding habitat areas; and
  - b) The delineation of regionally or locally rare or specialized habitats for wildlife with specialized needs; and
  - c) The examination of the local context of larger scale (i.e. North American flyways) animal movement linkages and of the regional and local animal movement corridors between the core areas of the Natural Heritage System features of the Township; and
  - d) The determination of the present and historical ecological significance of habitat areas associated with seasonal concentrations of animals.
- vi) As additional information is submitted and found to be acceptable to the Ministry of Natural Resources and the Township in regard to the location of areas of Significant Biologically Sensitive Wildlife Habitat, these lands/or waters may be designated Natural Heritage

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(Environmental Protection) - Category 2 Lands on Schedule “B” of this Plan.

- vii) Areas of Significant Biologically Sensitive Wildlife Habitat may be placed in a Zone in the implementing Zoning By-law which protects them in accordance with these policies.

16.2.1.4.2 (c) Forests and Woodlots

(i) Forests

- a) For the purposes of this Plan, Forests mean treed areas that vary in their level of significance and provide a variety of diverse environmental and economic benefits such as erosion prevention, water retention, a sustainable harvest of wood and other forest products, provision of habitat, public recreational opportunities where permitted, and aesthetic enjoyment. It is the policy of this Plan to generally maintain the present forest coverage of approximately 30 % of the Township.

- b) The Township shall encourage best forestry management practices and Management Plans prepared for forest areas in the Township shall generally endeavour to achieve the following basic objectives:

- (i) To allow the continuous and sustainable production and harvesting of the optimal volume of wood and other forest products; and

- (ii) The conservation and/or preservation of forest habitat of threatened and/or endangered species or other significant wildlife populations; and

- (iii) To permit passive and other non-intensive uses where permitted that are compatible with the above.

- (c) It is the policy of this Plan to encourage the continuation of the study and inventory of the Forest areas of the Township. Studies may be conducted in co-operation with nongovernmental organizations and/or interested groups with the purpose of the studies being the evaluation of the significance of the individual forest areas of the Township. This would permit their rating and prioritization of importance by the municipality for both protection and production purposes.

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- (d) Significant forests may be determined by the Township according to the combination of various factors such as species composition, age and maturity, contiguous size, terrain characteristics, Natural Heritage System linkages and connections, aesthetic and historical values, and productive capacity.
  - (e) Development may be permitted within 50 metres (164 feet) of and in significant forests subject to the completion of an Environmental Impact Assessment (E.I.A.) to the satisfaction of the Township and applicable approval and commenting agencies. The E.I.A. shall demonstrate that the proposal will not negatively impact the forest area and the values for which it is identified.
  - (f) Areas of Significant Forests may be placed in a Zone in the implementing Zoning By-law which protects them in accordance with these policies.
- (ii) **Woodlots**
- (a) Woodlots for the purposes of this Plan are shown on Schedule “B” and shall generally be defined as a contiguous wooded area, of no less than 30 hectares (74 acres) in size, irrespective of ownership, maturity, composition or density.
  - (b) A Management Plan for woodlots may be prepared in consultation and co-operation with Simcoe County and/or other agencies. Through further study and assessment, Woodlots may be identified, classified, and prioritized as to their relative importance taking into consideration any unique and higher order ecological functions and attributes.
  - (c) Criteria used in a determination of individual woodlot significance shall include size, location, shape, maturity, species composition as well as the relationship and linkage value of the woodlot to the Natural Heritage System of the Township, ecological functions, and the degree of wildlife and human benefit derived from the woodlot.
  - (d) Development proposals for Woodlots or lands situated adjacent to and within 15 metres (49 feet) of Significant Woodlots may be permitted by the Township subject to the completion of an Environmental Impact Assessment (E.I.A.) to the satisfaction of the Township and applicable commenting and approval agencies.
  - (e) Woodlots may be placed in a Zone in the implementing Zoning By-law which protects them in accordance with the above noted policies.

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- (a) The Township shall support the County of Simcoe in the application of its Tree Cutting By-law, and may undertake initiatives with the County and any other agency/ies in order to promote selective cutting and reduce clear cutting and land clearing activities to minimum levels.
- (b) The Township may enact a tree cutting By-law to regulate or restrict the cutting of trees in all or specific areas of the municipality.
- (c) The Township requires the appropriate replacement and replanting of trees when tree clearing activities occur.

