

<b>2006 OFFICIAL PLAN CONSOLIDATION Proposed Environmental Policy Modifications (shown as <u>additions</u> &amp; <u>deletions</u>)</b>		<b>Rationale for Proposed Modification</b>
<p><b>2.4.1. City Structure Policies - Natural Heritage System</b></p>	<p>xi) A natural heritage system comprised of areas and features and their connecting links that are significant for their contribution to the health and diversity of the City's natural environment will be identified and protected through the Official Plan and in the planning documents, <u>such as environmental impact studies and guideline documents,</u> required for implementation of the Official Plan.</p>	<p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>
<p><b>2.9. Introduction</b></p> <p><b>2.9.1. Natural Heritage</b></p>	<p style="text-align: center;"><b><u>ENVIRONMENTAL PLANNING</u></b></p> <p><i>There are three dimensions to the environmental policies in this Plan. First, London is committed to sustaining its rich natural heritage. Second, Londoners must be safe from natural and human-generated hazards. Third, to ensure a sustainable future, the City is committed to conserving natural resources.</i></p> <p>London's heritage is very much a "natural" heritage. The City is located near the northern limit of the Carolinian forest region - the most fertile and biologically diverse natural environment in Canada. Prior to European settlement, the landscape was dominated by forests of maple, oak, white pine, ash and basswood. It also contained marshes, swamps, open plains, tall grasslands and corn fields, which were being actively managed by Aboriginal peoples. The economy of the early settlers was forest based. This soon gave way to agriculture, and from this agricultural base, land use in London has become increasingly more urbanized.</p> <p>While very little of the original landscape remains, there is a framework of naturally vegetated areas, mostly associated with the City's valleys, ravines, and moraines, that can form the basis of a natural heritage system for London.</p> <p>The significant natural features that contribute to the Natural Heritage System are designated as Open Space on Schedule "A" - the Land Use map. Other natural areas may be added to the Open Space designation and form part of the Natural Heritage System if warranted on the basis of future studies. The City will seek to improve the quality of the Natural Heritage System over the planning period by strengthening linkages and mitigating the impacts of activities that impact on the system.</p> <p>The Natural Heritage System is also an important recreation and aesthetic resource for the City. The Thames River Valley, in particular, is closely linked with the City's history and identity. It is a patchwork of public parks and recreational areas, private open space, natural areas and public infrastructure. The City <u>anticipates will ensure</u> that the Thames River Valley will continue to perform this multi-functional role over the long term future.</p>	

**Hazard Protection**

The hazard protection policies in this Plan are concerned with ensuring public health and safety. Natural hazards areas, such as floodplains, lands susceptible to erosion and unstable slopes, are identified. So, too, are human generated hazard areas such as contaminated lands and abandoned oil and gas wells. Appropriate policies are provided to ensure that development permitted in these areas hazards are generally located and avoided, and that in cases where limited development is permitted, the hazards are properly mitigated to protect public health and safety.

The hazard protection objective is being revised to more clearly define how natural hazards are addressed through the municipal plan review process, in accordance with the requirements of the PPS

**Resource Conservation**

The Natural Heritage and Hazard Protection policies are closely interrelated. Some of the lands within the Natural Heritage System play an integral role in protecting persons and property from natural hazards.

London was built on natural resources and we continue to use these resources in all of our activities. For the benefit of present and future generations, the City of London is committed to using natural resources wisely and efficiently.

Resources come in many forms. This Plan addresses energy use, water conservation, waste management, transportation, aggregate resources, petroleum and mineral resources, as well as strategies for the efficient utilization of land in the City.

Resource conservation policies are often complementary. For instance, achieving a compact urban form could reduce energy use, lessen demands on the transportation system, reduce the amount of servicing infrastructure required and avoid the loss of natural features and ecological functions.

**2.9.2. Environmental Goal**

It is a goal of this Plan to:

- i) Promote a healthy natural environment in London;
- ii) Maintain a healthy Natural Heritage System for the benefit of present and future generations of Londoners;
- iii) Reduce risk to public health and safety from natural and human generated hazards; and
- iv) Conserve natural resources for the benefit of present and future generations of Londoners.

**2.9.3. Environmental Strategies**

Council will consider the following strategies in the pursuit of the Environmental Goal:

**Natural Heritage**

- i) The City will promote an ecosystem approach to environmental planning. An ecosystem approach to environmental planning means:

The ecosystem is defined as a community of living co-existing organisms (including human kind) and the non-living physical and chemical environment in which that community lives. Thus, there is a constant interaction and interdependence between the living and non-living components of the ecosystem. The dynamics of the environment allow for variations in key factors. Indeed, one attribute of an ecosystem is that it is constantly changing.

The concept of an ecosystem can be applied at any level of scale - a wetland, a tributary, or the entire watershed. The ecosystem approach is particularly applicable to land and water management studies because it integrates physical, chemical and biological information, so all of the factors are considered at each scale, in assessing overall environmental quality.

This ecosystem approach to environmental planning has been used in the Subwatershed Planning Studies to develop a Natural Heritage System for the City. Recognizing that natural heritage areas are valued for the natural features they contain and the ecological functions they perform, the City will utilize area planning processes, and environmental impact studies and guideline documents, to ensure that natural heritage areas are evaluated and protected, both individually and cumulatively as part of an interrelated Natural Heritage System.

- ii) The City shall encourage a net gain in environmental quality through the implementation of the Official Plan. The City shall develop and implement monitoring programs to measure changes in environmental quality and assess the effectiveness of the Official Plan's environmental goal, objectives and policies.
- iii) The City shall promote the rehabilitation of degraded ecosystems throughout the municipality and support appropriate rehabilitation works identified through the Subwatershed Planning Studies, community planning processes, or other environmental studies. Rehabilitation works may be undertaken in co-operation with landowners and other agencies and interest groups.
- iv) The City recognizes the Thames Valley Corridor as its most important natural, cultural, recreational and aesthetic resource. The City shall prepare a Thames River Valley Corridor Plan to optimize the multi-functional role of the river valley system in the City over the long term future.
- v) The City shall encourage, support and initiate, as appropriate, public education and awareness initiatives for the protection, rehabilitation and enhancement of the Natural Heritage System.
- vi) The City shall, in consultation with other agencies and groups, identify and promote appropriate non-regulatory measures, such as land trust and land stewardship initiatives, which will support the natural heritage objectives and policies contained in this Plan.

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

**Hazard Protection**

- vii) The City shall ~~establish, and participate in, an Implementation Committee to oversee~~ the implementation and monitoring of the Subwatershed Planning Studies, in conjunction with other agencies. A multi-stakeholder implementation committee may be established to co-ordinate this process.
- viii) The City shall encourage innovative development patterns and techniques which support and strengthen the Natural Heritage System.
- ix) The City may require that any planning processes or studies involving the identification or evaluation of Natural Heritage System components include pre-consultation with the appropriate agencies.
- x) The City shall minimize the risk to public safety and to property by restricting development within areas identified by the Conservation Authorities as being susceptible to flooding natural hazard processes such as flooding and erosion. In general, new development will be required to locate and avoid natural hazards, and redevelopment and infill development will be required to properly characterize and properly mitigate the natural hazard.
- xi) The City may allow encourage the use of flood plain lands for recreational uses and may acquire floodplain lands for these purposes. Where there is no other viable alternative and where it can be demonstrated that there is a net public benefit, stormwater management facilities that are acceptable to the City and the Conservation Authority having jurisdiction may be allowed on natural hazard lands, having regard to the hazards associated with these lands and their significance to the Natural Heritage System, and subject to other policies in this plan regarding their location in the Natural Heritage System.
- xii) To reduce the risk to public safety and property due to erosion and slope instability, the City, in cooperation with the Conservation Authority having jurisdiction, shall ensure that any proposed development or use within identified erosion hazard areas is subject to geotechnical assessment and that mitigation measures or development restrictions are imposed where appropriate natural hazard processes are allowed to occur naturally, or are mitigated in cases where existing development is at risk. In the limited cases where a development or use is permitted within erosion hazard areas, the proposed development will be subject to detailed assessment and mitigation measures, or appropriate development restrictions.
- xiii) To reduce the risk to public safety and property due to riverine flooding the City, in cooperation with the Conservation Authority having jurisdiction, shall ensure that flood plain storage and conveyance processes are maintained. In the limited cases where development or use is permitted within the flood plain, the proposed development will be subject to detailed assessment and mitigation measures, or appropriate development restrictions.
- xiiiiv) The City shall restrict development in the vicinity of human generated hazards such as abandoned oil and gas wells, suspected contaminated sites and closed landfill sites until it is demonstrated that such

The revised wording in clause vii) provides for increased flexibility in determining how the subwatershed studies are implemented. For example. Rather than one City-wide committee, there could be several smaller sub-committees that function at a neighbourhood level.

The wording in clause x) is being expanded to reflect the full mandate of conservation authorities and guidelines for hazard protection.

The revised wording clarifies the context for the use of floodplain lands with other sections of the OP. Specifically, policies of the Natural Heritage System must be addressed where stormwater management facilities are being considered for locations on natural hazard lands.

development does not cause an unacceptable risk to public health and safety.

**Energy Conservation and Air Quality**

- xiv) The City shall ensure that development involving uses that are sensitive to noise, air emissions or odour impacts is appropriately protected from sources such as operating landfill sites, transportation corridors, airports and sewage treatment plants.
- xvi) The City shall promote energy conservation and improved air quality by:
  - (a) initiating, participating, and cooperating in conservation programs, including public education and awareness programs;
  - (b) encouraging denser, contiguous development: intensification of existing built up areas and the efficient use of existing infrastructure;
  - (c) incorporating energy conservation measures into site design, and into the design, construction and renovation of buildings; ~~and~~
  - (d) encouraging the use of walking, bicycling, public transit and car pooling as alternatives to private automobile use;
  - (e) encouraging tree planting for windbreak protection and shade;
  - (f) focusing major employment, commercial and other travel intensive land uses on sites that are well served by existing or planned public transit service, and which facilitate the establishment of public transit;
  - (g) improving the mix of employment and housing uses to shorten commute journeys and decrease transportation congestion; and
  - (h) promote design and orientation of subdivisions and developments, which maximize the use of alternative or renewable energy systems, such as solar and wind energy, at appropriate locations.
- xvii) The City will develop an energy conservation and air emission reduction strategy to:
  - (a) reduce energy use and expenditures for buildings, vehicles and equipment owned and operated by the City;
  - (b) reduce energy use and expenditures for the operation of water supply and sewage treatment

Additional objectives are proposed in clause xvi) to implement Section 1.8.1, 1.8.2. and 1.8.3. of the 2005 PPS, which places increased emphasis on energy conservation, energy efficiency and improved air quality.

	<p>systems; <del>and</del></p> <p>(c) promote multi-sector, community wide reductions; <del>and</del></p> <p><u>(d) promote the development of alternative and renewable energy systems.</u></p>	
<p><b>Water Conservation</b></p>	<p>xviii) The City shall promote water conservation by:</p> <p>(a) initiating, participating, and cooperating in conservation programs, including public education and awareness programs;</p> <p>(b) developing a water efficiency and conservation strategy for the City; and</p> <p>(c) encouraging denser contiguous development, intensification of existing built up areas and the efficient use of existing water/sewerage infrastructure.</p> <p><u>(d) encouraging tree planting for temperature reduction and infiltration.</u></p>	<p>This objective recognizes the benefits that tree planting can provide to water quality and water conservation.</p>
<p><b>Waste Reduction</b></p>	<p><del>xviii)</del> The City shall support the reduction, reuse, recycling and recovery of materials from waste by:</p> <p>(a) initiating, participating and cooperating in reduction programs, including public education and awareness programs;</p> <p>(b) cooperating with surrounding municipalities to develop a long term strategy to reduce, reuse, recycle and recover materials from recycled waste, and to address available technologies for the use and/or disposal of waste;</p> <p>(c) reviewing development proposals which may potentially generate or store hazardous waste and ensuring that the location and operation of such developments will not adversely affect the health and safety of the public and the natural environment; and</p> <p>(d) encouraging development proposals to provide adequate waste disposal, recycling and composting facilities.</p>	
<p><b>Aggregate Resources</b></p>	<p>xix) The City shall protect aggregate resource areas by:</p> <p>(a) restricting land uses which are incompatible with possible future extraction of identified aggregate</p>	

<p><b>Mineral and Petroleum Resources</b></p>	<p>resources; and</p> <p>(b) ensuring that, where feasible, aggregate resources are extracted prior to development.</p> <p>xxi) The City shall encourage the integration and co-ordination of pit rehabilitation plans in keeping with the intended long term use of these areas.</p> <p>xxii) The City will permit the exploration and development of potential mineral and petroleum resources in keeping with provincial legislation.</p>	
<p><b>8A.</b></p>	<p><b><u>OPEN SPACE LAND USE DESIGNATION</u></b></p> <p>(Chapter 8A amended and renumbered by OPA No. 88 - OMB Order No. 2314 – approved 99/12/23)</p> <p><b><u>INTRODUCTION</u></b></p> <p><i>The Open Space designation is applied to lands which are to be maintained as park space or in a natural state. These lands include public and private open space, flood plain lands, <u>lands susceptible to erosion and unstable slopes</u>, and natural heritage areas which have been recognized by Council as having city-wide, regional, or provincial significance. It is the intent of the Plan to conserve such areas and, where appropriate, to integrate these lands into the City's overall parks network. These lands also serve the added function of enhancing the City's image as the "Forest City", and in providing a break in the urban landscape.</i></p> <p><del>Areas within the City that are designated Open Space are shown on Schedule "A" - the Land Use Map. Flood plain lands and natural heritage areas are delineated on Schedule "B" - Flood Plain and Environmental Features. Areas designated as Open Space may be in either public or private ownership.</del></p> <p><del>Policies contained in this Section of the Plan describe the intent, function, and permitted uses of the Open Space designation. There are also policies regarding flood plain lands and natural heritage areas designated as Open Space contained in Chapter 15 of the Plan - Environmental Policies.</del></p> <p><u>Areas within the City that are designated Open Space are shown on Schedule "A" – the Land Use Map. Components of the Natural Heritage System such as Significant Woodlands, Provincially Significant Wetlands and Environmentally Significant Areas, are delineated on Schedule "B1" – Natural Heritage Features. Natural resources and natural hazards are delineated on Schedule "B2" – Natural Resources and Natural Hazards. Areas designated</u></p>	<p>Additional wording in the opening paragraph recognizes that the open space designation is typically applied to slope and erosion hazards</p> <p>This change was recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>

Open Space may be in either public or private ownership.

Policies in this Chapter of the Plan describe the intent, function and permitted uses of the Open Space designation. There are also policies regarding natural hazard lands and natural heritage areas designated as Open Space contained in Chapter 15 of the Plan – Environmental Policies. The Open Space policies are implemented through the Zoning By-law, other by-laws and guideline documents adopted pursuant to Section 19.2.2.. The policies will be applied in a manner that is consistent with the Provincial Policy Statement and applicable Provincial Guidelines.

(Introduction amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

8A.1.

**OBJECTIVES FOR THE OPEN SPACE DESIGNATION**

The use of areas designated Open Space shall be directed towards the following objectives:

- i) Provide for a continuous linear open space network which generally follows the Thames River and its tributaries.
- ii) Provide for linkages among open space areas throughout the City.
- iii) Provide for open space areas in all parts of the City to allow for a balanced distribution of locations for both active and passive recreational pursuits.
- iv) Enhance the accessibility of publicly-owned open space areas, where there is no danger to public safety and where significant natural features and ecological functions can be protected. (Clause iv) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)
- v) Reduce the potential for property damage and loss of life due to flooding, by restricting the development of flood plain lands to an appropriate range of uses. (Clause v) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)
- vi) Provide for the protection of natural heritage areas which have been identified, studied and recognized by Council as being of city-wide, regional, or provincial significance. (Clause vi) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

8A.2.