## 16.2.1.4.2

(d) **Fish Habitat**

- (i) The Township possesses Significant Cold Water Streams and Fish Spawning and Nursery Areas. It is the policy of this Plan to ensure no net loss of the productive capacity of fish habitat. Fish Habitat includes spawning and nursery as well as feeding and migratory areas. The principle of no net loss may balance unavoidable habitat losses with habitat replacement and rehabilitation.
- (ii) Where development is proposed adjacent and within 30 metres (98 feet) of fish habitat or in areas of fish habitat, the proposal shall conform to the applicable provincial guidelines for fish habitat protection and the proponent shall include as part of an Environmental Impact Assessment (E.I.A.) to the Township the following information:
  - a) an assessment of the development's potential impact on the quality, quantity and temperature of the fish habitat; and
  - b) a strategy whereby the design, construction and operation of the development will maintain the quality, quantity and temperature of the fish habitat.
- (iii) Where development is proposed adjacent and within 30 metres (98 feet) of fish habitat or in areas of fish habitat and the proposed harmful alteration, disruption or destruction of habitat cannot be compensated for due to the nature and sensitivity of the habitat involved, the proposal shall not be authorized and the project not permitted to proceed.

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- (iv) It is the policy of this Plan to promote and encourage the study of fish habitat areas of the Township. Studies may be conducted in cooperation with non-governmental organizations and/or interested groups with the purpose of the studies being the identification, evaluation and classification of areas of fish habitat in order to ensure the adequate protection of these areas.
- (v) Where fish habitat is associated with an open watercourse or waterbody, a vegetative buffer may be required by the Implementing By-law. Land uses within the vegetative buffer may be restricted to those uses which maintain or enhance the quality of the natural feature.
- (vi) Where streambanks or watercourses have been identified as requiring restoration or enhancement, the Township should encourage and may participate in rehabilitative efforts.
- (vii) Areas of Significant Fish Habitat shall be placed in a Zone in the implementing Zoning By-law which protects these areas in accordance with the policies of this Plan.

16.2.1.4.2 e) **Core Areas**

Core Areas of the Natural Heritage System of the Township are those contiguous natural areas of greater than 400 hectares (988 acres) in size that may contain a variety of terrain and habitat areas and/or provide significant amounts of deep forest interior. In the Township the core areas of the Natural Heritage System include Minesing Swamp, the Fergusonvale A.N.S.I., the Copeland Forest Wetland Complex and Significant Biological Area, and the Jack's Lake Wetland Complex. It is the policy of this Plan that should the preparation of Management Plans be considered for portions of the Natural Heritage System, the above noted core areas should be given first priority (except for Minesing Swamp which has an approved Management Plan) as these areas are considered to be the key components of the Natural Heritage System of the Township.

16.2.1.4.2 f) **Animal Movement Corridors/Connections**

Development proposed in locations adjacent to or within defined animal movement corridors may be required to examine, as part of a required Comprehensive or Full Site E.I.A., the anticipated impact of the proposal on the affected biological corridor.

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The primary animal movement corridors identified within the Township are as follows:

- a) The Matheson/Willow Creek Valley Biological Corridor linking the Minesing Swamp with the Copeland Forest; and
- b) The Willow Creek Valley Biological Corridor linking Little Lake with the Matheson/Willow Creek Biological Corridor; and
- c) The Nottawasaga River Biological Corridor linking Minesing Swamp with the Jack's Lake Wetland Complex and the Little Marl Creek significant biological area; and
- d) The natural area linkages connecting the Orr Lake Wetland and significant biological area, Fergusonvale A.N.S.I, Phelpston Swamp Wetland Complex, and Hendrie County Forest with the Matheson/Willow Creek Valley Biological Corridor.

16.2.1.4.2 g) **Rare or Specialized Habitats**

Rare and specialized environmentally sensitive wildlife habitat areas of the Township in many instances may be protected as a result of being situated in other Natural Heritage System features or areas. The protection of areas of high species diversity containing rare and specialized habitat may permit the preservation of rare species and/or uncommon plant and animal communities. It is the intention of the Township to encourage the identification and evaluation of those areas of the municipality which contain rare or specialized habitats. Where rare or specialized habitat is identified and upon evaluation is deemed to be significant, the municipality may designate these features or areas as part of the Natural Heritage (Environmental Protection) - Category 2 Lands.

16.2.1.4.2 h) **Valleylands**

Valleylands often contain springs and seepage areas, river wetlands, and function as short term storage reservoirs for storm and melt waters. In addition, they provide fish and riparian habitats and serve as important natural linkages and migration corridors between natural features and areas.

In the Nottawasaga River watershed portion of the Township, those areas that may be deemed Valleylands occur wholly within the present fill regulation areas of the Conservation Authority. In order to adequately manage and monitor the activities occurring in the valleyland areas of the Township located outside of this watershed, it shall be the policy of this Plan to

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encourage the development of fill line mapping and the corresponding establishment of fill regulatory areas for those watersheds of the Township without them.

16.2.1.4.2 i) **Headwater Areas**

Headwater areas may be defined as those areas which contain first order streams located at the top of a drainage system, springs, seepage areas, and/or areas of groundwater recharge and/or discharge. Fish habitat in Headwater areas is generally highly sensitive to site alteration on development since these areas may include spawning and nursery areas for some species. Headwater areas tend to produce comparatively higher volumes of runoff since they are generally located in steeper upland areas and also function as important aquifer recharge areas because they typically consist of permeable surface materials.

Headwater areas of the municipality because of their environmental sensitivity need to be identified and evaluated and the groundwater aquifer recharge potential of these areas realized in order to maintain stream baseflows. Management guidelines developed for these areas should generally seek to maintain groundwater infiltration rates and vegetative cover, and minimize disturbances due to site alteration and development. It is the policy of this Plan that the necessity and feasibility of protecting headwater areas of the Township should be examined on a tributary by tributary basis as part of any Master Watershed and/or Sub-Watershed Planning exercise.

16.2.1.4.2 j) **Shorelines**

Areas situated along shorelines of lakes which possess excessive slope and/or erosion potential, natural heritage features or areas such as fish habitat and/or wetlands shall generally be restricted from development. The dredging, filling, clearing, or other form of site alteration of shoreline areas shall not be permitted without the written approval of the Township and the applicable regulatory agency.

In addition, the level of recreational activities and public access to shoreline areas shall generally be limited to a sustainable level which would respect and maintain the existing natural features and vegetation of the area as well as the aesthetic values for which the area is known.

16.2.1.4.2 k) **Significant Landform Features**

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The Township includes a number of significant physiographic landform features that may warrant additional study and consideration and/or the application of special policies. The purpose of identifying these potential study and special policy areas is to recognize those landscape features of the Township which may possess attributes and values that attract a range of diverse and sometimes competing interests. It is the intention of the Township to protect the environmental functions as well as the aesthetic values of these features while realizing the economic benefits from the wise and sustainable use of the natural resource. These areas include but are not limited to the following landform features listed below:

a) The Oro Moraine

The Oro Moraine is a kame moraine which has its western terminus in the southeastern portion of the municipality. It is an area of aggregate distribution and contains sand and gravel deposits of secondary significance as indicated in Figure 7 of the Background Report to this document. The soils of the moraine are characterized as coarse sands and gravels which generally limit its agricultural capability. The Oro Moraine functions as a significant groundwater recharge and discharge area, features a high percentage of forest cover, and has portions of both the Class 5 Craighurst Wetland Complex and the Class 1 Copeland Forest Wetland Complex situated along its western fringe. The portion of the Oro Moraine situated in the municipality also serves as the headwater area for Matheson Creek.

b) The Edenvale Moraine

The Edenvale Moraine is a glacial fluvial outwash deposit which has its eastern terminus in the Township. The moraine is an aggregate resource area of primary importance to the Township and contains a number of active aggregate extraction operations and significant gravel deposits (estimated at 125 million tonnes) as well as extensive high potential sand and gravel areas. The moraine is generally composed of moderately well drained soils and is comprised of clay and outwash gravel and gravelly sand deposits. The moraine contains areas of Class 1 Agricultural Land while other portions of the feature have low agricultural capabilities.

The Edenvale moraine has a high percentage of forest cover (approximately 50 %) which is composed of almost equal amounts of natural and reforested areas. The moraine functions as a significant groundwater recharge and discharge area and features portions of the

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Class 7 Strongville Swamp Wetland and the Class 5 Phelpsston Swamp Wetland Complex along its southern and northern flanks respectively. The moraine is bisected twice by the Class 1 Jacks Lake Wetland Complex and contains a significant deer wintering yard as well as waterfowl production and staging areas,

(c) Lake Algonquin Shorecliff

The boundary between the Simcoe Lowlands and the Simcoe Uplands is the former shoreline of Lake Algonquin. The Simcoe Uplands are drumlinized till plains and are characterized as a series of broad rolling plains separated by steep sided flat floored valleys. The former Lake Algonquin shoreline area is predominantly forested with steep and moderately sloped areas which encompass a number of significant ravines and a diverse mix of upland and lowland habitats. The Algonquin shoreline is identified as an area of high aggregate resource potential containing sand and gravel deposits of high grade/crushable aggregate. The ability of operators to obtain extraction licenses along this feature in the southern portion of the Township is being affected by residential encroachment.

**SECTION 16 - NATURAL HERITAGE (ENVIRONMENTAL PROTECTION POLICIES)**(d) **Lakes**(i) **Orr Lake**

Orr Lake is a kettle lake which contains a warmwater fish community and a significant fish spawning and nursery area. The Orr Lake area performs important recharge and discharge functions and is the headwater area for the Wye River as well as Hogg Creek. The Orr Lake area contains the Orr Lake Wetland which is a Class 1 Wetland situated around the lake margins and at the western end of the waterbody. The Orr Lake significant biological area generally coincides with the western portion of the Orr Lake Wetland although it also includes the upland areas situated adjacent and to the north of the Wetland. The Orr Lake area has aggregate potential and contains active aggregate extractive operations. The lacustrine beach deposit situated northeast of Orr Lake is considered to be exhausted in terms of the potential for additional resource extraction of adjacent lands not presently licensed.