**OPEN SPACE**

*The Open Space land use designation is comprised of public and private open space; flood plain lands; lands susceptible to erosion and unstable slopes; natural heritage areas recognized by Council as having city-wide, regional, or provincial significance; and lands containing other natural physical features which are desirable for open space use or preservation in a natural state. These features may include areas of rough or hilly topography,*

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

Minor wording addition to recognize that Open Space includes slopes and lands susceptible to erosion

	<p><i>organic soils, poor drainage, natural vegetation, steep slopes, woodlots, or ravines.</i></p> <p><i>Uses permitted within the Open Space designation are limited to non-intensive uses. District, city-wide, and regional parks are included in the Open Space designation. Neighbourhood parks and parkettes are not shown on the Land Use Map, but are included as secondary uses in other land use designations. Additional restrictions regarding uses for natural heritage areas designated as Open Space and flood plain lands are contained in Chapter 15.</i></p>	
<p><b>8A.2.1.</b> <b>Areas Identified as Open Space</b></p>	<p>(Section 8A.2 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>Areas designated Open Space on Schedule "A" - the Land Use Map, shall consist of, public open space, including district, city-wide, and regional parks; private open space, including such uses as cemeteries and private golf courses; flood plain lands and lands that are subject to natural hazards; <u>and natural heritage areas, components of the Natural Heritage System, which have been evaluated and</u> which are recognized by Council as being of city-wide, regional or provincial significance. The Open Space designation may also be applied to natural physical features which are desirable for preservation <u>and have not been evaluated.</u></p>	<p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>
<p><b>8A.2.2.</b> <b>Permitted Uses</b></p>	<p>(Subsection 8A.2.1 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>Public open space uses including district, city-wide, and regional parks; and private open space uses such as cemeteries and private golf courses are permitted in the Open Space designation. Agriculture; woodlot management; horticulture; conservation; essential public utilities and municipal services; and recreational and community facilities; may also be permitted. Zoning on individual sites may not allow for the full range of permitted uses.</p>	
<p>Flood Plain Lands</p>	<p>(Subsection 8A.2.2 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>i) Where flood plain lands as shown on Schedule "B" are included concerning development and use restrictions within flood plain lands shall take precedence.</p>	
<p>Natural Heritage Areas Designated as Open Space</p>	<p>(Clause i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>ii) Where <u>components of the natural heritage areas system</u> are included within the Open Space designation, the provisions of policy 15.3.2. concerning permitted uses within natural heritage areas designated as Open Space, shall take precedence.</p>	<p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>
<p><b>8A.2.3.</b> <b>Public Access</b></p>	<p>(Clause ii) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>Public access to lands within the Open Space designation shall be encouraged subject to the following provisions:</p>	
<p>Public Open Space</p>	<p>i) Accessibility to public open space areas will be provided where possible, provided that such access will not have a negative effect on the natural features or ecological functions of the area as determined by the City</p>	

	in consultation with the appropriate agencies.	
	(Clause i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
Private Open Space	ii) The inclusion of privately-owned lands within the Open Space designation shall not imply that the land is accessible to the public. Permissions for public access to privately owned property within the Open Space designation shall be at the discretion of the property owner.	
Natural Areas	iii) Public access to identified environmentally significant areas will be subject to the provisions of policy 15.4.1.4.	
	(Clause iii) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
<u>Thames River Shoreline</u>	iv) Public access along the shoreline of the Thames River will be encouraged in appropriate locations, where there is no danger to public safety, and where significant natural features and ecological functions can be protected.	A new objective, supporting public access along the shoreline of the Thames, is consistent with Section 1.5.1.c) of the PPS
<b>8A.2.4. Linkages between Open Space Areas</b>	Linkages shall be provided among open space areas, where feasible, as a means of encouraging continuity and accessibility to open space areas. Examples of such linkages include open space and utility corridors, abandoned railway lines, or physical features such as streams and ravines.	
	(Subsection 8A.2.4 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
<b>8A.2.5. Land Acquisition</b>	Council may acquire lands within the Open Space designation or add to the Open Space designation for the purposes of: adding to the network of publicly-accessible open space; providing protection to lands identified as being susceptible to flooding or erosion; and providing protection to natural heritage areas designated as Open Space.	
	(Subsection 8A.2.5 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
Parkland Dedication	i) The acquisition of parkland through dedication, as provided for under the <i>Planning Act</i> , shall be carried out subject to the parkland dedication policies contained in Section 16.3. of the Plan.	
Flood Plain Acquisition	ii) The public acquisition of flood plain lands shall be carried out subject to the flood plain acquisition provisions contained in policy 15.6.5. of the Plan.	
	(Clause ii) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
	iii) Council may develop a program for acquisition of natural heritage areas designated as Open Space in accordance with policy 15.3.4. of this Plan.	
	(Clause iii) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
Government Programs on Acquisition	iv) For the purposes of land acquisition as described above, Council may seek the assistance of other levels of government, and will work with the appropriate Conservation Authority and the private and volunteer	

<p>Private Lands</p>	<p>sectors in adding lands to the public open space system.</p> <p>(Clause iv) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>v) The inclusion of privately-owned lands within the Open Space designation does not imply that it is Council's intent to acquire these lands. However, Council may identify privately-owned lands for acquisition for the purpose of including these lands as public open space through any of the above provisions.</p> <p>(Clause v) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	
<p><b>8A.2.6. Evaluation of Potential for Public Acquisition</b></p>	<p>If a proposal is made to develop privately-owned lands within the Open Space designation for uses other than those permitted in the Open Space designation, Council will assess the potential for acquiring the property as public open space on the basis of the following criteria:</p> <p>(Subsection 8A.2.6. amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>i) the adequacy of the existing supply of public open space in the surrounding area;</p> <p>(Clause i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>ii) Deleted by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23</p> <p>iii) the potential impact of the proposed new use or change in existing use on surrounding lands, particularly lands which are expected to remain within the Open Space designation;</p> <p>iv) the location of the subject lands in relation to flood plain lands; and</p> <p>v) the location of the subject lands in relation to natural heritage areas designated as Open Space <u>or Environmental Review</u>.</p> <p>(Clause v) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	<p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>
<p><b>8A.2.7. Site Alteration and Tree Cutting By-laws</b></p>	<p>To mitigate potential impacts due to site alteration and tree cutting in lands designated as Open Space on Schedule "A", Council may adopt appropriate by-laws to restrict or prohibit site alteration and tree removal.</p> <p>(Subsection 8A.2.7 deleted and replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23) (Chapter 8A amended and renumbered by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	

8B

**ENVIRONMENTAL REVIEW LAND USE DESIGNATION**

(Chapter 8B added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

*In addition to the natural heritage areas which are included in the Open Space designation in Chapter 8A, there are additional lands which may contain significant natural features and important ecological functions which should be protected. These areas, which have been identified through the Subwatershed Planning Studies, are designated as Environmental Review on Schedule "A" and shall be protected from activities that would diminish their functions pending the completion of a detailed environmental study. A detailed environmental study may be undertaken as part of an area study or environmental impact study or may be undertaken by the City of London. Environmental Review areas or portions of areas that are determined to satisfy the criteria for significance under Section 15.4. shall be redesignated as Open Space on Schedule "A". The Environmental Review designation permits the continuance of farming that is carried out in accordance with generally accepted farming practices. Other areas, or portions of areas, which do not satisfy the criteria for significance under the provisions of Section 15.4. will be redesignated to an appropriate land use in accordance with the policies of the Plan.*

8B.1.

**OBJECTIVES FOR THE ENVIRONMENTAL REVIEW DESIGNATION**

~~It is intended that the development and use of areas designated as Environmental Review shall be directed towards the following objective:-~~

- ~~i) Protect natural features and ecological functions until their significance is determined through detailed environmental studies.~~

In addition to the components of the Natural Heritage System, which have been evaluated and designated on Schedule "A" – Land Use as Open Space, in accordance with the policies in Chapter 8A and Chapter 15, there are additional lands that may contain significant natural features and important ecological functions, which should be protected until environmental studies have been completed, reviewed and accepted by the City. These potential components of the Natural Heritage System are designated as Environmental Review on Schedule "A" and shall be protected from activities that would diminish their functions pending the completion, review and acceptance of a detailed environmental study.

A detailed environmental study may be undertaken as part of the Community Plan, Area Plan, Official Plan and/or Zoning By-law amendment application, Draft Plan of Subdivision, Site Plan application, Variance or Consent application by the applicant and/or landowner, or may be undertaken by the City of London. An Environmental Review area or portion of an area that is determined to satisfy the criteria for significance under Section 15.4, shall be designated as Open Space on Schedule "A" and delineated on Schedule "B" according to its specific nature or reason for significance according to the Official Plan policies. Other areas or portions of areas which do not satisfy the criteria for significance under the provision of Section 15.4 will be redesignated

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

for an appropriate land use designation in accordance with the policies of the Plan.

**8B.2.**

**LANDS INCLUDED**

~~The Subwatershed Planning Studies, in addition to identifying natural heritage areas designated as Open Space on Schedule "A", have identified other areas which require more detailed environmental studies prior to development. These areas are designated as "Environmental Review" on Schedule "A" — the Land Use Map, and are comprised of the following:~~

- ~~i) — Vegetation patches identified through the Subwatershed Planning Studies;~~
- ~~ii) — Stream corridors identified through the Subwatershed Planning Studies.~~

In addition to the components of the Natural Heritage System which are designated as Open Space on Schedule "A" and delineated on Schedule "B" according to the policies under Section 15.4, there are other natural features identified through the subwatershed studies or by other means which require more detailed environmental study to determine their significance. These areas are designated Environmental Review on Schedule "A", and are delineated on Schedule "B1" as one of the following:

- i) Unevaluated Vegetation Patches;
- ii) Unevaluated Wetlands;
- iii) Regulated Streams or Ravines; and
- iv) Potential ESA's.

**8B.3.**

**PERMITTED USES**

~~i) — Pending the evaluation of Environmental Review areas through Site-specific studies and their subsequent re-designation in accordance with ii) below, permitted uses in the Environmental Review designation will include agriculture, woodlot management, horticulture, conservation, recreational uses, and essential public utilities and municipal services where such utilities or municipal services have first been the subject of an environmental assessment process or environmental impact study in which the need has been confirmed, alternative locations identified and rejected, environmental impacts measured, and strategies to manage those environmental impacts~~

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

adopted, thereby minimizing and/or mitigating those impacts as much as reasonably possible. Existing uses are also permitted.

~~ii) Within the Urban Growth Area, on the basis of more detailed environmental studies undertaken in conjunction with an area study or site specific development proposal, areas within the Environmental Review designation on Schedule "A" will be redesignated as follows:~~

~~(a) Lands determined to be significant in accordance with the criteria for determining significance in Section 15.4. for specific components of the Natural Heritage System shall be redesignated as Open Space, and delineated on Schedule "B" according to the significant characteristics of the lands; and~~

~~(b) Lands not determined to be significant in accordance with the criteria for determining significance in Section 15.4., will be designated for an appropriate land use in accordance with the policies of this Plan.~~

i) Within the Urban Growth Boundary, on the basis of more detailed environmental studies and considerations of Official Plan policies, and Council and Provincial approved guidelines undertaken in conjunction with Community Plans, Area Plans, Official Plan and/or Zoning By-law amendment applications, Draft Plan of Subdivision applications, Site Plan applications, Consents and Variance applications, vegetation patches within the Environmental Review designation on Schedule "A", will be delineated on Schedule "B1" as follows:

a) Vegetation patches determined to be significant in accordance with the policies in Section 15.4 shall be designated as Open Space on Schedule "A" and delineated on Schedule "B1" according to the significant environmental characteristics of the feature; or

b) Vegetation patches not determined to be significant in accordance with the policies in Section 15.4 will be designated on Schedule "A" for an appropriate land use in accordance with the policies of this Plan and removed from Schedule "B1";

iii) The City will undertake an environmental study of Environmental Review Lands outside of the Urban Growth Area during the first ten years of the Planning period. Lands not determined to be significant in accordance with the criteria for determining significance in Section 15.4. will be redesignated as Agriculture.

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

**8B.3.1 Process for Evaluating Environmental Review Designations**

8B.4.	<b><u>SITE ALTERATION AND TREE CUTTING BY-LAWS</u></b>	
To mitigate potential impacts due to site alteration and tree cutting in lands designated as Environmental Review on Schedule "A", Council may adopt appropriate by-laws to restrict or prohibit site alteration and tree removal.		
(Chapter 8B added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)		
15.	<b><u>ENVIRONMENTAL POLICIES</u></b>	Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304
	<b><u>INTRODUCTION</u></b>	
	<i>The Environmental Policies of the Plan provide for the recognition <u>and protection</u> of significant natural features and ecological functions; lands subject to development constraints such as flooding and erosion hazards, contaminated soils and abandoned oil and gas wells; and lands containing aggregate, mineral or petroleum resources. <u>The lands known to be subject to the policies of Chapter 15 are delineated on Schedule "B" – Flood Plain and Environmental Features "B1" - Natural Heritage Features, and "B2" – Natural Resources and Natural Hazards. Where warranted on the basis of environmental studies, lands may be added to Schedules "B1" and "B2" through amendments to the Official Plan.</u></i>	
	(Introduction deleted and replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
15.1.	<b><u>OBJECTIVES FOR ENVIRONMENTAL POLICIES</u></b>	
	(Section 15.1 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)	
	It is intended that the development and use of natural heritage areas, areas containing natural or human generated hazards, and aggregate, mineral and petroleum resource areas, shall be directed towards the following objectives:	
15.1.1.	i) Achieve healthy terrestrial and aquatic ecosystems in the City's subwatersheds.	
<b>Natural Heritage Objectives</b>	ii) Provide for the identification, protection and rehabilitation of significant natural heritage areas.	
	iii) Protect, maintain and, <u>where possible</u> , improve surface and groundwater quality and quantity <del>where possible</del> .	Minor wording modification to clarify the intent of objective iii)
	iv) Enhance the contribution of the Natural Heritage System to urban form and community design.	

<p><b>15.1.2.</b> <b>Natural Hazards Objectives</b></p>	<p>v) <u>Maintain, restore, and where possible, improve the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems.</u></p> <p>i) Reduce the possibility of property damage, social disruption and danger to life from flooding, by restricting the uses and activities permitted on lands susceptible to flooding and/or erosion <u>processes</u>.</p> <p>ii) Provide for limited and controlled development on flood plain lands in accordance with provincial policies, where such development would be safe and appropriate, and would not reduce flood storage capacity.</p> <p>iii) Through acquisition and agreement, provide for the use of flood plain lands as public open space.</p> <p>iv) Define and regulate <del>flood plain areas</del> <u>natural hazards</u> as permitted by provincial <del>flood plain</del> <u>natural hazard</u> management policies and the <i>Conservation Authorities Act</i>.</p> <p>v) Reduce the risk to public safety and to property due to erosion and slope instability.</p>	<p>Proposed new objective implements Section 2.1.2 of the 2005 Provincial Policy Statement</p> <p>Minor wording changes are proposed in clauses i) and iv) to more clearly reflect the language in the PPS</p>
<p><b>15.1.3.</b> <b>Human Generated Hazards Objectives</b></p>	<p>i) Minimize the potential for contaminated lands to create a hazard to public health and safety, to property or to the natural environment.</p> <p>ii) <u>Encourage the restoration of contaminated land.</u></p>	<p>Proposed new objective ii) implements Section 3.2.2 of the 2005 Provincial Policy Statement</p>
<p><b>15.1.4. Objectives for Aggregate, Mineral and Petroleum Resource Areas</b></p>	<p>i) Provide for the continuation of existing extractive operations.</p> <p>ii) Provide for the expansion of existing pits and quarries, and the establishment of new pits and quarries, where appropriate.</p> <p>iii) <u>Protect mineral aggregate resources for long-term use.</u></p> <p>iiiiv) Minimize potential land use compatibility problems between pits and quarries and surrounding land uses.</p> <p>iv) Provide for the sensitive rehabilitation of pits and quarries to an appropriate after-use compatible with the long-term intent of the Plan.</p> <p>v) Minimize the potential for safety hazards from abandoned oil or gas wells.</p>	<p>Proposed new objective implements Section 2.5.2.3 and 2.5.2.4 of the 2005 Provincial Policy Statement</p>
<p><b>15.1.5.</b> <b>Agricultural Uses</b></p>	<p>i) Provide for the continuation of existing agricultural activities.</p> <p>ii) Promote farm practices which are environmentally sustainable.</p>	

iii) Promote the protection of natural and environmental features in the farming community through the mechanisms noted in Subsection 15.3.5 of this Plan.

iv) Permit improvements to the agriculturally related infrastructure such as drainage systems while having regard to the policies of ~~this~~ Section 15 of the Plan.

(Ministry Modification No.1 to OPA No. 88)

(Section 15.1 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

Minor wording change to clarify the intent of clause iv)

**15.2. NATURAL HERITAGE SYSTEM**

(Section 15.2 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

*This section provides the policy framework for a Natural Heritage System for London. The policies provide for the recognition and protection of natural features and ecological processes that are important to the sustainability of healthy urban and rural environments.*

**15.2.1.**

**Sub-Watershed Planning Studies**

The City of London Sub-Watershed Planning Studies provide background for the content and implementation of the Natural Heritage policies. These Planning Studies include the watersheds of all of the major tributaries entering the Thames River within the City as well as the upper reaches of the Kettle Creek Watershed which flows to Lake Erie. There are areas of the City not covered by the Subwatershed Planning Studies, including much of the pre-annexation City. Environmental studies within these areas may identify lands that should be protected as part of the Natural Heritage System. Such findings will result in amendments to Schedules "A" and/or "B1", as necessary, to implement the policies of this Plan.

The Sub-Watershed Planning Studies apply an ecosystem planning approach to the identification of: lands to be protected or conserved; criteria to be applied in the planning and design of development to protect natural features and ecological functions; management practices to mitigate impacts from existing land uses; and programs to promote education, awareness and stewardship. These Planning Studies provide a generalized level of direction that will be refined through more area specific assessment including area planning studies and environmental impact studies.

**15.2.2. Purpose of Natural Heritage Policies**

The Natural Heritage policies also establish the requirements for the refinement and protection of the Natural Heritage System through the preparation of area planning studies and environmental impact studies. Such processes may warrant additions or changes to the Natural Heritage System and provide for the implementation of rehabilitation measures.