Except for the western portion, Orr lake is ringed by development and it is the policy of this Plan that a Lake Capacity Assessment shall be completed prior to the approval of any substantial residential backlot development. Substantial development in this case is defined as the development of more than 5 abutting lots. The Township may consider requiring an investigation of the economic viability of the aggregate resource potential prior to the approval of development applications.

(ii) **Little Lake**

Little Lake is an environmentally sensitive waterbody situated adjacent to the City of Barrie which, because of its proximity to the City, is under development pressure. The Little Lake basin area performs important groundwater recharge and discharge functions and serves as storage capacity to the Willow Creek drainage system. Little Lake has a warmwater fish community and is a significant fish spawning and nursery area. The Little Lake basin area contains significant waterfowl production and staging areas as well as the Willow Creek Wetland which is a Class 1 Wetland. The Wetland is delineated as encompassing the entire lake as well as the upstream and downstream areas along Willow Creek.

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It is the policy of the municipality to protect the sensitive natural environment of the Little Lake basin area although existing uses and limited enlargement of these uses may be permitted. No new development shall be permitted except the construction of a dwelling and accessory uses on an existing vacant lot. New development shall not be permitted in the Little Lake basin area without development proponents first completing to the satisfaction of the Township and commenting agencies, a Lake Capacity Assessment, a Comprehensive Environmental Impact Assessment, and a Master Drainage Plan. Any approved development in the Little Lake basin area shall be subject to site plan control and municipal design guidelines.

**16.2.2 Constraint and Hazard Lands**

It is the policy of this Plan to prevent loss of life and minimize property damage and social disruption through the regulation and management of lands subject to natural constraints and/or hazards and to protect these areas from incompatible development. The following policies generally apply to the defined Fill Regulation Areas based upon the most current fill line mapping available. The use of fill line mapping recognizes that floodplain mapping is not extensive and has not been undertaken for the majority of the municipality. It is the intent of Council to update this Plan should revised or additional fill or flood line mapping become available. These policies shall also apply to other lands within the municipality that possess any of the constraints or natural hazards noted below.

**16.2.2.1 Definitions**

- (i) Constraint and Hazard Lands in the Township may be defined as including those areas which may possess characteristics such as organic soils, soil or bedrock instability, high water tables, steep slopes, or lands which may be susceptible to flooding events and erosion hazards.

**16.2.2.2 General Policies**

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- (i) In order to minimize the potential risk to persons and property, development will generally be directed away from areas having physical constraints and those land use patterns which cause environmental or public health and safety concerns.
- (ii) It is the policy of this Plan to provide a framework for the control of development in Fill Regulated Areas.
- (iii) In accordance with provincial guidelines, the flood hazard limit for the Township is determined as the greater of the Regional Flood (Timmins Storm) or the 100 Year Flood transposed on a specific watershed or where a maximum observed flood of greater severity has been approved. (Zone 3 of the Ministry of Transportation Drainage Manual)
- (iv) The erosion hazard limit from river and stream systems for the establishment of buildings and structures shall generally be determined for individual circumstances by requiring the following allowances in consultation with the applicable commenting and approval agency/ies. It is recognized by the municipality that flexibility exists in the application of these allowances in order to recognize specific local conditions. In order to depart from the established allowance requirements an applicant may be required to undertake site specific studies using accepted engineering, geotechnical, and/or other scientific approaches and standards as set out in the following:
  - a) in confined and terrain dependent systems consisting of cohesive materials a toe erosion allowance of 15 metres (49 feet) or the average annual rate of recession extended over a hundred year time span plus a stable slope allowance based on a three to one horizontal/vertical ratio and an erosion access allowance of six metres.
  - b) in unconfined and terrain dependent systems consisting of cohesionless materials the regulatory floodline and/or meander belt allowance plus an erosion access allowance of six metres.
- v) All development proposed within Fill Regulated Areas as defined by the Conservation Authority may be subject to site plan control where deemed necessary by the municipality.
- (vi) Development or site alteration shall not be permitted in a floodway.
- (vii) Development and site alteration may be permitted in *constraint and hazard land areas* [Mod. # 45 - Jan.28/98] provided that all of the following conditions can be adequately addressed:

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- a) the constraint or hazard can be safely addressed, and the development and site alteration is carried out in accordance with established standards and procedures; and
  - b) new constraints or hazards are not created and existing hazards or constraints are not increased; and
  - c) no adverse environmental impact will result; and
  - d) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies; and
  - e) the development proposal does not include the establishment of institutional uses or essential emergency services or the disposal, manufacture, treatment or storage of hazardous substances.
- (viii) It is anticipated that areas subject to other natural constraints may be identified in the future, at which time it may be appropriate to amend the Plan to include policies related to such constraints.
- (ix) The placement of fill and the grading of lands, construction in areas susceptible to flooding or in a wetland and alterations to a watercourse shall be subject to the Fill, Construction and Alteration of Waterways Regulations administered by the *conservation authority or approving and commenting authority*. **[Mod. #45- Jan.28/98]**
- (x) It is the policy of this Plan to recognize that due to imperfect information and mapping limitations, some lands may possess development constraints and hazard characteristics and not be defined as Fill Regulated Areas. Council may apply the policies contained herein to lands situated outside of the defined Fill Regulated Areas where reasonable grounds for concern have been received in writing and in consultation with the *conservation authority or approving and commenting authority*. **[Mod. #45- Jan.28/98]**

**16.2.2.3 Development Policies**

Development within defined Fill Regulated Areas that are subject to flooding events may be controlled by two methods, these being, the “One Zone Concept” or the “Two Zone Concept”. It is the policy of this Plan to implement the “One Zone Concept” however the “Two Zone Concept” may also be utilized by the Township for special circumstances in consultation with the applicable commenting and/or approval agency/ies. The policies shall be

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implemented by the municipality in accordance with the policies detailed and outlined below.

(i) **The “One Zone Concept”**

The “One Zone Concept” is the approach whereby the entire flood plain, as defined by the approved regulatory flood, is treated as one unit, and all development within the entire flood plain is prohibited.

- a) Buildings and structures are not permitted within the flood plain, except where written permission is obtained from the Conservation Authority or approval authority or agency having jurisdiction.
- b) Uses which may be permitted within the flood plain include:
  - (i) parks and passive open space;
  - (ii) agriculture and agriculturally related uses;
  - (iii) structural work uses for flood and erosion or sediment control;
  - (iv) minor additions to existing structures; and
  - (v) non-habitable accessory structures.
- c) All uses permitted within the Regulatory Flood Plain must be protected to the elevation of the Regulatory Flood. Permitted Uses shall not increase the potential for upstream or downstream flooding.
- d) Where development is permitted by the “One Zone Concept”, the following criteria shall apply for acceptable floodproofing:
  - (i) Habitable areas shall be dry floodproofed in accordance with the following:
    - a) the minimum opening elevation shall be at least .15 metres (.5 feet) above the Regulatory Flood level;
    - b) basements and other structures located below the Regulatory Flood Level shall be designed

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and constructed to withstand flood conditions;  
and

- c) no habitable buildings will be permitted in areas where the product of flood depth and velocity exceeds the maximum limits as determined by the applicable commenting and approval agency/ies.

(ii) Non-habitable areas shall be wet floodproofed in accordance with the following requirements:

- a) minimum fill is to be used;
- b) structure is to be built at grade and properly anchored to prevent floatation;
- c) The electrical systems be installed at least .15 metres (.5 feet) above the Regulatory flood level; and
- (d) drains must be able to be manually closed.

(ii) **The “Two Zone Concept”**

The “Two Zone Concept” is the approach whereby certain areas of flood plain are considered to be less hazardous than others, such that development potentially can safely occur. The flood fringe defines that portion of the flood plain where development may be permitted, subject to the appropriate floodproofing. The floodway defines the portion of the flood plain where development is prohibited.

- (a) Where appropriate, the Township may, after consultation with, and subject to the approval of the applicable authority having jurisdiction, establish a “Two Zone Concept” for dealing with risk areas. This concept is to be applied on a comprehensive basis and not for individual sites.
- (b) The following criteria shall be utilized by the Township when determining if the “Two Zone Concept” may be utilized;
  - (i) frequency of flooding is such that development could be adequately floodproofed, and where minimal maintenance measures will ensure that floodproofing remains effective;

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- (ii) physical characteristics of the flood plain;
  - (iii) that a need for a “Two Zone Concept” is demonstrated;
  - (iv) that utilization of “Two Zone Concept” does not negatively impact the Regulatory flood level;
  - (v) ability to implement floodproofing measures;
  - (vi) *constraints to the provision of services*; **[Mod. #46 - Jan.28/98]**
  - (vii) *ingress/egress*. **[Mod. #46- Jan.28/98]**
- (c) An amendment to the Official Plan and Zoning By-law are required to implement the “Two Zone Concept”. The area which is determined as the floodway shall be deemed to be Category I Lands and placed in an appropriate zone which does not permit development. The zoning for areas delineated as flood fringe areas shall include special policies and regulations.
- (d) The following policies pertain to the development of all permitted uses within the floodrange;
- i) floodproofing be implemented in accordance with the policies as they are listed above and apply to the “One Zone Concept”;
  - ii) any necessary Zoning By-law Amendment, pertaining to a development proposal has satisfactorily addressed the concerns of the applicable commenting and approval authority.
- (e) *That appropriate setbacks, minimum elevations and floodproofing requirements be incorporated into the Zoning By-law*. **[Mod. #46 - Jan.28/98]**

## 16.2.3

**Ground and Surface Water Resources**

It is the policy of this Plan to protect *and where necessary* **[Mod. # 47- Jan.28/98]** enhance the quality and quantity of ground water and surface water of the municipality in order *to maintain natural and heritage features and functions* **[Mod. #47- Jan.28/98]** to ensure that the existing and future needs of settlement areas as well as individual residents are met. The Township considers groundwater to be a significant public resource and

discourages the practice of groundwater mining for private commercial or industrial bottling purposes.