Additional wording in Section 15.2.1 recognizes the geographical limitations of previously completed subwatershed studies and contemplates future amendments to the Official Plan for the purpose of recognizing additional natural features and ecological functions, based on further environmental studies

<p><b>15.2.3. Natural Heritage Policies - Open Space - Environmental Review</b></p>	<p>The Natural Heritage policies apply as an overlay to the land use designations shown on Schedule "A". Natural features identified on Schedule "B1" are designated as "Open Space" or "Environmental Review" on Schedule "A" depending on the attributes of the feature and the need for further evaluation to assess significance, refine boundaries and determine the appropriate level of protection. Therefore, the Natural Heritage policies should be read in conjunction with the Open Space and Environmental Review policies contained in Chapters 8A and 8B respectively. (Section 15.2.3. replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	<p>Revised notation to reflect the reformatting of Map Schedule "B" into "B1" and "B2"</p>
<p><b>15.3.</b></p> <p><b>15.3.1. Lands Included</b></p>	<p><b><u>NATURAL HERITAGE AREAS DESIGNATED AS OPEN SPACE</u></b></p> <p>(Section 15.3 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p><i>Natural heritage areas designated as Open Space represent significant natural features and ecological functions. While these areas are protected to some extent by their inclusion in the Open Space designation, additional measures to provide for their protection and utilization are considered necessary. It is the City's intent to protect these areas for their natural features and ecological functions and to encourage their rehabilitation where warranted.</i></p> <p>i) Natural heritage areas designated as Open Space include:</p> <ul style="list-style-type: none"> <li>(a) Provincially Significant Wetlands;</li> <li>(b) Environmentally Significant Areas;</li> <li>(c) Significant River, Stream, and Ravine Corridors;</li> <li>(d) Life Science Areas of Natural and Scientific Interest as identified by the Province;</li> <li>(e) Habitat of Endangered and Threatened Species;</li> <li>(f) <del>Areas of</del> Significant Woodlands, Significant Wildlife Habitat, Habitat of Vulnerable Species, Locally Significant Wetland and renaturalization corridors and linkages as described in Section 15.4., that are deemed by Council, on the basis of an appropriate environmental study, to satisfy the criteria in Section 15.4.;</li> <li>(g) <u>Areas of significant groundwater recharge, headwaters and aquifers, where necessary to protect their hydrological function</u></li> </ul> <p>ii) Council may <u>require or</u> encourage the retention of natural features other than the features listed in i) above, through the area planning, subdivision approval, <u>Official Plan and/or Zoning By-law amendment.</u></p>	<p>The addition of measures to protect important water resources implements Section 2.2.1 of the 2005 Provincial Policy Statement</p> <p>Recommended in the June 19, 2006 report to Planning Committee to</p>

<p><b>15.3.2. Permitted Uses</b></p>	<p><u>consent, variance</u> and site plan approval processes.</p> <p>iii) <u>Natural Heritage Areas may be identified on Schedule “B1” and designated as Open Space on Schedule “A” by an amendment to the Official Plan, where warranted on the basis of an environmental study and consideration of the policies in Section 15.4.</u></p> <p>i) Notwithstanding policy 8A.2.2., the uses permitted in natural heritage areas designated as Open Space shall be limited to:</p> <p>(a) Existing development and uses, and expansions to existing uses provided that it can be demonstrated to the satisfaction of Council that the expansion will protect the natural features and ecological functions of the area;</p> <p>(b) <u>Passive</u> Recreational uses including <u>pathways and community</u> trails provided that such <u>trails uses</u> are designed, constructed and managed to minimize their impact on the natural heritage area;</p> <p>(c) Creation or maintenance of infrastructure subject to policy 15.3.3;</p> <p>(d) The harvesting of trees in accordance with responsible forestry management practices; and</p> <p>(e) Conservation works</p>	<p>clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p> <p>Minor wording modification will more clearly define the types of recreational uses that may be permitted in natural Heritage Areas designated as Open Space</p>
<p><b>15.3.3. Infrastructure</b></p>	<p>i) New or expanded infrastructure shall only be permitted within Natural Heritage areas including stream corridors where it is clearly demonstrated through an environmental assessment process or an environmental impact study <u>approved by the City</u>, that there is no reasonable alternative for locating that infrastructure elsewhere. The City and other relevant public authorities shall <del>in any case consider</del> <u>include</u> methods for minimizing impacts when reviewing proposals to construct transportation, communication, sewerage or other infrastructure in natural heritage areas.</p> <p>ii) Where there is more than one type of infrastructure, the rights-of-way shall be combined, wherever feasible, to reduce the extent of the intrusion into the area.</p> <p>iii) As conditions of approving infrastructure projects <u>adjacent to or</u> in natural heritage areas, the City <del>may</del> <u>shall</u> require specific mitigation and rehabilitation measures and/or compensation for <del>the damage to natural features and functions caused by the</del> <u>any negative impacts on the natural features and functions caused by the</u> construction or maintenance of the infrastructure.</p>	<p>The wording modifications proposed in 15.3.3. are consistent with the intent of Section 2.1 of the 2005 Provincial Policy Statement, which only permits the creation or maintenance of infrastructure within Natural Heritage areas if it is authorized under an environmental assessment process</p>
<p><b>15.3.4. Public Ownership/ Acquisition</b></p>	<p>i) It is not intended that all natural heritage areas shall be purchased or otherwise brought into public ownership, nor that all such lands shall be open and accessible for public use. It may be determined, however, that certain areas should be in public ownership or accessible for passive recreational uses, where appropriate. In such cases, the City or other agencies shall explore options for purchasing, or otherwise</p>	

<p><b>15.3.5. Stewardship</b></p> <p><b>15.3.6. Ecological Buffers</b></p>	<p>acquiring, managing or providing access to these lands.</p> <p>ii) The City shall develop a program for the long term acquisition of natural heritage areas. Acquisition may occur as properties become available primarily through the following methods: purchase; dedication; and donation or bequest.</p> <p>iii) Council may accept natural heritage areas for parkland or conservation use in accordance with the provisions of Chapter 16, concerning parkland dedication.</p> <p><u>iv) Council may accept gifts of ecologically sensitive lands in accordance with the provisions of the Ecological Gifts Program administered by Environment Canada.</u></p> <p>i) Where natural heritage areas are privately owned, the City will encourage individual property owners to provide for their protection and <del>conservation</del> conservation. In this regard, the City may use the following techniques:</p> <p>(a) Stewardship agreements;</p> <p>(b) Conservation easements;</p> <p>(c) Education programs to inform landowners of maintenance and stewardship options available to protect or rehabilitate natural features and ecological functions;</p> <p>(d) Encouraging the establishment of land trusts and the utilization of existing land trusts, as well as other mechanisms to purchase land and to rehabilitate, create or conserve natural heritage areas; <del>and</del></p> <p><u>(e) Modification of property tax assessment and/or facilitation of the Provincial Conservation Land Tax Incentive Program; and</u></p> <p>(f) Any other suitable techniques.</p> <p>ii) Where natural heritage areas designated as Open Space are owned by the City, the City will encourage community groups and individuals to take an active role in their protection and rehabilitation. The City may develop programs to facilitate community involvement in the protection and rehabilitation of these areas.</p> <p>i) Ecological buffers serve to protect the ecological function and integrity of the Natural Heritage System. <del>Ecological B</del> buffers may <del>will</del> be required around, or adjacent to, <del>the shorelines of lakes, rivers and streams and other</del> <u>all</u> components of the Natural Heritage System.</p>	<p>The addition of clause iv) explicitly recognizes that Council may accept donations of land as an ecological gift, in the form of an outright donation, or conservation easement, pursuant to the Ecological Gifts Program, which applies in all parts of the Country</p> <p>Typographical correction</p> <p>The addition of Clause (e) recognizes the Provincial Conservation Land Tax Incentive Program, which provides property tax relief to those landowners who agree to protect the natural heritage values of their property. The current tax relief offered is a 100 per cent tax exemption on the eligible portion of a property</p> <p>The revised wording in i) provides a clearer indication of when buffers will be required and is more</p>
--	---	--

<p><b>15.3.7. Management and Rehabilitation Priorities</b></p>	<ul style="list-style-type: none"> <li>ii) The location, width, composition and use of ecological buffers necessary to protect natural heritage areas from the impacts of development on adjacent lands will be specified through an area study and/or an environmental impact study.</li> <li>iii) In addition to buffer lands, additional techniques may be required to assist in minimizing the impact of development on the Natural Heritage System, including but not limited to: <ul style="list-style-type: none"> <li>(a) The use of site planning to orient the development away from natural heritage areas;</li> <li>(b) The acceptance of lands immediately adjacent to natural heritage areas as part of the required parkland dedication for the proposed development;</li> <li>(c) The use of a setback from the boundary of natural heritage areas for construction purposes;</li> <li>(d) Restriction of public access by providing a limited number of access points to natural heritage areas; and</li> <li>(e) Other measures, such as fencing.</li> </ul> </li> <li>iv) The City shall prepare and adopt a Guideline Document <u>pursuant to the policies in Section 19.2.2.</u>, setting out recommended criteria and parameters to facilitate the identification of Ecological Buffers.</li> </ul> <p>The City will encourage rehabilitation measures that protect the ecological function and integrity of the Natural Heritage System. The City of London Subwatershed Plans provide guidance for the types of measures that may be identified through area studies, environmental impact studies or other environmental studies or programs. Rehabilitation measures may be implemented through the management of publicly owned land and through stewardship and conservation programs for privately owned lands.</p> <ul style="list-style-type: none"> <li>i) The City's highest priority for rehabilitating the Natural Heritage System shall be those areas linking or adjacent to natural heritage areas that are subject to flood or erosion hazard constraints.</li> <li>ii) With respect to specific components of the Natural Heritage System, the City's management and rehabilitation priorities are: <ul style="list-style-type: none"> <li>(a) Environmentally Significant Areas - to protect the existing ecosystem features and functions, to increase the amount of interior forest habitat, and to strengthen corridors.</li> </ul> </li> </ul>	<p>reflective of current practice. Buffers should not be discretionary where they are deemed necessary to protect the ecological and integrity of the Natural Heritage System</p> <p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p> <p>The additional wording in b) provides for consistency with the wording used in other natural heritage policies</p>
--	---	---

**15.3.8.  
Conservation  
Master Plans**

- (b) Wetlands - to protect the natural features and ecological functions of all existing wetlands.
  - (c) Significant Woodlands - to protect existing ecosystem features and functions, to increase the amount of interior forest habitat, and to retain or restore linkages between isolated natural areas.
  - (d) River, Stream and Ravine Corridors - to protect existing ecosystem features and functions, and to rehabilitate degraded shorelines.
  - (e) Upland Corridors - to retain or create linkages between isolated natural areas.
  - (f) Wildlife Habitat - to protect wildlife habitat.
  - (g) Fish, Riparian Habitat - to protect, rehabilitate and/or create fish and riparian habitat, and to encourage a net gain of productive capacity of ~~fish~~ habitat where possible.
  - (h) Potential Naturalization Areas - to naturalize areas within ~~fill-regulated areas~~ the Regulation Limit of streams, rivers and ravine corridors.
  - (i) Groundwater Recharge Areas, Headwaters and Aquifers – to protect the hydrological function.
- i) Council may request the preparation of Conservation Master Plans for Environmentally Significant Areas and other natural heritage areas. Conservation Master Plan may be adopted by Council, and will function as guideline documents for the purposes of defining the boundaries and providing direction on the management of these areas.
  - ii) Matters which may be addressed through Conservation Master Plans include:
    - (a) Refinement of the boundaries of the Environmentally Significant Area, or other natural heritage area;
    - (b) Identification of programs for the acquisition of lands within, adjacent to, or providing a linkage to, the Environmentally Significant Areas, or other natural heritage area, by the City or other public body;
    - (c) Programs for site and facility development, including descriptions of recreational programs and facilities to be provided if applicable, and details of access permitted to and within the area, including formalized pathways and trail systems;
    - (d) Descriptions of proposed management strategies for the area and the management

Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

The reference to riparian habitat is consistent with the definition of fish habitat in the 2005 PPS, which includes areas that fish depend on, directly and indirectly, to carry out their life processes

Under the new Conservation Authorities Act Regulations, “Fill Regulated” areas should be replaced with reference to the Regulation Limit

The additional reference to groundwater recharge areas, headwaters and aquifers is consistent with Section 2.2.1 of the 2005 Provincial Policy Statement

The reference to pathways more clearly reflects the range of pedestrian corridors that are provided within ESA’s. This change is consistent with current practice and terminology

<p><b>15.3.9. Environmental Advisory Committee</b></p>	<p>considerations to be addressed in conjunction with the review of development proposals for adjacent lands;</p> <p>(e) Identification of opportunities to rehabilitate degraded natural heritage areas, and to establish or strengthen corridors or linkages between isolated natural heritage areas;</p> <p>(f) Background information including a description of the natural features and their significance to the Natural Heritage System; and</p> <p>(g) Other relevant background information, as applicable.</p> <p>City Council may establish an environmental advisory committee, consisting of individuals appointed on the basis of their expertise, experience, academic qualification and/or availability, to provide expert technical advice to the City of London on environmental matters that are relevant to the formulation and implementation of the City's Official Plan. Detailed terms-of-reference, membership guidelines and operational requirements for the Committee will be determined by City Council, from time to time.</p> <p><small>(Section 15.3 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</small></p>	
--	--	--

**15.4. COMPONENTS OF THE NATURAL HERITAGE SYSTEM**

(Section 15.4 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

*The policies in Section 15.4 apply to recognized and potential components of the Natural Heritage System as delineated on Schedule "B1" or features that may be considered for inclusion on Schedule "B1". and These policies are supplemental to policies contained in Section 15.3. They also address the protection of environmental quality and ecological function with respect to water quality, fish habitat, groundwater recharge, headwaters and aquifers.*

The revised wording more accurately reflects the status of identified features and makes reference to Map Schedule "B1".

**15.4.1. Environmentally Significant Areas**

Environmentally Significant Areas contain natural features and perform ecological functions that warrant their retention in a natural state. While Environmentally Significant Areas are protected to some extent by their inclusion in the Open Space designation, additional measures to provide for their protection and utilization are considered necessary. Environmentally Significant Areas (ESA's) are identified through the application of the Council approved Environmentally Significant Areas Identification and Boundary Delineation Guideline Document, and through the application of Provincial guidelines.

The changes proposed to Sections 15.4.1 and 15.4.1.1 were recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304

**15.4.1.1. Identification of Environmentally Significant Areas**

Environmentally Significant Areas (ESA's) which have been identified by Council as being of city-wide, regional, or provincial significance, are designated as Open Space on Schedule "A" - the Land Use Map, and are shown on Schedule "B1" - ~~Flood Plain and Environmental~~ Natural Heritage Features. New Environmentally Significant Areas may be identified by City Council and added to Schedule "B1" by amendment to this Plan and in accordance with the provisions of Section 15.4.1.3.. Areas which have the potential to meet the criteria for an ESA but have not been thoroughly studied are identified as "Potential ESA's" on Schedule "B1". The identified Environmentally Significant Areas recognized by Council include:

Reference to the Province of Ontario and the Upper Thames River Conservation Authority is redundant and unnecessary

Sifton Bog

- i) The Sifton Bog, located in the Oakridge area, is recognized ~~by the Province of Ontario and the Upper Thames River Conservation Authority~~ as a Provincially Significant Wetland. The Bog contains a kettle lake and is an excellent example of sphagnum bog.

Westminster Ponds

- ii) The Westminster Ponds - Pond Mills wetland complex, located in the Westminster, Glen Cairn, and Jackson areas, is the subject of an approved Conservation Master Plan, and is classified as a provincially significant wetland complex.

Meadowlily Woods

- iii) The Meadowlily Woods, located in the Jackson area, is recognized as London's best example of some vegetative associations. Some of this area is classified as a Provincially Significant Wetland.

Medway Valley Heritage Forest

- iv) The Medway Valley Heritage Forest, located in the Masonville, ~~and~~ Medway ~~and~~ Sunningdale areas, is largely within the flood plain, contains some rare plant and animal species, and is an important asset for research and educational purposes.

Warbler Woods

- v) Warbler Woods, located in the Byron area, is classified by the Province of Ontario as an Area of Natural and Scientific Interest (ANSI), and is significant because of its size, its diversity of vegetative associations, and the presence of rare species.

Fanshawe Wetlands

- vi) The Fanshawe Wetlands located in ~~northwest~~ ~~east~~ London, contain a Provincially Significant Wetland complex (Fanshawe Wetlands) that straddles Stoney Creek. ~~and a locally significant wetland (Ballymote~~

Several minor corrections and wording clarifications are being proposed in Section 15.4.1.1. i) through xvi), to more accurately describe the location, environmental features and ecological functions for each of the identified ESA's

	<p><del>Wetland</del>). It is part of a groundwater recharge area and includes a diverse assemblage of community types and species, as well as several rare plants.</p>	
Kilworth	vii) The Kilworth Environmentally Significant Area is adjacent to the Thames River on the Western boundary of the City. It contains diverse natural communities, distinctive landforms <u>recognized as an earth science ANSI</u> and rare species.	
<u>Kilally Meadows and Forest</u>	viii) The Kilally Meadows <u>and Forest</u> straddles the Thames River just north of Kilally Road. It is an important component of the Thames River corridor, a groundwater recharge area and contains <u>meadows, woodland and</u> wetland area. Among the many vulnerable and rare plant and animal species, the area maintains a diverse community of forest birds.	
	(Clause viii) amended by OPA No. 298 - approved 05/01/31)	
Lower Dingman Corridor	ix) The Lower Dingman Corridor is adjacent to the Dingman Creek west of Lambeth <u>to the City Limits. It forms a continuous linkage with the Dingman Creek Fen Provincially Significant Wetland Complex and a Provincially Significant Wetland complex</u> , very diverse assemblage of natural communities and species and provides an important linkage function <u>and a Provincially Earth Science ANSI</u> .	
East Lambeth Forest	x) Located immediately east of Lambeth, this relatively large area contains a diverse range of natural communities and swamp communities dominated by Black Ash and White Elm.	
Tenant's Pond	xi) Tenant's Pond is located south of Wilton Grove Road near Highbury Avenue. It consists of a Provincially Significant Wetland (Westminster Wetlands) and a locally significant wetland (Elliot-Laidlaw Wetland). The small lake and surrounding area contains a diversity of distinctive plant and animal species.	
White's Wetland	xii) White's Wetland lies in an upper tributary of Dodd Creek south of Glanworth Drive and west of Wellington Road South. It contains two relatively undisturbed, mid-age communities dominated by Yellow Birch, and a wetland which makes an important contribution to the baseflow of Dodd Creek.	
Glanworth Wetland	xiii) The Glanworth Wetland which is located south of the hamlet of Glanworth, is a Provincially Significant Wetland.	
Regina Mundi-Kirk Cousins Wetland	xiv) The Regina Mundi - Kirk Cousins Wetland is a Provincially Significant Wetland. It is located east of Wellington Road South near Regina Mundi School.	
Kains Woods	xv) Kains Woods is adjacent to the Thames River west of Hyde Park and south of Gainsborough Road. This large and important component of the Thames River Corridor contains a significant variety of communities and species, many of them nationally, provincially or regionally rare.	
The Coves	xvi) The Coves area, which is situated in central London south and west of the confluence of the north and south branches of the Thames River, contains a series of oxbow ponds and forms part of the Thames River Corridor.	
<u>Dingman Creek Fen Wetland</u>	xvii) <u>The Dingman Creek Fen Wetland Complex is located in the western end of the City, between the Lower Dingman Creek ESA and Kilworth ESA. It is a Provincially Significant Wetland representing a rare</u>	Both the Dingman Creek Fen Wetland Complex and Ballymote Wetland are delineated as ESA on Schedule "B" and designated Open Space on Schedule "A" of the

<p><u>Complex</u> <u>Ballymote Wetland</u></p>	<p>xviii)</p>	<p><u>community type. The wetland is associated with the Kilworth Shoreline Provincial Earth Science ANSI. The Ballymote Wetland is located in northeast London along a tributary of Stoney Creek. It is part of a Provincially Significant Wetland Complex that extends to the north of the City boundary and contains forest interior and area sensitive bird species.</u></p>	<p>Official Plan; however, they are subsumed within adjacent ESA areas. The text of the Official Plan should be updated to recognize these these areas as separate ESA's, based on their location and function</p>
<p><b>15.4.1.2.</b> <b>Expansion of Environmentally Significant Areas</b></p>	<p>Certain lands adjacent to these recognized Environmentally Significant Areas may have potential for inclusion in the ESA if warranted on the basis of site-specific evaluation undertaken in conjunction with area studies or environmental impact studies, <u>or the application of boundary delineation guidelines. Such lands are designated as "Environmental Review" on Schedule "A" and are shown as "Potential Environmentally Significant Areas" on Schedule "B1".</u></p>	<p>Lands that are identified as "ER" and "Potential Environmentally Significant Areas" comprise part of the ESA (the Potential ESA's are subject to confirmation). Reference to the boundary delineation guidelines should be included in this section and the last sentence should be removed so that Potential ESA's are not confused with other adjacent lands</p>	
<p><b>15.4.1.3.</b> <b>Evaluation of Environmentally Significant Areas</b></p>	<p>To assist in the consideration of proposals to recognize Environmentally Significant Areas in the Official Plan, Council may request the submission of detailed supporting information from any agency, individual or group proposing the recognition of a candidate area. The Evaluation Criteria contained in this section will be used, together with more detailed application and boundary guidelines contained in an associated Guideline Document, to recognize Environmentally Significant Areas in this Plan. Candidate areas that clearly satisfy two or more of the following criteria will be considered for recognition:</p>		
<p>Criteria Intrinsic to the Site</p>	<ul style="list-style-type: none"> <li>i) The area contains unusual landforms and/or rare to uncommon natural communities within the country, province or London subwatershed region.</li> <li>ii) The area contains high quality natural landform-vegetation communities that are representative of typical presettlement conditions of the dominant physiographic units within the London subwatershed region, and/or that have been classified as distinctive in the Province of Ontario.</li> <li>iii) The area, due to its large size, provides habitat for species intolerant of disturbance or for species that require extensive blocks of suitable habitat.</li> <li>iv) The area, due to its hydrologic characteristics, contributes significantly to the healthy maintenance (quality or quantity) of a natural system beyond its boundaries.</li> <li>v) The area has a high biodiversity of biological communities and/or associated plant and animal species within the context of the London subwatershed region.</li> <li>vi) The area serves an important wildlife habitat or linkage function.</li> <li>vii) The area provides significant habitat for rare, threatened or endangered indigenous species of plants or animals that are rare within the country, province or county.</li> </ul>		
<p><b>15.4.1.4.</b></p>	<p>Where necessary, public access to identified Environmentally Significant Areas within public ownership will be</p>		

**Public Access to Environmentally Significant Areas**

controlled so that such access will not be detrimental to the significant features of the property. Permission for public access to privately owned lands in Environmentally Significant Areas shall be at the discretion of the property owner.

**15.4.1.5. Potential Environmentally Significant Areas**

Several areas have been identified as candidate sites for recognition as Environmentally Significant Areas pending further evaluation according to the criteria in 15.4.1.3. iii) Such areas are shown as "Potential Environmentally Significant Areas" on Schedule "B1" and are designated as "Environmental Review" on Schedule "A". Such areas include:

- i) Sharon Creek;
- ii) Hyde Park;
- iii) Silver Swamp;
- iv) Arva.

**15.4.2. Wetlands**

Wetlands provide important habitat for plants, fish and wildlife. They also influence the quality and temperature of water flowing through them and some wetlands provide storage capacity to offset peak flows associated with storm events.

~~Wetland classes and boundaries have been identified according to the evaluation methodology adopted by the Province of Ontario. This methodology categorizes wetlands into seven classes based on their ecological functions. Class 1 to 3 wetlands are considered to be Provincially Significant and Class 4 to 7 wetlands are considered to be Locally Significant.~~

The determination of significant wetlands in accordance with the Provincial Policy Statement (PPS) is made by the Ministry of Natural Resources (MNR) through an established wetland evaluation procedure. Evaluated wetlands are classified as Provincially Significant (formerly Class 1-3) or Locally Significant (formerly Class 4-7) on the basis of scores received through the evaluation and are identified on Schedule "B1".

Wetlands that have not yet been evaluated are also identified on Schedule "B1". Council may request that any ~~unclassified unevaluated~~ wetlands identified in an area study, or environmental study or EIS be evaluated by qualified persons in accordance with the Provincial Wetlands Evaluation System.

**15.4.3. Areas of Natural and Scientific Interest**

Areas of Natural and Scientific Interest represent high quality and unique life science and earth science features across a variety of landscapes throughout the Province. Life Science Areas of Natural and Scientific Interest are significant representative segments of Ontario's biodiversity and natural landscapes including specific types of forests, valleys, prairies and wetlands, their native plants and animals, and their supporting environments. Earth Science Areas of Natural and Scientific Interest include the best representative of bedrock, fossils and landforms.

There are two Life Science Areas of Natural and Scientific Interest in London: Warbler Woods; and the Komoka

The revised description of how wetlands are identified and evaluated is a more up-to-date and accurate reflection of Provincial policy

Reference to Environmental Impact Studies should be included in this section to reflect the fact that they can include wetland evaluations

The shoreline feature in Komoka

<p><b>15.4.4. Habitat of Endangered, Threatened and Vulnerable Species</b></p>	<p>Park Reserve. The Komoka Park Reserve <del>is also categorized as an</del> <u>includes the Kilworth Shoreline</u> Earth Science Area of Natural and Scientific Interest. These areas are included within recognized Environmentally Significant Areas as shown on Schedule "B1".</p> <p>The significance of Areas of Natural and Scientific Interest will be evaluated in accordance with provincial criteria. The Ministry of Natural Resources identifies species in categories of endangered, threatened and vulnerable. The Ministry administers the <i>Endangered Species Act</i> to protect and conserve the species listed by regulation as well as their habitat. Criteria for determining significant portions of the habitat of endangered, threatened and vulnerable species may be recommended by the Province, if requested by the City.</p> <p>(Ministry Modification No.2 to OPA No.88)</p> <p>Area Studies, Subject Lands Status Reports or Environmental Impact Studies will identify the extent of the habitat of endangered, threatened and vulnerable species.</p> <p>The significance of the Habitat of Endangered, Threatened and Vulnerable Species will be based on an evaluation of the following considerations:</p> <ul style="list-style-type: none"> <li>i) Assessments reviewed by the Ministry of Natural Resources regarding the extent of the species' habitat;</li> </ul> <p>(Ministry Modification No.3 to OPA No.88)</p> <ul style="list-style-type: none"> <li>ii) Portions of species' habitat that are critical to sustaining or expanding populations; and</li> <li>iii) Species specific requirements identified in recovery plans or management guidelines, or through an Environmental Impact Study.</li> </ul>	<p>Park is significant and should be noted</p>
<p><b>15.4.5. Significant Woodlands and Woodlands</b></p>	<p>Woodlands are complex ecosystems of different tree species, shrubs, ground vegetation and soil complexes that provide habitat for many plants and animals. Woodlands is a general term which collectively refers to areas occupied by trees, treed areas, woodlots and forested areas, <u>and naturalizing woodland edges</u>. Woodlands identified through the Subwatershed Planning Studies and located outside of the recognized Environmentally Significant Areas are shown as "Unevaluated Vegetation Patches" on Schedule "B1". <u>Not all of the City of London was covered by subwatershed studies and new vegetation patches may be added to Schedule "B1", through an amendment to this Plan, on the basis of additional environmental studies.</u></p> <p>Potentially significant woodlands <u>and other vegetation</u> that have not been evaluated are designated as Environmental Review on Schedule "A" and delineated as "Unevaluated <del>Woodlands</del> <u>Vegetation Patches</u>" on</p>	<p>The proposed wording changes in Section 15.4.5. will more clearly describe how Woodlands and Significant Woodlands are recognized in the Official Plan. These changes were recommended in the June 19, 2006 report to Planning Committee to clarify the</p>

	<p>Schedule “B1”. The significance of Woodlands will be based on an evaluation of the following considerations:</p> <ul style="list-style-type: none"> <li>i) The Woodland contains natural features and ecological functions that are important to the environmental quality and integrity of the Natural Heritage System.</li> <li>ii) The Woodland contains natural features and ecological functions that are important to the environmental quality and integrity of the Natural Heritage System.</li> <li>iii) The Woodland is important for the provision of a balanced distribution of open space amenities and passive recreational opportunities across the urban area.</li> <li>iv) The Woodland provides significant habitat for endangered or threatened species.</li> <li>v) The Woodland contains distinctive, unusual or high quality natural communities or landforms.</li> </ul> <p><u>Woodlands that are determined to be ecologically significant on the basis of these Official Plan criteria and the Council approved Guideline Document for the Evaluation of Ecologically Significant Woodlands, will be designated as Open Space on Schedule “A” and delineated as “Significant Woodlands” on Schedule “B1”.</u></p> <p><u>Woodlands that are not determined to be ecologically significant but are to be retained for public open space or park purposes according to criterion iii) above, or woodlands to be retained at the landowners request as a private woodland, will be designated as Open Space on Schedule “A” and delineated as “Woodlands” on Schedule “B1”. If the woodlands are evaluated and confirmed as not being ecologically significant, and the landowner has no interest in their retention, the lands may be redesignated from Environmental Review to another designation in keeping with the policies of this Plan, and the “Woodlands” delineation on Schedule “B1” may be removed.</u></p> <p><b>15.4.6. Corridors</b> Corridors provide a number of important <u>natural features and ecological</u> functions. From a natural heritage perspective, corridors contain natural habitat, they link many aspects of the Natural Heritage System, and they facilitate species richness, movement and diversity. River and stream corridors are the water collection systems for watersheds, providing a vital support to the City's natural environment. In addition to these ecological functions, corridors may also provide protection from flooding <u>and other natural hazard processes</u> <del>erosion and other hazards</del>. Corridors are valued for their aesthetic and cultural values, and for the recreational opportunities they provide.</p> <p><u>River, Stream and Ravine Corridors identified on Schedule “B1” include “Significant River Stream and Ravine Corridors” that have been evaluated and identified according to the criteria in i) below; and, other “Streams or Ravines Within Regulation Limits” that are subject to the requirements of the <i>Conservation Authorities Act</i>. The Thames River and the main branches of Stoney Creek, Medway Creek, Dingman Creek, Pottersburg Creek, Wabuno Creek, Mud Creek, Stanton Drain and Kelly Drain have been the subject of subwatershed studies and are</u></p>	<p>policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p> <p>The additional wording provides for consistency with the wording used in other natural heritage policies</p> <p>Minor wording revision more comprehensively describes potential hazards</p> <p>There has been some confusion over the interpretation of the natural heritage policies for river, stream and ravine corridors. The additional text is proposed in 15.4.6. to clarify that all watercourses with</p>
--	---	--

<p><u>Significant River, Stream and Ravine Corridors</u></p>	<p><u>shown as Significant River, Stream and Ravine Corridors on Schedule “B1”. Several tributaries to these watercourses have also been shown as Significant River, Stream and Ravine Corridors on Schedule “B1”, based on information from the subwatershed studies. Determination of the width of Significant River, Stream and Ravine Corridors will be in accordance with ii) below:</u></p> <p>i) The <del>significance of</del> <u>identification of</u> Significant River, Stream and Ravine Corridors will be based on an evaluation of their ecological, hazard protection, recreational, aesthetic and surface water management functions including the following considerations:</p> <ul style="list-style-type: none"> <li>(a) The corridor performs an important hydrological role relating to surface drainage, groundwater recharge and filtering of surface water sediments, <u>or is located in a headwater area.</u></li> <li>(b) The corridor contains distinctive, unusual natural communities or landforms of high quality.</li> <li>(c) The corridor represents mostly continuous, large natural areas that provide <u>for wildlife movement,</u> linkages and connections beyond the City or subwatershed boundaries.</li> <li>(d) The corridor provides linkage between significant natural heritage areas; remains in a largely natural state containing a diversity of species, communities and habitat; or provides reasonable opportunities for rehabilitation of the landform to a natural state, and the habitat to a state that can support healthy natural communities.</li> <li>(e) The corridor serves as a visual amenity to the surrounding areas and plays an important role in minimizing land use impacts by providing a physical separation or buffer between incompatible forms of development.</li> <li>(f) The corridor has physical characteristics, related to size, depth and slope gradient, that are susceptible to slope instability or erosion and that are expected to present constraints to development.</li> <li>(g) The corridor provides opportunities for the logical extension of the City's trail systems.</li> </ul>	<p>associated floodplains are considered to be “Significant River, Stream and Ravine Corridors”</p> <p>Minor wording modifications in sub-clause i) will help to more clearly define the criteria that are used to identify Significant River, Stream and Ravine Corridors</p>
<p><u>Width of Significant River, Stream and Ravine Corridors</u></p>	<p><u>ii) Significant River, Stream and Ravine Corridors are designated Open Space on Schedule “A”, with the corridor width to be determined on the basis of the following criteria:</u></p> <ul style="list-style-type: none"> <li>(a) <u>The corridor width shall be sufficient to accommodate the natural features and ecological functions that contribute to its’ significance including natural hazard areas (flood plain and erosion hazards), buffers for natural features and provision for future recreational needs. This will be determined through the preparation of an Area Plan, Environmental Impact Study and/or Subject Lands Status</u></li> </ul>	<p>The current OP policies do not provide sufficient direction on the determination of corridor widths. The addition of sub-clause ii) provides clear parameters to be used in defining the width of</p>

<p>Alterations to Stream Corridors</p>	<p><u>Report; and</u></p> <p>(b) <u>Unless a narrower width is established through the preparation of an Area Plan, Environmental Impact Study and/or Subject Lands Status Report confirmed by the City, the minimum width of Significant River, Stream and Ravine Corridors will be 60 metres, normally comprised of 30 metres on each side of the watercourse;</u></p> <p>iii) Council may <u>only</u> consider alterations to <u>create new or expanded infrastructure within a Significant River, Stream and Ravine Corridor</u> <del>stream corridors and any associated flood lines</del> where it can be demonstrated, through an <del>area study</del> <u>environmental assessment process</u> or environmental impact study, that <del>such alterations will enhance the ecological function of the stream corridor</del> <u>any hazard constraint can be avoided, and there will be no negative impacts on the natural features or the ecological functions of the river or stream and downstream corridor.</u></p> <p><u>The provisions in Section 15.4.6. shall be considered in the evaluation of proposals to construct or maintain drainage works pursuant to the requirements of the <i>Drainage Act</i>.</u></p>	<p>Significant Corridors, based on supporting rationale from the Subwatershed Studies.</p> <p>Sub-clause iii) is being revised to more closely reflect the wording that is used in the 2005 Provincial Policy Statement. The revised wording more clearly identifies the criteria that apply where infrastructure is proposed within significant corridors.</p>
<p>Upland Corridors</p>	<p>iiiiv) Upland Corridors are vegetated areas, or potentially revegetated areas, outside of River, Stream, Valley or Ravine Corridors that link significant components of the Natural Heritage System. The potential for creation of upland corridors will be addressed in the area planning process. Where a corridor is to be created, the area study will provide direction for its location, scale and function. The Subwatershed Plans provide guidance for the planning of upland corridors. Locations shown in the Subwatershed Plans as being suitable for the creation of upland corridors are indicated on Schedule "B1".</p>	
<p><u>Establishment of Upland Corridors</u></p>	<p>v) <u>Potential locations for future upland corridors are identified on Map Schedule "B1". Upland Corridors will be encouraged to establish through a variety of measures such as stewardship agreements or conservation easements with private landowners, planting programs, and acquisition by the City through purchase, dedication, donation and/or bequest. Upland Corridors that have been established may be designated Open Space and zoned in a manner that will ensure their long-term protection.</u></p>	<p>The addition of clause v) is proposed in this section, to differentiate upland corridors from other (i.e. Significant River, Stream and Ravine) corridors, and provide a context for the establishment of upland corridors</p>
<p><b>15.4.7. Wildlife Habitat</b></p>	<p>Habitat is one of the primary ecological functions provided by natural heritage areas. All animals and plants have specific, individual habitat requirements, which differ for different periods in their life cycles. For animals, these essentials include the food, water, cover and space they need at different times for shelter to reproduce, care for young or feed.</p> <p>Some specific wildlife habitats are particularly important, and should be considered significant. In general, these are habitats where important wildlife species are concentrated or are particularly susceptible to impacts during a specific period of their life cycle.</p>	<p>Reference to the MNR Technical Guide provides added guidance in the determination of wildlife habitat</p>