It is also the intention of this Plan to protect the function of sensitive ground water recharge/discharge, and aquifer areas of the municipality. It is recognized that at the present time the location and function of all ground water recharge/discharge and aquifer areas within the Township may not be delineated and understood. *In general, the management of ground and surface water resources shall occur on a watershed and subwatershed basis.* [Mod. #47 - Jan.28/98]

16.2.3.1 **Aquifers**

- (i) The Township will promote water conservation and support the efficient and sustainable use of aquifers and other water resources.
- (ii) The Township will encourage the study of the nature and extent of municipal aquifers especially in the vicinity of existing settlement areas through the compilation of existing information or the collection of new information.
- (iii) Given the general lack of detailed information relating to the groundwater regime of the Township, any use which requires an approval under the Planning Act which could result in significant amounts of water being withdrawn from an aquifer within the Township, such as a water extraction and bottling plant, shall require an amendment to this Plan. When considering such an amendment, the proponent shall address the following to the satisfaction of Council:
  - a) the long term impact of the proposal on the quality and quantity of water in the affected aquifer and upon any hydrological linkages which may effect environmentally sensitive areas.
  - b) the potential of the proposal to interfere with the quality and quantity of water yielded by adjacent wells.
  - c) the adequacy of measures proposed by the proponent to ensure the long term monitoring of the impact of the water withdrawal on the aquifer and adjacent wells.
  - d) the preparation of a suitable agreement which could require the installation of metering and would address municipal concerns such as any necessary road upgrades, traffic control signage, and licensing or other such matters deemed appropriate by the Township.

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- (i) It is the intent of this Plan to provide a high level of protection to the significant groundwater recharge/discharge areas of the municipality. These areas typically consist of highland areas where infiltration to the shallow groundwater regime discharges into the headwaters of streams and rivers and/or to wetlands and development of these areas may pose a hazard to persons and/or property.
- (ii) Where significant groundwater recharge/discharge areas of the municipality have been determined and delineated, the Township may place these areas in a special designation or zone which may require new development to address the following concerns to the satisfaction of Council.
  - a) the impact of the proposed use/s on the groundwater recharge function and any associated ecological systems or environmentally sensitive areas.
  - b) the general viability of locating the proposed use/s in an area of groundwater discharge and the methods by which this constraint may be overcome according to established and accepted standard engineering practices.
  - c) the effect of the proposed use/s on the quality and quantity of drinking water in adjacent wells.
- (iii) Where development upon aquifer areas or lands having capacity for groundwater recharge is approved, the developments will incorporate best management practices and be designed to:
  - a) minimize the reduction of groundwater recharge; and
  - b) maintain groundwater quality to the highest degree; and
  - c) promote aquifer recharge by means of runoff retention or detention ponds.

**16.2.4 Environmental Impact Assessments**

It is the policy of this Plan to approve only those land uses which are demonstrated to be environmentally sound and do not negatively impact the natural features or functions of the Township. In order to ensure the long term viability of the Natural Heritage System of the Township it is necessary to clearly understand the environmental implications of all development

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proposals under consideration especially where proposals may have the potential to cause significant change in the natural functions and features of the environment.

When development is being proposed, the proponent may be required to undertake environmental studies to examine the environmental impact of the proposed use on the inherent natural attributes and functions of a site or area. The general purpose of these studies is to accurately assess the potential impact on the natural flora, fauna, local ecosystem, and natural processes to determine if environmental features or functions will be impaired.

**16.2.4.1 Definitions**

It is the intention of this Plan that Environmental Impact Assessments generally should only be as complex as they need to be and that the process of environmental review be adaptable and flexible in order to take into account the size, scale, and complexity of the proposal being assessed. The two basic levels of Environmental Impact Assessment include:

- (i) **Comprehensive E.I.A.:** A Comprehensive E.I.A. may be required to assess impacts over large and extensive geographical areas. A Comprehensive E.I.A. is typically broad in scope and would provide sufficient analysis to formulate land use designations and policies. A Comprehensive E.I.A. may require detailed objectives outlined in a Terms of Reference and input from an Advisory or Technical Review Committee.
- (ii) **Site E.I.A.:** A Site Environmental Impact Assessment is intended to assess the potential impact of a specific development proposal on the natural features and/or functions of a particular site. Depending upon the complexity and scale of a proposal, a Full Site or a Scoped Site E.I.A. may be required by the municipality to adequately assess the anticipated environmental impact/s. An Issues/Summary Report (I.S.R.) may also be required by the Township as a preliminary step in order to more closely define the basis of study for a required Site E.I.A. The following is a brief definition and description of an I.S.R., Full Site, and Scoped Site E.I.A.:
  - a) **Issues/Summary Review:** An I.S.R. would identify key natural features and functions and briefly outline and summarize fundamental issues relating to potential impacts. An I.S.R. would also recommend the scale and type of Site E.I.A.