	<p>i) The significance of Wildlife Habitat will be based on an evaluation of the following considerations, <u>and having regard for the Technical Guide prepared by the Ministry of Natural Resources, which provides information on the identification, description and prioritization of significant wildlife habitats:</u></p> <p>(a) It is an area of habitat where particularly important wildlife species are concentrated or are particularly susceptible to impacts for a specific period of their life cycle;</p> <p>(b) The amount of the specific type of habitat that exists within the context of the ecological region and its representation within other components of the Natural Heritage System; and</p> <p>(c) It is an area of habitat having a high diversity of species that are of value for research, conservation, education and passive recreation opportunities.</p>	<p>significance</p>
<p><b>15.4.8. Fish Habitat</b></p>	<p>"Fish habitat" includes the habitat of fish and other aquatic <del>communities</del> <u>organisms which together make up the aquatic ecosystem</u>. Healthy aquatic communities are generally a good indicator of environmental health. The Thames River and London's creeks and streams support a variety of cold water and warm water fisheries; however, these fish habitats are vulnerable to degradation from factors such as channelization, loss of stream bank vegetation, untreated urban runoff <del>and increased stormwater flows and sedimentation</del> <u>and changes in the timing and amount of stormwater entering the watercourse</u>. The harmful alteration, disruption or destruction of fish habitat is <u>generally</u> prohibited under the <i>Fisheries Act</i>. It is the City's intention to encourage improvement of productive capacity of this habitat. The extent and significance of fish habitat shall be determined in consultation with the Ministry of Natural Resources having regard for the Subwatershed Plan and the Subwatershed Studies Aquatic Biology Study where applicable. <u>Development and site alteration shall not be permitted in areas of fish habitat, except in accordance with relevant provincial and federal requirements.</u> (Ministry Modification No. 4 to OPA No. 88)</p>	<p>Change in wording more accurately describes the features and issues that are the subject of policy 15.4.8.. The destruction of fish habitat is generally prohibited under the Fisheries Act but in some cases can be permitted if compensation is provided.</p> <p>The additional sentence in 15.4.8. is consistent with the wording in Section 2.1.6 of the 2005 Provincial Policy Statement</p>
<p><b>15.4.9. Groundwater Recharge Areas, Headwaters and Aquifers</b></p>	<p>Groundwater recharge areas, headwaters and aquifers are key components in the functioning of the hydrologic cycle. Sensitive Groundwater Recharge Areas, <del>Headwaters, and Aquifers</del> as identified in the Subwatershed Studies are shown on Schedule "B1" - <del>the Flood Plain and Environmental</del> <u>Natural Heritage</u> Features Map. <u>New Groundwater Recharge Areas that are identified through subsequent environmental studies may be added to Schedule "B1" through an amendment to the Official Plan.</u> The City will require the protection of the hydrological function of these sensitive areas through its planning approval processes.</p>	<p>The modification to 15.4.9. reflects the fact that headwaters and aquifers are not explicitly identified on Schedule B1; important headwaters should be identified as Significant River, Stream and Ravine corridors. It also clarifies that additional Groundwater Recharge Areas may be identified through new studies and added to Schedule B1</p>
<p><b>15.4.10. Water Quality and Quantity</b></p>	<p>Water quality and quantity are addressed from a number of perspectives in this Plan. The Natural Heritage System policies address water quality and quantity through the protection of: natural heritage features and areas such as river, stream and valley corridors; fish habitat; and ground water recharge, headwaters and aquifers. Water quality and quantity are also protected through storm water management policies, water supply and sanitary sewerage policies, and water conservation policies.</p> <p>The City will seek to protect, <u>improve and/or restore</u> the quantity and quality of groundwater and surface water through its planning approval processes. The Subwatershed Plans and the stormwater management policies in Section 17.6 provide guidance for the measures necessary to achieve this interest. <u>The City will also promote</u></p>	<p>The revised and additional wording in 15.4.10. more effectively</p>

<p><b>15.4.11. Potential Naturalization Areas</b></p> <p><b>15.4.12 Unevaluated Vegetation Patches</b></p>	<p><u>efficient and sustainable use of water resources including practices for water conservation and sustaining water quality.</u></p> <p><u>Development and site alteration will be restricted and mitigative measures or alternative development approaches may be required in or near sensitive surface water features and sensitive ground water features in order to protect, improve and/or restore these features and their related hydrologic functions.</u> The City will also co-operate with Middlesex County, the surrounding municipalities and the Conservation Authorities to ensure that water quality and quantity goals and objectives identified in the Subwatershed Plans are achieved across municipal boundaries.</p> <p>Area Studies and Environmental Impact Studies will address opportunities for naturalizing areas that will form part of the Natural Heritage System. Locations identified in the Subwatershed Plans as being suitable for the application of a naturalization strategy are <u>shown identified as Potential Naturalization Areas</u> on Schedule "B1". (Section 15.4 replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p><u>Unevaluated Vegetation Patches, as delineated on Schedule "B1", were identified through the Subwatershed Studies or other environmental studies. These features may include treed areas, swamps, wetlands, savannahs, old field plantations, or other similar natural cultural features. Most Unevaluated Vegetation Patches are designated Environmental Review on Schedule "A".</u></p> <p><u>The "Environmental Review" designation and "Unevaluated Vegetation Patches" delineation are considered to be interim in nature, until such time as the significance of these patches can be confirmed through the completion of an Area Plan, Environmental Impact Study and/or Subject Lands Status Report accepted by the City, and Map Schedules "A" and "B1" have been amended to reflect the final designation and delineation.</u></p> <p><u>If an Unevaluated Vegetation Patch is already designated for development on Schedule "A", the preservation of trees and other vegetation will be encouraged through the implementation of Tree Preservation policies as part of the subdivision approval and site plan approval process.</u></p>	<p>implements Section 2.2 of the 2005 Provincial Policy Statement, which places greater emphasis on the protection of ground water and surface water resources that the previous PPS.</p> <p>Recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304. Some modifications are being proposed to clarify the original wording.</p>
<p><b>15.4.13 Other Drainage Features</b></p>	<p><u>In addition to the "Significant River, Stream and Ravine Corridors" and "Regulated Streams and Ravines" that comprise part of the Natural Heritage System, the base map features on Schedule "B1" also identify "Drainage Courses/Ponds" to delineate the location of municipal or agricultural drains, intermittent streams and man-made or natural ponds. They are identified for information purposes and may be added or removed from the base map without an Official Plan Amendment, to reflect changes over time in drainage patterns and features on the ground. While these drainage features do not comprise part of the Natural Heritage System, their ecological contribution as headwaters, recharge areas and riparian corridors, will be addressed through the Area Plan and/or EIS process.</u></p>	<p>Policy 15.4.13 is being added in order to clarify the status of "Other Drainage Features", which are identified on the OP base map but do not comprise part of the Natural Heritage System.</p>

**15.5. ENVIRONMENTAL IMPACT STUDIES AND SUBJECT LANDS**

**STATUS REPORTS**

(Section 15.5 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

*Environmental Impact Studies are required prior to the approval of development to prevent negative impacts on the Natural Heritage System. Environmental Impact Studies will normally be completed as part of Area Studies in accordance with the provisions of Section 19.2, however, they can also be completed separately as part of subdivision or site plan applications.*

*In circumstances where an Area Study is not completed, the City may require a Subject Lands Status Report to determine ~~whether a more detailed Environmental Impact Study is required~~ the significance of any natural heritage feature.*

**15.5.1.**

**Purpose of Environmental Impact Studies**

**Where Required**

**Restrictions on Development, Site Alteration**

- i) Environmental Impact Studies are required to determine whether, or the extent to which development ~~will~~ may be permitted in areas within, or adjacent to, specific components of the Natural Heritage System. They ~~may~~ will confirm or refine the boundaries of components of the Natural Heritage System, and ~~may~~ will include conditions to ensure that development does not negatively impact the natural features and ecological functions for which the area is identified. Council has approved "Guidelines for the Preparation and Review of Environmental Impact Studies" to implement the Official Plan policies.
- ii) Environmental Impact Studies are required where development or site alteration is proposed within or adjacent to components of the Natural Heritage System. The City will require that an Environmental Impact Study be completed to its satisfaction, in consultation with the relevant public agencies prior to the approval of an Official Plan amendment, Zoning By-Law amendment, subdivision application, consent application or site plan application, where development is proposed entirely or partially within the distances adjacent to Natural Heritage System components set out in Table 15-1.
- iii) Development and site alteration shall not be permitted on adjacent lands to components of the Natural Heritage System, as outlined in Table 15-1, unless the ecological functions of the adjacent lands has been evaluated, and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

The minor wording clarification confirms that the purpose of a subject lands status report is to establish significance; if a feature or function is confirmed as significant an EIS would be required.

The approval of development adjacent to components of the Natural Heritage System is discretionary whereas the content of a required EIS is not.

The changes in sub-clause i) were recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304  
Under the PPS, an EIS may also be required in the case of consent applications.  
The revised wording in sub-clause iii) reflects and implements Section 2.1.6 of the 2005 Provincial Policy Statement

**Table 15-1 Areas Subject to Environmental Impact Study Requirements**

<b>DISTANCE</b>	<b>COMPONENTS</b>
Within 120 metres	-Provincially Significant Wetlands and all lands connecting Provincially Significant Wetland areas within a wetland complex
Within 100 metres	-Locations of endangered, threatened or vulnerable species, where the extent of

		significant portions of the habitat is not mapped or where management guidelines are unavailable	
	Within 50 metres	<ul style="list-style-type: none"> <li>-Environmentally Significant Areas</li> <li>- Life Science Areas of Natural and Scientific Interest</li> <li>-Locations of endangered, threatened or vulnerable species, where the extent of significant portions of the habitat is mapped or where management guidelines indicate the appropriate extent of significant portions of the habitat</li> <li>-Significant Woodlands</li> <li>-Significant Wildlife Habitat</li> <li>-Significant River, Stream and Ravine Corridors</li> <li>-Significant Upland Corridors</li> </ul>	
	Within 30 metres	<ul style="list-style-type: none"> <li>-Locally Significant Wetlands and all lands connecting Locally Significant areas within a wetland complex</li> <li>- Fish Habitat</li> <li>- <u>Woodlands</u></li> </ul>	The addition of "Woodlands" was recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304
	Within	-Earth Science Areas of Natural and Scientific Interest	
	Within a distance appropriate to the specific components of the Natural Heritage System contained on the lands	-Areas designated as Environmental Review on Schedule "A"	
Relationship to Subwatershed Plans	iii) The City may require that the Environmental Impact Study consider areas beyond those outlined in Table 15.1. to ensure the relevant context for the assessment of potential impacts which may be induced by proposed land uses and for the prescription of effective avoidance and mitigation measures.		
Content	iv) The Subwatershed Plans have provided broad level subwatershed-by-subwatershed environmental evaluations to be refined through site specific studies. An Environmental Impact Study completed pursuant to this Plan shall have regard to both the ecosystem framework and specific environmental targets contained in the Subwatershed Plans.		
	v) An Environmental Impact Study shall include:		
	(a) a description of the existing natural environment that will be affected or that might reasonably be expected to be affected, either directly or indirectly;		
	(b) the environmental effects that might reasonably be expected to occur <u>and their temporal and</u>		

Additional Matters to be Addressed	<p><u>spatial scales;</u></p> <p>(c) <del>development criteria alternative methods and measures for mitigation of potential environmental effects of the proposed development to maintain features and functions, and mitigate the impacts of development within or on adjacent lands;</del> and</p> <p>(d) <u>an implementation strategy for mitigation measures including</u> a monitoring plan to measure the potential effects on the environment if demonstrated to be necessary.</p> <p>vi) Prior to initiation of the Environmental Impact Study, a work plan <u>and study scope</u> shall be prepared to the satisfaction of the City, in consultation with the relevant public agencies. Generally, an Environmental Impact Study will be required to:</p> <p>(a) confirm <u>and map</u> boundaries of natural heritage areas designated as Open Space;</p> <p>(b) evaluate <u>the</u> significance of lands designated as Environmental Review on Schedule "A" <u>in accordance with the criteria outlined in Section 15.4;</u></p> <p>(c) identify and evaluate <u>the</u> significance of other natural heritage features which are not designated as Open Space or Environmental Review on Schedule "A" including headwater areas, <u>rivers, streams, and drainage corridors and other vegetation patches greater than 0.5 hectares;</u></p> <p><u>The results of this initial stage of the Environmental Impact Study are to be reviewed and confirmed by the City prior to completion of the balance of the study.</u></p> <p><del>(d) identify site-specific development criteria required to maintain the features and functions of the Natural Heritage System and to buffer them from the impacts of development on adjacent lands; and</del></p> <p><del>(e) identify mitigation and compensation measures that may be required to protect natural heritage features and areas.</del></p>	<p>The revisions in sub-clauses v), vi) and vii) provide clarification that will help applicants to better understand the required elements and parameters in the preparation of Environmental Impact Studies, based on experiences over the past several years</p> <p>Reference to "other vegetation patches greater than 0.5 hectares" was recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p> <p>The addition of the second sentence under sub-clause (c) will avoid the potential for misunderstanding by ensuring that the EIS requirements must be confirmed by the City prior to completion of the study</p>
Environmental Assessment	<p>vii) When an Environmental Assessment of a proposal is carried out under the <i>Ontario Environmental Assessment Act</i> or relevant Federal legislation, <del>that assessment will be considered as fulfilling the Environmental Impact Study required by this Plan</del> <u>any required EIS will be scoped to include only those matters that have not been adequately addressed through the Environmental Assessment.</u></p>	<p>The information contained under sub-clauses (d) and (e) is also found under paragraph v), as amended, and it is redundant to include this twice</p>
Notice	<p>viii) The public, including adjacent property owners, shall be notified of the preparation of an Environmental Impact Study, and given the opportunity to comment. The public notices respecting all Official Plan, Zoning,</p>	<p>The modification to sub-clause vii)</p>

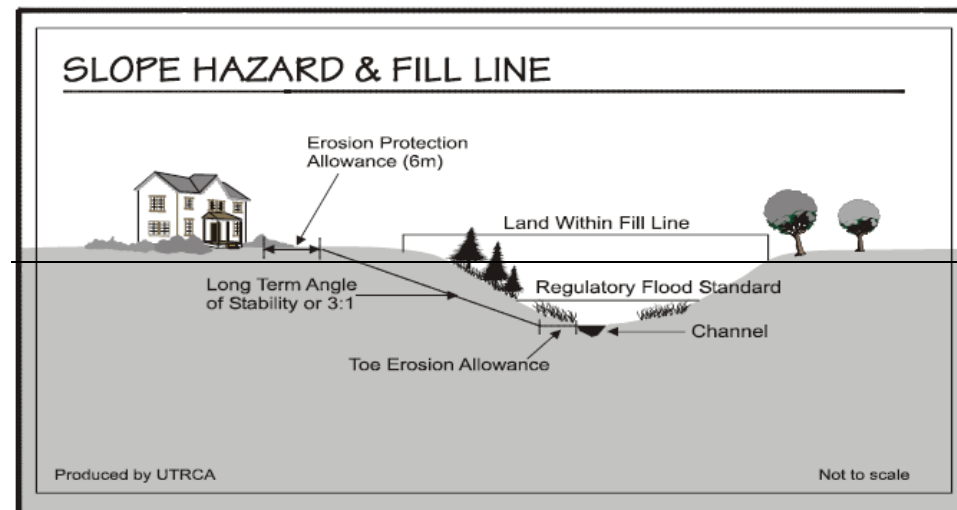
<p><b>15.5.2.</b></p> <p><b>Subject Lands Status Reports</b></p>	<p>Subdivision, <u>Consent</u> and Site Plan applications shall clearly state whether an associated Environmental Impact Study is being prepared and, if so, that a separate notice of its preparation will be given to the public, including abutting property owners.</p> <p>i) Where an Area Study has not been completed, <del>prior to approving new development</del> the City may require the preparation of a Subject Lands Status Report. <u>The work plan for the Subject Lands Status Report will be determined in consultation with the City and relevant public agencies:</u></p> <p>ii) <u>a) A Subject Lands Status Report shall provide an <del>preliminary</del> assessment of natural features on the Subject Lands and within that part of the Sub-Watershed catchment area that may be impacted by the new development and including but not limited to those areas designated as Open Space or Environmental Review on Schedule "A" in accordance with the requirements of 15.4.</u></p> <p>iii) <u>b) If the Subject Lands Status Report identifies any lands that, in the estimation of the City, may meet the criteria for determining significance set out in Section 15.4 for specific components of the Natural Heritage System, the City shall require the preparation of an Environmental Impact Study for these lands in accordance with the requirements of 15.5.2.</u> Lands that satisfy the criteria for significance shall be designated as Open Space in conjunction with any Official Plan amendment required for the proposed development.</p> <p><b>15.5.3.</b></p> <p><b>Environmental Management Guidelines</b></p> <p>The City shall prepare Environmental Management Guidelines setting out in more detail the requirements of the environmental component of Area Plans; Environmental Impact Studies; and/or Subject Lands Status Reports.</p> <p>(Section 15.5 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	<p>recognizes that it may be necessary, in some instances, to supplement the findings of an EA with more detailed environmental evaluation</p> <p>The changes to 15.5.2. clarify that the scope and content of a Subject Lands Status Report is to be prepared in consultation with the City and appropriate agencies so that Official Plan requirements are addressed. The other changes provide cross-references to the applicable policies in Chapter 15</p>
<p><b>15.6</b></p>	<p><b><u>FLOOD PLAIN LANDS</u></b></p> <p>*****</p>	<p><b>* <u>NOTE:</u> At the request of Council, a separate report on flood plain policies and flood fringe development, is being prepared and presented to Planning Committee.</b></p>
<p><b>15.7.</b></p>	<p><b><u>ONE HUNDRED YEAR EROSION LIMIT AND REGULATION LIMIT FILL LINE AREA</u></b></p> <p>(Section 15.7. added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p><i>Ravines, river valleys and stream corridors may be susceptible to natural hazards. The natural hazards addressed in this section are:</i></p> <p>i) <i>Lands within the one hundred year erosion limit in accordance with provincial policy;</i></p>	<p>The Fill Line delineation is no longer applied to the Conservation Authority watersheds in the City of London. A "Regulation Limit" is now applied to identify the areas subject to approval under the Regulations of the Conservation Authorities Act</p>

<p><b>15.7.1. One Hundred Year Erosion Limited</b></p>	<p>ii) Steep slopes; and</p> <p>iii) Lands within <del>a fill line</del> <u>the Regulation Limit</u> as identified by the Conservation Authority having jurisdiction. The lands susceptible to natural hazards are shown on Schedule "B" - Flood Plain and Environmental Features.</p> <p>This policy restricts development within areas susceptible to erosion. The <del>contents</del> <u>components</u> of the One Hundred Year Erosion Limited <u>and the Regulation Limit</u> are illustrated in Figure 15.7.1.</p>	<p>Reference is made to the new Conservation Authority Regulation Limit, which is identified in Figure 15.7.1. below</p>
<p>Identification of One Hundred Year Erosion Limit</p>	<p>i) The One Hundred Year Erosion Limit is delineated on Schedule "B1" - the Environmental Features Map. In accordance with provincial policy, it is based on the combined influence of the following factors, where applicable:</p> <p>(a) Toe Erosion Allowance - a setback based on the anticipated toe erosion which would occur for a 100 year design period, or 100 times the measured annual recession rate; <u>the toe erosion limit for a specific site may need to be determined by a stream morphology study;</u></p> <p>(b) Stable Slope Allowance - a setback based on a 3 to 1 horizontal to vertical slope projected from the toe erosion allowance <u>or a more specific slope as determined by a site specific geotechnical study;</u> and</p> <p>(c) <del>Erosion Protection</del> <u>Access</u> Allowance - a setback of 6 metres <u>from the combined Toe Erosion Allowance and Erosion Access Allowance components.</u></p>	<p>Wording modifications in clauses i) and ii) will provide for consistency with current Conservation Authority requirements and terminology</p>
<p>Boundaries</p>	<p>ii) Where warranted on the basis of <del>a geotechnical assessment</del> <u>an appropriate technical study</u>, as described in policy 15.7.4., reductions to the 100 Year Erosion Limit may be permitted without an amendment to this Plan.</p>	
<p>Permitted Uses</p>	<p>iii) Uses permitted by the underlying land use designation <del>may be developed</del> within the 100 Year Erosion Hazard Limit are limited to infill, reconstruction and minor additions to existing structures. <del>provided that all of</del> <u>The following requirements <del>can</del> <u>must</u> be fulfilled:</u></p> <p>(a) the erosion and/or slope instability hazard can be safely <del>addressed</del> <u>avoided</u>;</p> <p>(b) new or existing hazards are not created or aggravated including possible impacts on upstream or downstream areas;</p> <p>(c) adverse environmental impacts can be appropriately mitigated;</p>	<p>A change in terminology is proposed to more accurately reflect the wording in 3.1.1. of the PPS and regulations applied by the Conservation Authorities</p>

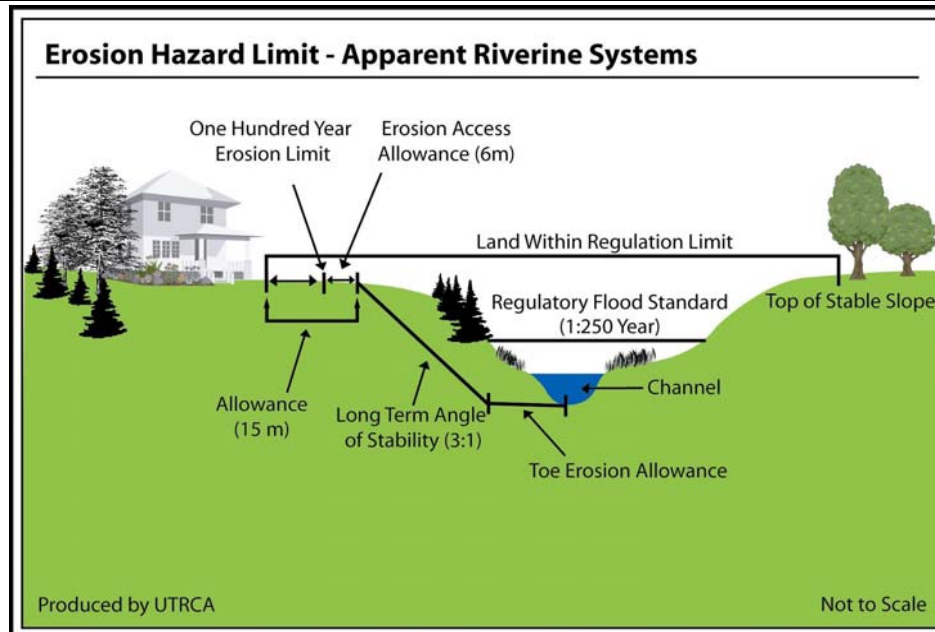
- (d) vehicles and people have a way of entering and exiting the area during times of emergencies;
  - (e) development will be carried out in accordance with established standards and procedures; and
  - (f) the development does not involve institutional uses, essential emergency services or the storage of hazardous substances, which could pose an unacceptable threat to public safety if damaged or impacted by erosion forces.
- iv) Permitted uses within the One Hundred Year Erosion Limit will also include:
- (a) flood and erosion control and bank stabilization works necessary to protect existing and new development, provided that, in areas of new development the use of hazard avoidance, vegetation plantings and other non-structural solutions will be the preferred method of addressing erosion and slope stability hazards.
  - (b) creation or maintenance of infrastructure authorized under an environmental assessment process.
- v) Compliance with the above conditions shall be demonstrated through appropriate studies geotechnical study in accordance with policy 15.7.4.

Geotechnical Study

**FIGURE 15.7.1.: ONE HUNDRED YEAR EROSION LIMIT AND REGULATION LIMIT**



**Note:** It is expected that further policy modifications will be proposed to Sections 15.6 and 15.7, and Map Schedule “B2” by the UTRCA, to reflect Regulations that have recently been enacted under the Conservation Authorities Act



**15.7.2. Steep Slopes Outside the One Hundred Year Erosion Limit**

The One Hundred Year Erosion Limit identifies the erosion hazard associated with slopes along the City's river and stream corridors. Steep slopes associated with other features such as moraines or remnant valley slopes no longer continuous with the river system exist within the City outside of the One Hundred Year Erosion Limit. These features will be identified and assessed through the community planning process and appropriate measures will be taken to address erosion hazards and protect the natural vegetation associated with these features. Such measures may include the preparation of a geotechnical study in accordance with policy 15.7.4.

**15.7.3. Lands Within the Fill Line Regulation Limit and Maximum Hazard Line**

~~The fill lines of the respective conservation authorities are approximately delineated on Schedule "B" - Flood Plain and Environmental Features. Fill lines are intended to generally identify hazards such as steep slopes, flood plain areas and areas of unstable or organic soils. As a result, fill lines generally follow steep river valley slopes and ravines, flood lines or estimated flood plain areas and wetlands.~~

~~Fill line maps accompanied with written schedules can be registered to form part of the Fill, Construction and Alteration to Waterways Regulation made pursuant to Section 28 (1) of the *Conservation Authorities Act*.~~

Regulation Limits may be mapped by the respective Conservation Authority, pursuant to the *Conservation Authorities Act* and enacting regulations, to delineate natural hazards and features such as steep slopes, and ravines, floodplain areas, wetlands and areas of interference surrounding wetlands. The Regulation Limits may be delineated on Schedule "B2" to denote areas within which approval for site alteration and development activity is

Changes in terminology reflect the fact that the Fill Line delineation is no longer applied to the watershed areas in the City of London. A "Regulation Limit" is now applied to identify the areas subject to approval under the Regulations of

<p>Boundaries</p> <p><b><u>Maximum Hazard Area / Maximum Hazard Line</u></b></p>	<p><u>required from the conservation authority having jurisdiction.</u></p> <p>i) <del>The approximate limit of the fill lines is indicated on Schedule "B" – Flood Plain and Environmental Features. More detailed fill line Regulation Limit mapping is available for inspection at the respective Conservation Authority office.</del></p> <p>ii) <u>The Maximum Hazard Area, identified on Map Schedule "B2", represents the general extent of combined natural hazards associated with the flood plain, areas of unstable or organic soils, steep slopes and erosion. The Maximum Hazard Line is also delineated on Schedule "B1" for information purposes.</u></p> <p>ii) <del>The preparation and review of an area study, or any development proposal outside of a community planning area, that pertains to lands within the fill line, shall identify and address hazards associated with flooding, erosion, steep slopes and unstable or organic soils to the satisfaction of the City and the Conservation Authority. Lands may be designated and zoned and conditions may be imposed on development to provide for hazard protection.</del></p> <p>iii) <u>Detailed mapping for the Maximum Hazard Area and Maximum Hazard Line is available from the Conservation Authority having jurisdiction.</u></p> <p>iii) <del>Development may be permitted within the fill line delineated on Schedule "B", in accordance with the requirements of the Conservation Authorities Act.</del></p> <p>iv) In cases where the slope is not sufficiently steep to be classified as an area within the One Hundred Year Erosion Line, the City and the conservation authority may still require the submission of a geotechnical assessment completed in accordance with policy 15.7.4. of this Plan.</p> <p><b>15.7.4. Geotechnical Assessments</b></p> <p>i) Geotechnical assessments will be required to:</p> <ul style="list-style-type: none"> <li>(a) refine boundaries of the One Hundred Year Erosion Limit;</li> <li>(b) identify existing erosion and/or slope instability hazards;</li> <li>(c) assess the impact of the proposed development on existing hazards;</li> <li>(d) assess the potential for the proposed development to create new hazards; and</li> <li>(e) identify measures to safely avoid or address the potential hazards, including building setbacks from the One Hundred Year Erosion Limit.</li> </ul> <p>ii) The City shall require that the geotechnical assessment be completed to its satisfaction, in consultation with the relevant public agencies, prior to the approval of an Official Plan Amendment, Zoning By-Law Amendment, subdivision application or site plan application.</p> <p>iii) A geotechnical assessment may be completed as part of an Area Plan or an Environmental Impact Study in accordance with Section 15.5. of this Plan.</p> <p><small>(Section 15.7 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</small></p>	<p>the Conservation Authorities Act</p> <p>Map schedule terminology and labeling modifications in 15.7.3. relate to the replacement of Schedule "B" with Schedules "B1" and "B2" (Note: The Regulation Limit may be delineated on Schedule "B2" at a future date, based on mapping information from the Conservation Authorities)</p> <p>The Maximum Hazard Area and Maximum Hazard Line are identified on Map Schedules "B1" and "B2" in place of the previous fill line, which is no longer in effect. These delineations are intended to show the general location of the combined maximum hazard area that should be avoided by new development</p>
--	--	---

**15.8.**

**CONTAMINATED LANDS**

(Section 15.8 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**15.8.1.  
Development in  
the Vicinity of  
Known or  
Suspected  
Contaminated  
Sites**

- i) Notwithstanding the land use designated on Schedule "A" of this Plan and any associated policies, future development will not be permitted on or in the vicinity of known or suspected contaminated sites, unless it is determined that the development satisfies the provisions of the *Environmental Protection Act*, and the development complies with any other provincial and municipal guidelines, as applicable.
- ii) The City may consult with appropriate Provincial agencies and may require an investigation, including testing of soil and groundwater samples, to:
  - (a) Determine potential health concerns;
  - (b) Demonstrate the site can be rehabilitated to meet appropriate Federal, Provincial and local standards; and
  - (c) Identify procedures for site remediation.

**15.8.2.  
Cooperation With  
Other Agencies**

The City shall cooperate and participate with other private or public agencies, in an effort to reduce adverse environmental impacts or health hazards associated with contaminated sites.

(Section 15.8 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**15.9.**

**ABANDONED OIL, GAS OR WATER WELLS**

(Section 15.9 added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**15.9.1.  
Known or  
Suspected Wells**

~~On lands found to contain abandoned oil, gas or water wells, prior to approving development, the City will require the proponent to demonstrate that the wells are plugged, capped or otherwise made safe in accordance with the *Petroleum Resources Act* as administered by the Ministry of Natural Resources. For information purposes, known petroleum well locations are shown on Schedule "B2". Information pertaining to well locations and petroleum resources may be obtained from the Ministry of Natural Resources.~~

For information purposes, the approximate locations of former petroleum wells that are known or suspected, are identified on Schedule "B2". Prior to approving new development on or adjacent to former petroleum well locations, the City will require the proponent to demonstrate that the known or suspected hazard has been mitigated in accordance with the provisions of the *Oil, Gas and Salt Resources Act*.

The wording in Section 15.9.1. has been revised to more accurately reflect Section 3.2.1. of the Provincial Policy Statement, and to reference the Oil, Gas and Salt Resources Act, which applies to former petroleum wells.

**15.10.**

**AGGREGATE RESOURCES**

(Section 15.10 renumbered by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

*The London area contains extensive sand and gravel deposits which provide a valuable source of road and building construction material. In recognition of the value of these aggregate resources, the Plan provides for the continuation and expansion of existing pits and quarries and the introduction of new pits and quarries. The potential impacts of pits and quarries on other land uses are also taken into account.*

*Aggregate extraction is recognized by the Plan as an interim land use and, as such, aggregate resources are designated on Schedule "A" - the Land Use Map, for their ultimate intended land use. The locations of both aggregate resources and existing pits and quarries are shown on Schedule "B2" - ~~Flood Plain and Environmental Features~~ Natural Resources and Natural Hazards.*

*In addition to the policies of the Plan, existing pits and quarries in London are also subject to the provisions of the Aggregate Resources Act.*

**15.10.1. Extractive Industrial**

Legally existing pits and quarries are recognized as a permitted use by this Plan. In areas shown Extractive Industrial on Schedule "B2", aggregate extraction is a permitted interim land use in all designations on Schedule "A".

Location

i) Extractive Industrial Areas shown on Schedule "B2" - ~~Flood Plain and Environmental Features~~ Natural Resources and Natural Hazards include licensed pits and quarries and properties appropriate for consideration for a license under the *Aggregate Resources Act*.

Designation

ii) Extractive Industrial Areas shown on Schedule "B2" may be designated on Schedule "A" - the Land Use Map, according to their ultimate intended land use.

Evaluation of Proposals for Adjacent Development

iii) In evaluating proposals for change in land use within, or adjacent to, Extractive Industrial Areas shown on Schedule "B2" - ~~Flood Plain and Environmental Features~~ Natural Resources and Natural Hazards, the potential impact of the pit or quarry on the proposed use and the future availability of aggregate resources for extraction will be considered. ~~To reduce conflicts between the new development and the aggregate resource extraction, the following measures may be required~~ Existing mineral aggregate extraction operations shall be protected from new development and activities that would preclude or hinder their expansion or continued use, or which would be incompatible for reasons of public health, public safety or environmental impact. The following measures may be required to ensure that extraction is undertaken in a manner which minimizes social and environmental impacts between the mineral aggregate resource extraction and new development:

(a) phasing of the proposed development, such that portions of the site furthest away from the pit or quarry are developed first. This will assist in the maintenance of a buffer area between the two uses;

(b) phasing of the proposed development, so that rehabilitation of portions of the pit or quarry

Map schedule terminology and labeling modifications in 15.10. and 15.10.1. relate to the replacement of Schedule "B" with Schedules "B1" and "B2"

The modification to sub-clause iii) reflects the intent and stronger language used in Section 2.5.2.4 of the 2005 Provincial Policy Statement

	<p>precedes the development of adjacent residential uses; and</p> <p>(c) the provision of berms, landscaping, and fencing.</p> <p><b>15.10.2.</b> <u>Council will promote the conservation of mineral aggregate resources by making provision for the recovery of these resources, wherever feasible.</u> Aggregate resources within the City are shown on Schedule "B2" - <del>Flood Plain and Environmental Features</del> <u>Natural Resources and Natural Hazards</u>. It is recognized that the extraction of these resources may occur during the life of the Plan. An Official Plan amendment will be required to establish a new pit or quarry, or to substantially expand an existing pit or quarry, according to the provisions of policy 15.4.3. of the Plan. The foregoing notwithstanding, in the case of Aggregate Resource Areas in the Byron area, only a zoning by-law amendment will be required to establish a new pit or expand an existing pit.</p> <p><u>In areas within or adjacent to known mineral aggregate resources development and activities that would preclude the establishment of new aggregate extraction operations, or access to the resources will only be permitted if:</u></p> <p><u>(a) resource use would not be feasible; or</u></p> <p><u>(b) the proposed land use or development serves a greater long-term public interest; and</u></p> <p><u>(c) issues of public health, public safety and environmental impact are addressed.</u></p>	<p>The modification and additional wording in 15.10.2 reflects the intent and stronger language used in Section 2.5.2.5 of the 2005 Provincial Policy Statement</p>
<p><b>15.10.3.</b></p> <p><b>Applications to Expand or Add Pits or Quarries</b></p> <p>Potential Impact On Other Uses</p> <p>Information to Assist in Evaluation</p>	<p>In addition to the requirements of the <i>Aggregate Resources Act</i>,</p> <p>(a) except in the south-east Byron area, an Official Plan amendment will be required in order to establish a new pit or quarry or to expand an existing pit or quarry beyond that area shown on Schedule "B2" - <del>Flood Plain and Environmental Features</del> <u>Natural Resources and Natural Hazards</u> as Extractive Industrial Area; and</p> <p>(b) in the case of lands in the south-east Byron area shown on Schedule "B2" - <del>Flood Plain and Environmental Features</del> <u>Natural Resources and Natural Hazards</u> as Extractive Industrial Area or <u>Mineral</u> Aggregate Resource Area, only a rezoning will be required to establish a new pit or quarry or to expand an existing pit or quarry</p> <p>i) Proposals will be evaluated in terms of their potential impact on surrounding land uses.</p> <p>ii) In reviewing aggregate extraction proposals applied for under the <i>Aggregate Resources Act</i>, where an Official Plan amendment would be required, or in the case of those lands in the Byron area where only a rezoning is required to establish a new pit or quarry or to expand an existing pit or quarry, Council may request submission of the following information from the applicant:</p>	<p>Map schedule terminology and labeling modifications in 15.10.3. relate to the replacement of Schedule "B" with Schedules "B1" and "B2"</p>

	<ul style="list-style-type: none"> <li>(a) a report setting out the location, extent, amount, and quality of the aggregate resource to be extracted;</li> <li>(b) an inventory of existing site conditions, including the description and dimensions of the site, property ownership and area, adjacent land uses, vegetation, topography, soil conditions, ground and surface water, and other significant features;</li> <li>(c) an evaluation of potential noise and vibration impacts on adjacent land uses in keeping with the provisions of policy 19.9.5.;</li> <li>(d) the site plan of the extractive operation, as required by the <i>Aggregate Resources Act</i>, and showing the proposed development as planned and staged. Such site plans shall include: the location of structures, operating equipment, activity areas, points of access, and internal roads; the anticipated use of traffic routes to and from the site; the proposed use of measures to mitigate the potential impact of dust, noise, vibration, and other nuisances on surrounding land uses; and the phasing of rehabilitation of the extractive operation.</li> </ul>	
Other Designations	<ul style="list-style-type: none"> <li>iii) In land use designations other than Urban Reserve, applications for Official Plan amendment to establish a new pit or quarry, or to expand on existing pit or quarry will require the completion of a Planning Impact Analysis according to the applicable section of the Plan.</li> </ul>	
Byron	<ul style="list-style-type: none"> <li>iv) In connection with Extractive Industrial Areas and Aggregate Resource Areas in Byron, it is the intent of this Plan to minimize the impact of extraction activities upon surrounding land uses. Accordingly, in the Byron area, in addition to compliance with policies 15.4.3.i) and ii), the Ministry of Natural Resources may be requested, through the licence and site plan approval process, to require any of the following: <ul style="list-style-type: none"> <li>(a) the extraction and rehabilitation of extracted areas to be expedited to the extent possible through a phasing sequence on the site plans required by the <i>Aggregate Resources Act</i>;</li> <li>(b) the location of stockpiling, screening, mixing, crushing or other processing of materials at the lowest elevations that are reasonably possible;</li> <li>(c) to the extent possible, the use of common, paved entrances and exits as recommended by the City Engineer to be shared by extraction operations; and/or</li> <li>(d) the retention of tree or other vegetative cover within the setback areas to the extent practicable.</li> </ul> </li> </ul> <p><b>15.10.4.</b> Council, in considering an Official Plan amendment and/or rezoning, as the case may be, and an application under the <i>Aggregate Resources Act</i> to add or expand a pit or quarry, will request the submission of a rehabilitation plan, as provided for by the <i>Aggregate Resources Act</i>, to ensure that the rehabilitation of a pit or quarry is in keeping with</p>	
<b>Rehabilitation of</b>		

**Pits and Quarries** the land use designation(s) shown on Schedule "A" - the Land Use Map, and other relevant policies of this Plan.