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necessary for a proponent to undertake in order to satisfactorily assess anticipated impacts.

The two basic levels of Site E.I.A.s include:

- b) Full Site E.I.A.: A full site E.I.A. may contain a number of detailed assessments of various potential impacts and may be required by the Township to assess large scale development where impacts are unknown and when appropriate mitigative measures may not be readily available.
- c) Scoped Site E.I.A.: A scoped site E.I.A. consists of a focused review which assesses small scale development where environmental impacts can reasonably be expected to result in minimal disruption and change and/or where the expected impacts can be easily mitigated.

**16.2.4.2 General Policies**

- (i) The proponent of land use changes requiring approval under the Planning Act of lands identified by Schedule "A" of this Plan as being situated adjacent to Natural Heritage (Environmental Protection) - Category 1 Lands, or situated within or adjacent to significant natural features as defined in Section 16.2.1.4.2 **[Mod. # 48 - Jan.28/98]** of this Plan, may be required by the Township to complete an Environmental Impact Assessment in accordance with the requirements and policies of this Plan.
- (ii) A Comprehensive Environmental Impact Assessment shall generally be required by the Township as part of the background study component of a Secondary Plan prior to the development of detailed planning policies for that document. A Site Environmental Impact Assessment shall be required to be completed for specific sites prior to the development approval stage.
- (iii) Comprehensive or Full Site Environmental Impact Assessments as a minimum shall identify key functions and processes of natural heritage features in a particular area, how they interact and how they may be affected by a proposed development. Mitigation techniques should be identified to minimize impacts, and residual impacts must be identified as well as recommendations made concerning the necessity of monitoring and the opportunities for rehabilitation and restoration.
- (iv) The undertaking of duplicate environmental studies is not advocated or desired by the Township. Where an Environmental Impact Assessment is required by the policies of this Plan, it may be combined or blended with

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other environmental studies that may be required to be undertaken by other agencies such as the County of Simcoe, the Conservation Authority and/or the Ministry of Natural Resources. This blending or combining of environmental reports may occur with the prior written approval from the Township in consultation with the applicable commenting agencies.

- (v) In certain circumstances where a Comprehensive E.I.A. has been completed for a specific area or natural heritage feature in the municipality, the need for a Full Site E.I.A. may be reduced and a scoped study may be deemed by the municipality to be adequate to allow an assessment of the anticipated potential impacts.
- (vi) Where an Issues/Summary Report has recommended a Scoped Site Environmental Impact Assessment be undertaken or where a Scoped Site Environmental Impact Assessment has been completed by a development proponent, Council may consider the merits of a written “bump up” request for the proponent to examine additional issues or obtain more detailed information relating to anticipated potential environmental impacts.
- (vii) Environmental Impact Assessments completed for development proposals in the Township shall take into account the corresponding guidelines and policies of the County of Simcoe, *Conservation Authority [Mod. #48-Jan.28/98]* and/or other commenting agencies for similar studies as well as the applicable Ministry of Natural Resources guidelines for impact assessments.
- (viii) For a development proposal to be acceptable to the Township, the Environmental Impact Assessment shall demonstrate that the proposal will not cause a negative impact on the natural feature or ecological functions for which an area is identified and that the anticipated residual environmental impact complies with the applicable provincial and county policies and guidelines.
- (ix) As part of the planning process for the preparation of a Secondary Plan the Township may retain independent professional environmental consultants to undertake and complete a Comprehensive Environmental Impact Assessment to evaluate the impact of development on natural features or functions of an area. The Township may require such a study to be funded by the proponents of development and the findings of the Assessment may recommend full acceptance of the proposal, acceptance with conditions such as compliance with a mitigation/monitoring program, acceptance pending further studies, or rejection.
- (x) Where an Environmental Impact Assessment is required by the municipality, in all instances the assessment shall be completed and reviewed by the

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applicable commenting agency/ies prior to the adoption by the Township of a site specific amendment to this Plan, the adoption of an amendment to the Zoning By-law, an approval of a Site Plan Agreement, or a Draft Plan of Subdivision.

- (xi) Where an Environmental Impact Assessment recommends the monitoring of impacts or the implementation of other long term mitigative strategies, the municipality may require, as a condition of approval, for the proponent to enter into a legal agreement to establish and undertake a monitoring program. The legal agreement shall specify potential remedial measures that may be implemented by the municipality if the monitoring shows the mitigation measures are not effective.
- (xii) As it is in the best interest of all participants in the development approval process to understand as early as possible relevant issues and topics and the extent and depth of the existing available information base, it is the policy of this Plan to require a proponent of development to consult with the municipality and other applicable commenting and interested agencies before a formal E.I.A submission is made to the municipality and/or other agencies.
- (xiii) The findings of a Full Site or Scoped Site Environmental Impact Assessment may recommend full acceptance of the proposal, acceptance with conditions such as compliance with a mitigation and/or monitoring' program, acceptance pending further studies, or rejection.