Rehabilitation Plan Criteria i) Council may request that the following items be included in the rehabilitation plan: details of the proposed land use, final topographic contours; the expected depth and quality of topsoil; the expected depth and quality of ground water; the expected extent, depth, and quality of surface water; proposed measures to ensure slope stability; details of the landscaping or replanting program; and delineation of proposed drainage patterns.

Basis of Rehabilitation Plans ii) Council may request that rehabilitation plans be based on an area study, prepared in accordance with the provisions of policy 19.2.1. of the Plan - Area Studies. Area studies intended to form the basis of a rehabilitation plan will address, in addition to those matters described in policy 19.2.1. ii), methods of minimizing potential land use conflicts between proposed new development and existing land uses.

South East Byron iii) In connection with Extractive Industrial Areas and Aggregate Resource Areas in southeast Byron, the integration of rehabilitation plans for the extraction area east of North Street will be achieved through the process of both new and replacement site plan approval by the Ministry of Natural Resources. The integrated plans will provide an approximate indication of the rehabilitated landscape including limited peripheral areas that are intended for residential after-use, and the greater portion of the pit that will not be suitable for residential development because of slope or elevation constraints. Since the ultimate use of this area is likely to be open space and recreation, a more detailed level of site planning will have to be undertaken in the future involving the pit operators and land owners, the Ministry of Natural Resources and the City of London. The resulting plan and related documentation will indicate:

- (a) an accurate delineation of the land intended to be rehabilitated as public open space;
- (b) accurate contour information indicating the final grading of the rehabilitated areas;
- (c) the approximate configuration of any ponds to be incorporated in the rehabilitation scheme;
- (d) road and trail access to and through the rehabilitated pit area including any required parking facilities;
- (e) the siting of any recreational facilities proposed for the rehabilitated pit area;
- (f) a planting scheme to provide for the stabilization of soils and reduced maintenance on rehabilitated slopes, the naturalization of lands at the edge of forest areas, and the creation of a visually attractive landscape suitable for passive recreation pursuits.

**15.10.5. Wayside Pits and Quarries** "Wayside" pits or quarries may be established in undeveloped areas within any land use designation of the Plan without the requirement for an Official Plan or Zoning By-law amendment, subject to the following provisions:

Definition i) For the purposes of this Plan, "wayside pit or quarry" shall mean: a temporary pit or quarry opened and

Open Space of Flood Plain Lands	<p>used by a public road authority solely for the purpose of a particular project or contract of road construction, and not located within the road right-of-way.</p> <p>ii) Wayside pits or quarries to be established within areas of the Open Space designation which have been recognized by Council as environmentally significant areas, or within areas of any land use designation that are subject to the <del>Fill, Construction, and Alteration to Waterways regulations</del> <u>Regulations for Development, Interference with Wetlands and Alterations to Shorelines and Watercourses</u> of the Upper Thames River Conservation Authority, will require a Zoning By-law amendment to permit a temporary use, in accordance with the provisions of the Planning Act. Applications for a Zoning By-law amendment to permit wayside pits and quarries will be subject to Planning Impact Analysis, according to the applicable Planning Impact Analysis section of the Plan.</p>	
Areas of Existing Development	<p>iii) Wayside pits or quarries to be established within areas of existing development will require a Zoning By-law amendment to permit a temporary use, in accordance with the provisions of the <i>Planning Act</i>. Applications for a Zoning By-law amendment to permit wayside pits and quarries will be subject to Planning Impact Analysis, according to the applicable Planning Impact Analysis section of the Plan.</p>	Changes in terminology reflect the fact that the Fill Line delineation is no longer applied to the watershed areas in the City of London and new Regulations are now applied under the Regulations of the Conservation Authorities Act
Rehabilitation	<p>iv) Council, in reviewing applications under the <i>Aggregate Resources Act</i> for wayside permits, will request the submission of a rehabilitation plan prepared to Council's satisfaction, as provided for by the <i>Aggregate Resources Act</i>, to ensure that the rehabilitation of a pit or quarry is in keeping with the land use designations shown on Schedule "A", the Land Use Map, and other relevant policies of this Plan.</p>	
<p><b>15.10.6.</b> <b>Byron Gravel Pits and Adjacent Lands</b></p>	<p>Aggregate resources adjacent to the Byron Gravel Pits are shown on Schedule <del>B2 - Floodplain and Environmental Features</del> <u>Natural Resources and Natural Hazards</u> Map. It is recognized that extraction of these resources may occur during the life of this Plan as a means of assisting in the overall rehabilitation of the Byron Gravel Pits as provided for in policy 9.2.4. Consideration of the long term development for the lands identified on Schedule "B2" as having aggregate resources adjacent to the Byron Gravel Pits shall be incorporated and form a part of the studies being undertaken to achieve a comprehensive extraction, rehabilitation and development plan for the lands designated "Urban Reserve and Residential" on Schedule "A". (Section 15.10 renumbered by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	Map schedule terminology and labeling modifications in 15.10.6. relate to the replacement of Schedule "B" with Schedules "B1" and "B2"
<p><b>17.6.</b></p>	<p><b><u>STORMWATER MANAGEMENT</u></b></p> <p><i>Effective control of stormwater run-off is required to adequately protect property from flooding damage and to protect the environment. The reduction of peak stormwater flows through various measures provides considerable protection against such occurrences, and can reduce capital costs for trunk storm sewers and other flood control structures. Effective stormwater management should provide protection against surface flooding, basement flooding and erosion; sediment control during construction; and should provide for appropriately designed street systems and receiving watercourses capable of handling projected stormwater flows. Stormwater control requires the construction of works and facilities by both the Municipality and developers, and concerted efforts should be made to minimize the capital, operating, and maintenance expenditures required for such facilities. Successful and</i></p>	

*cost-effective management of stormwater can be best achieved through a co-ordinated approach to, and use of, different water control techniques.*

*The Subwatershed Planning Studies have addressed stormwater management from an ecosystem perspective for ten subwatersheds and three sections of the Thames River valley in the City. They have identified stormwater management issues, development criteria and stormwater targets which should be addressed on a subcatchment or tributary basis.*

*To address stormwater management issues in more detail, the City will require the preparation of Stormwater Management Plans. Stormwater Management Plans will be prepared on a subcatchment or tributary basis, and will detail measures which can and should be undertaken, in conjunction with development, to control floodwaters to acceptable levels while protecting baseflows and water quality. The Plans provide a comprehensive and co-ordinated strategy to determine appropriate stormwater management measures, and at the same time, provide opportunities for protecting and enhancing the Natural Heritage System, and for open space planning as a part of the stormwater management process.*

(Section 17.6 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

- i) The City will require stormwater quality and quantity management control for all proposed developments in accordance with Provincial policies and guidelines, and in accordance with the policies of this Plan.
- ii) The City shall encourage minimizing the number of stormwater management facilities. Where feasible, the City will encourage the use of regional stormwater management facilities.
- iii) ~~Where feasible, s~~Stormwater management facilities shall be designed to avoid adverse impacts on ~~provide a net benefit to~~ the Natural Heritage System.
- iv) Stormwater management facilities may be permitted within or adjacent to Natural Heritage Areas designated as Open Space or in buffer areas if an ~~Area Study or~~ Environmental Impact Study demonstrates that there will be no negative impacts on the natural features or ecological functions for which the area is identified and that the facility will maintain ~~provide a net environmental benefit and will enhance~~ the natural features and ecological functions of the Natural Heritage System. Such facilities will also be subject to the policies in Section 15.3.3. and approval of by the appropriate agencies.
- v) Subject to an appropriate study, ~~S~~stormwater management facilities of a non-structural nature that provide tertiary treatment may be permitted in floodplain areas where it can be demonstrated that the facility will ~~provide a net environmental benefit~~ have no negative impacts on natural features and ecological functions.

The 2005 Provincial Policy Statement potentially allows for the creation and maintenance of infrastructure within and adjacent to Natural Heritage areas. The approach for consideration of stormwater management facilities, should emphasize the avoidance of adverse impacts, as demonstrated through the preparation of an Environmental Impact Study

The proposed modification and references to “no negative impacts” will provide for greater consistency with the wording in Section 2.1.4 of the 2005 Provincial Policy Statement

**17.6.1.**

**General Provisions**

Such facilities will also be subject to ~~the approval of~~ by the appropriate agencies.

(Subsection 17.6.1. added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**17.6.2.  
Stormwater  
Management  
Plans**

It is the intent of Council to require effective stormwater management to control flooding, erosion and sedimentation from development and to enhance the water quality and the environmental, aesthetic and recreational potential of the City's watercourses.

(Subsection 17.6.2 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**Area Studies**

- i) Area Studies shall include the preparation of a Stormwater Management Plan, addressing stormwater management issues, best management practices and the applicable Subwatershed Planning Study and including, but not limited to:

(Clause i) replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

- (a) provisions to prevent loss of life and reduce property damage;
  - (b) provisions to mitigate the impact of proposed development on the environment and on existing overland stormwater flows;
  - (c) provisions to control erosion, sedimentation, and pollution likely to result from development projects;
  - (d) provisions to reduce on-site and downstream surface ponding and flooding;
  - (e) provisions to protect and enhance water quality and baseflow in receiving watercourses;
- (Subclause (e) replaced by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)
- (f) provisions to protect groundwater recharge/discharge areas;
- (Subclause (f) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)
- (g) provisions to reduce the total cost of a stormwater drainage system and its related works;
  - (h) provisions to consider the integration of stormwater retention, detention or other management facilities into public park and open space areas, provided the overall function of the park or open space area is protected; and

- (i) any other criteria or guidelines which, in the opinion of Council, may be required to regulate development in order to achieve effective stormwater management in the subcatchment or tributary.

(Subclause (i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

- ii) Stormwater Management Plans shall be prepared on the basis of tributary areas identified in the Subwatershed Planning Studies or as determined by the City in consultation with the appropriate agencies.

(Clause ii) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

**Subdivision  
Applications**

- iii) Applicants for approval of draft plans of subdivision within areas for which an Area Study has been prepared, shall demonstrate how the proposed development would provide for the management of stormwater in accordance with the Stormwater Management Plan.

(Clause iii) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)

<p>Zoning, Building Permit and Site Plan Applications</p>	<p>iv) Applicants for zoning, building permit and/or site plan approval within areas for which an Area Study has been prepared, may be required to prepare and submit a stormwater management plan which demonstrates how the proposed development would provide for the management of stormwater in accordance with the Stormwater Management Plan.</p>	
<p>Area Rating Surcharge</p>	<p>(Clause iv) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>v) For areas where the City has determined that it is not practical to initially implement stormwater management measures due to constraints such as small lot sizes, small-scale developments, site conditions or fragmented land ownership, the City may undertake the development of stormwater management plans and/or facilitate establishment of an area rating charge to recover the costs of such works.</p> <p>(Clause v) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	
<p><b>17.6.3. Stormwater Management Report</b></p>	<p>For areas where no Stormwater Management Plan has been prepared but where the City has determined that stormwater management measures may be required, an applicant for a plan of subdivision or site plan approval, may be required to submit a stormwater management report containing any or all of the following information in support of such application:</p>	
<p>Subwatershed Planning Studies</p>	<p>(Subsection 17.6.3 amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>i) an assessment of how the proposed development will address the stormwater management issues, best management practices, development criteria and stormwater targets identified in the applicable Subwatershed Planning Study;</p> <p>(Clause i) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	
<p>Storm Drainage Erosion Control</p>	<p>ii) a scheme for the provision of stormwater drainage facilities to accommodate the proposed development;</p> <p>iii) a plan for the control of erosion and sedimentation to minimize the impact of the proposed development on any watercourse;</p>	
<p>Water Pollution</p>	<p>iv) the applicant's proposals for mitigating any water pollution likely to result from the proposed development; and</p>	
<p>Grading</p>	<p>v) a grading plan for the proposed development.</p>	
<p><b>17.6.4. Stormwater Management Technical Guidelines</b></p>	<p>The City may adopt technical guidelines to assist in the development of stormwater management plans or reports and the design of effective stormwater control measures. Such guideline documents may include, among other things:</p>	
<p>Stormwater Runoff Methods</p>	<p>i) methods and standards for designing, accommodating and controlling stormwater runoff through the minor drainage systems, consisting of building drainage, street gutters and storm sewers, and major drainage systems, consisting of streams and valleys, drainage channels, streets, and man-made ponds;</p>	

<p>Site Plans</p> <p>Anticipated Flow</p> <p><b>17.6.5. Stormwater Facility Design Standards</b></p> <p><b>17.6.6. Control of Erosion and Sedimentation</b></p> <p>Surface Protection</p> <p>Sedimentation</p>	<p>(Clause i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>ii) information and details to be shown on site plans, including land uses and layouts, elevations and grades, system and facilities design, and overland flow routes; and</p> <p>iii) tables to be used to illustrate anticipated water flows, pollutant levels, hydrographs and discharge rates for stormwater management facilities.</p> <p>The Site Plan Control By-law may contain standards and requirements for the provision of stormwater management measures and facilities as part of the site plan approval process.</p> <p>Council may adopt erosion and sediment control guidelines to minimize the amount of erosion during the construction phase of new development, and to prevent or minimize the deposition of eroded material in adjacent or downstream watercourses and/or drainage networks. These guidelines will be designed to:</p> <p>i) control erosion by protecting exposed surfaces through the use of such measures as seeding, mulching, sodding, rip-rap, aggregate cover, nets and matting, and other means; and</p> <p>ii) control runoff so as to minimize sedimentation through the use of vegetative buffer strips, filters, dams and sediment traps.</p>	
<p><b>19.</b></p> <p><b>19.2.</b></p> <p><b>19.2.1. Area Studies</b></p> <p>Purpose</p>	<p><b><u>IMPLEMENTATION</u></b></p> <p><b><u>AREA STUDIES AND GUIDELINE DOCUMENTS</u></b></p> <p><i>Area Studies (also known as community plans and area plans) and guideline documents may be used to assist in the implementation and refinement of the Plan. Area Studies allow for the analysis and conceptual planning of a specific area of the City at a level of detail which may not be appropriate for the Official Plan. Guideline documents elaborate upon assist in the implementation of policies by providing more detailed criteria that have general application to the control of development. Area studies and guideline documents do not form part of the Official Plan and are not to be regarded as having Official Plan status.</i></p> <p>Council may direct that an area study be prepared if the land use characteristics of a specific area, and its potential for development or change, warrant a review, refinement, or elaboration of Official Plan policies.</p> <p>i) An area study/<u>community plan/area plan</u> may be used to facilitate the implementation of Official Plan policies in a specific area by providing more detailed guidance for the evaluation of development proposals and for the preparation of zoning by-laws. They may also be used to provide the basis for amendments to the Plan that will specifically address land use problems in a particular area. Examples of areas that may warrant an area study include: (Clause i) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p>	<p>The modifications in Section 19.2 and 19.2.1. were recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>

<p>Content</p>	<ul style="list-style-type: none"> <li>(a) older industrial areas that are subject to pressures for expansion or transition to other types of land use;</li> <li>(b) commercial districts that are subject to land use transition and compatibility issues;</li> <li>(c) areas that require a co-ordinated approach to subdivision development;</li> <li>(d) residential neighbourhoods that are experiencing pressure for conversion, infill development, or redevelopment to a higher intensity of use;</li> <li>(e) residential areas where detailed planning is required to maintain residential stability and character, and to improve neighbourhood amenities;</li> <li>(f) areas that may be subject to substantial change as the result of a proposed major development;</li> <li>(g) areas that have been designated as Heritage Conservation Districts; and</li> <li>(h) areas, in whole or in part, that have been designated "Area Studies" on Schedule "D".</li> </ul> <p>(Sub-clause (h) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <ul style="list-style-type: none"> <li>ii) An area study will normally consist of policy objectives, statements, and/or maps that provide a more detailed approach to land use planning matters than is contained in the Official Plan. Among the matters that may be addressed are land use mix and compatibility, road alignments, municipal services, residential densities and affordability, road access points, location of community facilities, buffering concerns, location of pedestrian and bicycle routes, building conditions, the natural heritage system and the suitability of existing development requirements.</li> </ul> <p>The purpose of including an environmental component into the Area Study is to complete the necessary field studies and technical analysis to define the environmental conditions at a tributary level, identify significant natural areas and provide for the implementation of the Natural Heritage System Policies of this Plan. The environmental component should have regard for the applicable Subwatershed Plan and:</p> <ul style="list-style-type: none"> <li>(a) undertake field studies and technical analysis as determined by the City and authorized agencies;</li> <li>(b) detail best management practices for stormwater management to be undertaken at the tributary level;</li> </ul>	
----------------	--	--

<p>Status</p> <p>Public Participation and Review</p>	<p>(c) identify opportunities for rehabilitating and enhancing the Natural Heritage System; and</p> <p>(d) where appropriate, address the requirements for Environmental Impact Studies as described in Section 15.5. (Clause ii) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <p>iii) An area study will be adopted by resolution of Council and will be used as a guideline for the review of development applications and for the planning of public facilities and services in the subject area. It may also provide the basis for an amendment to the Official Plan and/or Zoning By-law if the recommendations of the study suggest that a change or refinement in policies, land use designations, or zoning regulations, is appropriate.</p> <p>iv) The preparation of an area study will include provisions to encourage participation by area residents, property owners, and other interested groups. Before adopting an area study, Council will hold at least one public meeting to provide for the input of area residents, property owners, and interested groups.</p>	
<p><b>19.2.2. Guideline Documents</b></p>	<p>Council may adopt guideline documents to provide detailed direction for the implementation of Official Plan policies. <u>Guideline documents proposed pursuant to these policies and adopted by Council, shall be added to the list in Section 19.2.2.ii). Provincial guideline documents are also used in the implementation of Official Plan policies.</u></p>	
<p>Purpose</p>	<p>i) Guideline documents will be initiated by Council and may contain policies, standards, and performance criteria that are either too detailed, or require more flexibility, in interpretation or implementation, than the Official Plan would allow. Depending on the nature of the guideline document, they will provide specific direction for the preparation and review of development proposals, the identification of conditions to development approval, or the planning of improvements to public services and facilities.</p>	<p>The modifications in Section 19.2.2., which clarify wording and add reference to several additional Guideline Documents, were recommended in the June 19, 2006 report to Planning Committee, to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304</p>
<p>Content</p>	<p>ii) Guideline documents <del>shall</del> <del>may</del> be adopted by Council to assist with the implementation of any aspect of the Official Plan. In particular, guideline documents shall be adopted to assist with the implementation of any aspect of the Official Plan for the following, but are not limited to the following: (Clause ii) amended by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</p> <ul style="list-style-type: none"> <li>(a) Site Plan Control Guidelines;</li> <li>(b) Subdivision Design Guidelines;</li> <li>(c) Road Access Guidelines;</li> <li>(d) Noise and Vibration Attenuation Guidelines;</li> <li>(e) Master Drainage Plans;</li> <li>(f) Stormwater Management Guidelines;</li> <li>(g) Erosion Control Guidelines;</li> </ul>	<p>Community Energy Plans are also identified as a potential Guideline Document, based on several new policies in the PPS that support energy conservation measures</p>

	<ul style="list-style-type: none"> <li>(h) Conservation Master Plans for Environmentally Significant Areas;</li> <li>(i) Urban Design Guidelines;</li> <li>(j) Descriptions of properties on the Heritage Resources Inventory;</li> <li>(k) Descriptions of Potential Heritage Conservation Districts;</li> <li>(l) Subwatershed Planning Studies;</li> <li style="padding-left: 20px;">(Sub-clause (l) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</li> <li>(m) <u>Ecological Buffers and Development Setback Guidelines</u>;</li> <li style="padding-left: 20px;">(Sub-clause (m) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</li> <li>(n) Environmental Management Guidelines;</li> <li style="padding-left: 20px;">(Sub-clause (n) added by OPA No. 88 - OMB Order No. 2314 - approved 99/12/23)</li> <li>(o) Guidelines for the identification of Cultural Heritage Landscapes; and</li> <li>(p) Cultural Heritage Landscape Guidelines;</li> <li style="padding-left: 20px;">(OPA No. 269 - approved 03/02/17)</li> <li>(q) Bicycle Master Plan;</li> <li style="padding-left: 20px;">(OPA No.368 - approved 05/10/3)</li> <li>(r) <u>Environmental Impact Study Guidelines</u>;</li> <li>(s) <u>Environmentally Significant Area Identification and Boundary Delineation Guidelines</u>;</li> <li>(t) <u>Significant Woodland Evaluation Guidelines</u>;</li> <li>(u) <u>Plant Selection Guidelines for Environmentally Significant Areas</u>; and</li> <li>(v) <u>Community Energy Plan</u></li> </ul>	
Status	<ul style="list-style-type: none"> <li>iii) Guideline documents will be adopted by resolution of Council. Development proposals shall be reviewed to determine their conformity with the provisions of any applicable guideline document and conditions may be imposed upon the approval of the development. Council may allow a reduction, change, or waiver of the provisions of a guideline document if it is of the opinion that such action is warranted and that the general intent of the Official Plan will be maintained.</li> </ul>	
Public Participation and Review	<ul style="list-style-type: none"> <li>iv) The preparation of a guideline document will include provisions to encourage input from agencies, associations, and individuals that have an interest in the subject matter. Before adopting a guideline document, Council will hold a public meeting to provide for input from interested parties.</li> </ul>	

<b>PROPOSED ENVIRONMENTAL MAP FORMAT MODIFICATIONS</b>		<b>Rationale for Proposed Modification</b>
Schedule "B" Map Format	Map Format Modification – Replace existing Map Schedule "B" – Flood Plain and Environmental Features, with two separate Map Schedules as follows: Schedule "B1" – Natural Heritage Features Schedule "B2" – Natural Resources and Natural Hazards	Following the 2001 Official Plan review process, it was determined that the large amount of information represented on Schedule "B" was making it difficult to read and understand; and that important environmental features could be more clearly identified by showing it on two separate map schedules.
Schedule "B1" Legend	On the Legend of Map Schedule "B1", adding a "Significant Woodland" category under the Natural Heritage System	This modification was recommended in the June 19, 2006 report to Planning Committee, to clarify the policies on Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304.
Schedule "B1" Legend	On the Legend of Map Schedule "B1", adding an "Unevaluated Vegetation Patches" category under the Natural Heritage System (this replaces the former delineation "Vegetation Patches Outside ESA's and Wetlands")	This new category has been added to the Natural Heritage System to reflect the fact that not all vegetation patches have been evaluated. This change relates to modifications being proposed to OP Policy 15.4.12.
Schedule "B1" Legend	On the Legend of Map Schedule "B1", adding an "Unevaluated Wetlands" category under the Natural Heritage System	This new category has been added to the Natural Heritage System to reflect the fact that not all wetlands have been evaluated. This change relates to modifications being proposed to OP Policy 15.4.2.
Schedule "B1" Legend	On the Legend of Map Schedule "B1", replacing "River, Stream and Ravine Corridors Outside Flood Plain Regulated Corridors" category under the Natural Heritage System with two new categories: "Significant River, Stream and Ravine Corridors"; and, "Regulated Streams or Ravines"	The policies relating to the "River Stream and Ravine Corridors" are being revised to more clearly differentiate between those corridors that are identified as being "Significant" and other corridors that may not warrant the same level of protection (relates to the modification of policy 15.4.6.)
Schedule "B1" Legend	On the Legend of Map Schedule "B1", replacing the terminology "Wetlands Class 1 – 3" and "Wetlands Class 4 – 7" with "Provincially Significant Wetlands" and "Locally Significant Wetlands"	The revised description of how wetlands are identified and evaluated is a more up-to-date and accurate reflection of Provincial policy (relates to the modification of policy 15.4.2.)
Schedule "B1" Legend	On the Legend of Map Schedule "B1", adding a "Maximum Hazard Line" delineation under the Natural Hazards heading. This replaces the previous "Fill Line" delineation, which no longer applies within the City of London and is being removed from the map legend	The Maximum Hazard Line is delineated on Schedule "B1" for reference purposes, based on information provided by the Conservation Authority having jurisdiction. It represents the combined limit of the flooding hazard and the erosion hazard.
Schedule "B1" ESA locations	Apply labeling on Schedule "B1" to identify the names of all ESA's	This will make it easier for users to determine the geographic location of ESA's, and relate mapping information to the descriptions in the OP text.
Schedule "B1" and "B2" Legend	Identifying subwatershed area boundaries on Schedules "B1" and "B2" for reference purposes	This identification of subwatershed area boundaries on the Environmental Map Schedules will make it easier to relate geographic areas of the City with recommendations from the Subwatershed Plans. This information will assist in the review of applications and preparation of Environmental Impact Studies.
Schedule "B2" Legend	On the Legend of Map Schedule "B2", adding a "Maximum Hazard Area" delineation under the Natural Hazards heading. This replaces the previous "Fill Line" delineation, which no longer applies within the City of London and is being removed from the map legend	The Maximum Hazard Area is identified on Schedule "B2" for reference purposes, based on information provided by the Conservation Authority having jurisdiction. It represents the combined limit of the flooding hazard and the erosion hazard.

<b>PROPOSED SITE SPECIFIC ENVIRONMENTAL MAPPING MODIFICATIONS</b>		<b>Rationale for Proposed Modification</b>
Schedule "B2" (various locations)	Several "known or suspected former petroleum well locations" have been added to Schedule "B2"	The additional locations reflect more detailed records that have been made available since OPA 88 was adopted in 1996. While most of the identified wells have previously been plugged and abandoned, their locations should be identified to ensure that potential hazards are suitably mitigated prior to permitting new development, in accordance with S. 3.2.1 of the PPS.
Schedule "B1" and Schedule "A" (various locations)	On Map Schedule "B1", apply a "Significant River, Stream and Ravine Corridor" delineation along the Thames River and the main branches of Stoney Creek, Medway Creek, Dingman Creek, Pottersburg Creek, Wabuno Creek, Mud Creek, Stanton Drain and Kelly Drain as well as several tributaries to these watercourses. On Map Schedule "A" the designation of these corridors would change from Environmental Review to Open Space	The Council-adopted Subwatershed Studies provide supporting documentation on the locations of "Significant River, Stream and Ravine Corridors" that should be clearly reflected on the Official Plan map schedules. The current terminology on Schedule "B" – "River, Stream and Ravine Corridors Outside Flood Plain Regulated Corridors" is being revised to "Significant River, Stream and Ravine Corridors" which more accurately corresponds with the
Schedule "B1" (various locations)	Identify several new locations for "Potential Naturalization Areas" and "Potential Upland Corridors" on Map Schedule "B1"	The identification of potential naturalization and corridor locations is based on recommendations from the Subwatershed Studies, which were prepared as part of the Vision London process, and endorsed by Council as a Guideline Documents. The establishment of these potential features would typically be considered through the preparation of an Area Plans and/or EIS
Schedules "A" and "B1" (various locations)	Recognize woodland patches in various locations with an Open Space designation on Schedule "A" and a "Woodland" delineation on Schedule "B1", pursuant to policy 15.4.5. of the Plan (note most of the woodland patches are already designated Open Space and/or City-owned).	Woodlands that are not determined to be ecologically significant but are to be retained for public open space or park purposes according to policy 15.4.5., or woodlands to be retained at the landowners request as a private woodland, will be designated as Open Space on Schedule "A" and delineated as "Woodlands" on Schedule "B1"
Schedule "B1" (various locations)	Arva Moraine Wetland Complex – Change the delineation from Locally Significant Wetland to Provincially Significant Wetland on Schedule "B1" (excluding developments that have been approved through an application under the Planning Act)	Wetland mapping from the Ministry of Natural Resources has confirmed the Provincially Significant status of the Arva Moraine Wetland Complex, which includes several wetland pockets in the north end of the City. This change will implement the PPS (Note: the wetlands in question are already designated OS on and no further changes are required on Schedule "A")
Schedules "A" and "B1" (various locations)	Provincially Significant Wetlands – Apply a Provincially Significant Wetland delineation on Schedule "B1" and Open Space designation on Schedule "A" (excluding developments that have been approved through an application under the Planning Act)	Wetland mapping from the Ministry of Natural Resources has confirmed changes in the size and configuration of several PSW's, which should be reflected on Map Schedules "A" and "B1". Some of these wetland areas are already designated Open Space on Schedule "A"
Map Legend & Schedule "B2"	Identify a symbol on the Map Legend and delineate the Coves Special Policy Area	Special Policy Area status has been approved by the Province for the Coves basin pursuant to provisions in the Provincial Policy Statement and the Official Plan. This status should be confirmed and reflected on Map Schedule "B2"

1	Recognize the status of vegetation patch 8008 (east of Highbury Ave., north of the Thames River) as “Significant Woodlands” and “Unevaluated Wetland” on Schedule “B1”.	This vegetation patch is already designated Open Space on Schedule “A” of the OP and was evaluated as part of the Kilally Community Plan (O-6527). The “Significant Woodland” and “Unevaluated Wetland” status can now be confirmed with these two delineations on Schedule “B1”.
2	Change delineation of the woodland patch at 530 Sunningdale Rd. East (Uplands) from “Woodland” (on Schedule “B”) to “Significant Woodland” on Schedule “B1”	This change will reflect the evaluation undertaken as part of application 39T-05510, which has been draft approved. This change is consistent with the policies that are proposed for Significant Woodlands and Woodlands, in response to OMB Decision / Order No. 2304. The woodland patch is already designated Open Space on Schedule “A” and zoned OS5.
3	Apply an Environmental Review designation on Schedule “A”, and “Vegetation Patches” / “Unevaluated Wetland” delineations on Schedule “B1” to lands located north of Sunningdale Road, east and west of Hyde Park Road (abutting the northern boundary of the City)	These lands were not within the study area of Subwatershed Plans prepared for the Vision 96 process. The patches have been subsequently identified through Ecological Land Classification (ELC) mapping and zoned Environmental Review. The natural features should be recognized in the OP until such time as further evaluation has been conducted to determine significance (note: most of the lands immediately north of these patches are identified as “Significant Woodlands” in the County of Middlesex Official Plan).
4	Apply a “Significant Woodland” delineation on Schedule “B1” to two woodland patches located east of Hyde Park Road, between Fanshawe Park Road and the CPR corridor (note: these patches are already designated Open Space on Schedule “A” of the OP) The third woodland patch (Van Horik property) was found not to be a “Significant Woodland” and designated “Urban Reserve” by the OMB	The two patches in question were the subject of an OMB hearing on the policies relating to “Significant Woodlands” and “Woodlands”. As directed by the OMB (Decision / Order No. 2304), modifications to Section 19.2 and 19.2.1. were recommended in the June 19, 2006 report to Planning Committee to clarify the policies on Significant Woodlands and Woodlands. These refinements provide a policy context that supports delineation of the two “Significant Woodlands”. The third woodland patch was found not to be a “Significant Woodland” and redesignated by the OMB from “Open Space” to “Urban Reserve”. The Vegetation Patch delineation should be removed from Schedule “B” to reflect the fact that it has been designated for development
5	Clara Brenton Woods – change the delineation from “Woodland” to “Significant Woodland” and identify a small “Locally Significant Wetland” patch (north of the CNR) on Schedule “B1”	This woodland is owned by the City, designated Open Space on Schedule “A”, and has been confirmed as a “Significant Woodland” through recent evaluations. The woodland area is already zoned OS5.
6	Beaverbrook Woods (north of Beaverbrook, west of Capulet) – change the designation from Low Density Residential and Multi-Family, Medium Density Residential to Open Space on Schedule “A”; and change the delineation from “Vegetation Patch” to “Woodland” on Schedule “B1”	This area was acquired by the City as part of the Beaverbrook Subdivision (39T-99512) and should be recognized as “Woodland” in the Official Plan.
7	Hickory Woods Park – (south of Oxford, east of Westdel Bourne) – change the designation from “Woodland” to “Significant Woodland” on Schedule “B1”	This woodland patch was confirmed as significant and acquired by the City in 2005 as part of Subdivision Application 39T-02506 (Sydenham/Sifton). The patch is already designated “Open Space” and should now be recognized as a “Significant Woodland” on Schedule “B1”

8	Apply an “Environmental Review” designation and “Unevaluated Vegetation Patch” delineation to the woodland patch located at 1826 Oxford St. West	The northern part of this property was the subject of an application for plan of subdivision, which was draft approved in 2006 (39T-04507). The Planning evaluation and Issues Summary Report for this application recommended that additional inventory & evaluation be undertaken to determine whether the woodland is significant or potentially developable. The recommended designation and delineation will ensure that the property is suitably protected until a final determination is made.
9	North Talbot – remove a portion of “Vegetation Patch”; and, identify a “Significant Woodland” delineation on Schedule “B1”	The portion of vegetation patch being removed has been evaluated and approved/zoned for development. A “Significant Woodland” delineation should be applied to the deciduous swamp community in the interior of the subdivision, which was previously designated Open Space and Zoned OS5.
10	Remove a portion of the “Vegetation Patch” delineation on Schedule “B1” in the area north of Dingman Drive, east of Old Victoria Road	There is no vegetation in the subject area and the “Vegetation Patch” delineation was mistakenly applied in OPA 88 (note: most of this area will continue to be designated ER or OS on Schedule “A” as it is within the Significant Stream Corridor and adjacent hazard area).
11	Westminster Ponds – Change name of “Walkers Pond” to “Saunders Pond” on all Official Plan Map Schedules	The pond in question, which is part of the Westminster Ponds - Pond Mills Wetland Complex, has been known by several names in the past including “Walkers Pond”, but is now referred to as “Saunders Pond”, in honor of the William Saunders homestead. The OP maps should be corrected to reflect this.