**16.2.4.3 Policies****16.2.4.3.1 Comprehensive Environmental Impact Assessment:**

- (a) *Generally* a Comprehensive E.I.A. *shall* be required by the Township as part of the necessary background studies for Secondary Plans, or to address potential area wide impacts upon specific natural heritage features, functions or areas within the municipality. *The Township may however determine that a lower order EIA is appropriate.* **[Mod. #49 - Jan.28/98]**
- (b) A Comprehensive E.I.A. shall generally identify those areas where development may be permitted subject to standard accepted practices, areas where constraints and natural hazards may occur which could limit the potential of an area for development, and areas where development may not be permitted.
- (c) A Comprehensive E.I.A. in addition to delineating development and non-development areas should identify the level of further environmental studies required to permit development (i.e. Full Site or Scoped Site E.I.A.)

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approvals, and the priority or key issues that must be addressed by any required subsequent Site E.I.A.

- (d) The Township may retain independent professional environmental consultants to undertake or review a Comprehensive Environmental Impact Assessment. The municipality may require such a study to be funded by the proponents of development.
- (e) The Township may appoint a Technical Review and Steering and/or Advisory Committee comprising municipal representatives and staff, commenting and interested agencies, ratepayer groups, and the proponents of development to assist with the definition of the objectives of a Comprehensive Environmental Impact Assessment and to provide input and direction during the study process.

**16.2.4.3.2 Site Environmental Impact Assessment:****(a) Issues/Summary Review:**

- (i) For those development proposals where the scale and scope of a required Site E.I.A. is unclear (i.e. Full or Scoped) and it is necessary to develop an agreed upon Terms of Reference, or where such a review would assist with the blending or combining of environmental reports required by a number of commenting agencies and approval authorities, the Township may request the development proponent to undertake an Issues/Summary Review.
- (ii) An Issues Summary Review (I.S.R.), if required by the Township, shall be prepared in conformity with the applicable guidelines of the Province and County for such studies and shall consist of, at a minimum, a review of all existing available and relevant information.
- (iii) Where an Issues/Summary Review (I.S.R.) has been completed and indicates that no environmental features or functions would be impacted by a proposed development, the municipality may, in consultation with the appropriate commenting agencies, deem the I.S.R. to fulfill the E.I.A. requirements of this Plan.
- (iv) The Issues Summary Review (I.S.R.) shall identify all known key natural features and functions of the area/site under consideration and briefly outline the fundamental issues relating to the potential impact that could reasonably be expected to result from the proposal.

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- (v) An I.S.R. shall describe the magnitude of the development proposal and define the scope of work necessary to complete a Site Environmental Impact Assessment. An I.S.R. shall recommend the scale and type of Site E.I.A. (i.e. Full or Scoped) necessary to satisfactorily assess anticipated impacts.

(b) **Scoped Site Environmental Impact Assessment:**

- (i) The level of detail required for a Scoped Site Environmental Impact Assessment shall be flexible according to the size, scale and complexity of the proposal and may be determined by the Township in consultation with the commenting and approval agencies and/or through the findings of an I.S.R.
- (ii) Where a Comprehensive E.I.A. has previously been completed for an area in which development has been proposed and a Scoped Site E.I.A. is required, the findings and recommendations of the Comprehensive E.I.A. shall be taken into consideration in the preparation of the Scoped Site E.I.A.
- (iii) A Scoped Site Environmental Impact Assessment shall demonstrate that a proposed development will not negatively impact the Natural Heritage features or functions of an area.

(c) **Full Site Environmental Impact Assessment:**

- (i) A Full Site Environmental Impact Assessment may be required where there is no Comprehensive Environmental Impact Assessment and it is reasonable to assume that the size, scale, and complexity of the proposal may have the potential to negatively affect the natural features and functions of an area. A Full Site E.I.A. may also be required by the municipality as a result of information and/or recommendations contained within a Comprehensive E.I.A.
- (ii) The range of issues and the detail of information required for a Full Site Environmental Impact Assessment may be determined by the Township in consultation with the commenting and approval agencies and/or through the recommendations of an I.S.R.

**SECTION 16 - NATURAL HERITAGE (ENVIRONMENTAL PROTECTION POLICIES)**

- (iii) A Full Site Environmental Impact Assessment shall be prepared in conformity with the policies of this Plan and the applicable guidelines of the Province and County for such studies and shall demonstrate that a proposed development will not negatively impact the Natural Heritage features or functions of an area.