



**DISCUSSION PAPER #11**  
**NATURAL HERITAGE & HAZARDS**

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*Update December 2019*



Presented to Town Council on  
January 14, 2020

# NATURAL HERITAGE

## Introduction

The Town of St. Marys Official Plan was adopted by Council on September 22, 1987. The Official Plan was approved in part by the Minister of Municipal Affairs and Housing on February 2, 1993 with 15 modifications and two deferrals. Final approval from Minister of Municipal Affairs and Housing was received on April 30, 1999. Following a five-year review of the document, Council approved the current consolidated copy of the Official Plan on October 1, 2007.

This is the eleventh of a series of Discussion Papers prepared to assist in the 5-year review of the Town of St. Marys Official Plan as per the Planning Act Section 26(1). The purpose of a Section 26 review is to ensure that the Official Plan conforms with provincial plans (or does not conflict with them), has regard to matters of provincial interest and is consistent with policy statements, such as the Provincial Policy Statement which was updated in 2014. In addition to meeting statutory requirements under the Planning Act, this review is also intended to ensure that the policies in the Official Plan are in keeping with the goals and objectives of the community and provides the opportunity to identify opportunities and issues that can be addressed through the Official Plan.

This Discussion Paper will identify areas and topics as they relate to the natural heritage and hazards in the Town. This Discussion Paper is intended to bring information to Planning Committee for review and consideration when making recommendations to Town Council.

Part V - Policies of the Provincial Policy Statement (PPS) contains a number of policies geared to direct and manage growth of urban areas such as the Town (those Sections in the grey highlighting are from the 2014 Provincial Policy Statement).

## Planning Background

The most recent version of the Provincial Policy Statement (PPS) came into effect on April 30, 2014. Section V - Policies of this PPS contains a number of policies that direct and manage growth of urban areas such as St. Marys. The policies of Section 2.0 (wise use and management of resources) are particularly relevant in guiding and managing change to promote efficient land use and development patterns.

The Upper Thames River Conservation Authority completed the Perth Natural Heritage Systems Study (NHSS) which provides a landscape level assessment of natural heritage features and functions in Perth County including St. Marys and Stratford, and is intended to establish a local approach for identifying the terrestrial natural heritage system (fish habitat and other aquatic habitat features are not identified in the NHSS) as required by the PPS. The NHSS incorporates the most current information available from the Ministry of Natural Resources and Forestry (MNR) to identify the natural heritage features and areas that they are responsible for identifying as per the PPS definition of significant (e.g., provincially significant wetlands and Areas of Natural and Scientific Interest). The NHSS also includes the identification of significant woodlands and valleylands, in accordance with the Natural Heritage Reference Manual (MNR, 2010), and sets out a recommended approach for identifying significant wildlife habitat, to address the PPS requirement for planning authorities to identify such natural heritage features and areas as per the PPS. The NHSS also identified natural heritage features and areas that are not considered significant as defined by the PPS and provides mapping for all municipalities including St. Marys.

As noted in the PNHSS, fish habitat is identified by the Department of Fisheries and Oceans, habitat of endangered and threatened species are not identified because species at risk are subject to specific legislation and no uniformly mapped across the landscape and significant wildlife habitat can only be mapped at the site level.

### **PPS Policies**

#### **2.0 Wise Use and Management of Resources**

Ontario's long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits.

#### **2.1 Natural Heritage**

2.1.1 Natural features and areas shall be protected for the long term.

The PPS defines Natural heritage features and areas to mean features and areas, including significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest (ANSIs), which are important for their environmental and social values as a legacy of the natural landscapes of an area.

There are no known significant wetlands, valley lands, wildlife habitats, areas of natural or scientific interest, habitat of endangered and threatened species in the Town, however policies are required in the Official Plan to provide direction with respect to the identification and protection of such areas and features.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term *ecological function* and biodiversity of *natural heritage systems*, should be maintained, restored or, where possible, improved, recognizing linkages between and among *natural heritage features and areas, surface water features and ground water features*.

As St Marys is located in Ecoregions 6E and 7E1 for the purposes of Section 2.1 of the PPS, the natural heritage systems policies of Section 2.1.3 are applicable.

2.1.3 *Natural heritage systems* shall be identified in Ecoregions 6E & 7E1, recognizing that *natural heritage systems* will vary in size and form in *settlement areas, rural areas, and prime agricultural areas*.

Natural Heritage Systems include:

- (a) the core areas which are capable of providing and sustaining ecological functions and may consist of one or more features. Some of the attributes of a core area may include, its size, integrity and degree of naturalness, shape, habitat and species diversity, presence of interior habitat, presence of rare habitats and species, and potential for connectivity;
- (b) linkages and corridors that may accommodate the natural movement patterns of plants and animals necessary for biodiversity conservation and the long term viability of ecological systems; and
- (c) natural heritage features and areas, including significant wetlands, significant woodlands, and significant valley lands, fish habitats, significant habitats for endangered and threatened species, significant wildlife habitats, and ANSIs.

While the natural heritage system policies apply in St. Marys, the Province also recognizes that natural heritage systems will vary in size and form in settlement areas, and that there

may be limited opportunities for linkages.

**2.1.4** *Development and site alteration shall not be permitted in:*

- a) *significant wetlands* in Ecoregions 5E, 6E and 7E1; and
- b) *significant coastal wetlands*.

### **3.1 Natural Hazards**

**3.1.1** Development shall generally be directed to areas outside of:

- b) *hazardous lands* adjacent to *river, stream and small inland lake systems* which are impacted by *flooding hazards* and/or *erosion hazards*.

**3.1.2** *Development and site alteration shall not be permitted within:*

- a) areas that would be rendered inaccessible to people and vehicles during times of *flooding hazards, erosion hazards* and/or *dynamic beach hazards*, unless it has been demonstrated that the site has safe access appropriate for the nature of the *development* and the natural hazard; and
- a *floodway* regardless of whether the area of inundation contains high points of land not subject to flooding.

**3.1.6** Where the *two zone concept* for *flood plains* is applied, *development and site alteration* may be permitted in the *flood fringe*, subject to appropriate floodproofing to the *flooding hazard* elevation or another *flooding hazard* standard approved by the Minister of Natural Resources.

**3.1.7** Further to policy 3.1.6, and except as prohibited in policies 3.1.2 and 3.1.5, *development and site alteration* may be permitted in those portions of *hazardous lands* and *hazardous sites* where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards, and where all of the following are demonstrated and achieved:

- a) *development and site alteration* is carried out in accordance with *floodproofing standards, protection works standards, and access standards*;
- b) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
- c) new hazards are not created and existing hazards are not aggravated; and
- d) no adverse environmental impacts will result.

**3.1.4** Despite policy 3.1.2, *development and site alteration* may be permitted in certain areas associated with the *flooding hazard* along *river, stream and small inland lake systems*:

a) in those exceptional situations where a *Special Policy Area* has been approved. The designation of a *Special Policy Area*, and any change or modification to the official plan policies, land use designations or boundaries applying to *Special Policy Area* lands, must be approved by the Ministers of Municipal Affairs and Housing and Natural Resources prior to the approval authority approving such changes or modifications; or

b) where the *development* is limited to uses which by their nature must locate within the *floodway*, including flood and/or erosion control works or minor additions or passive non-structural uses which do not affect flood flows.

**PPS - 1.7.1** Long-term economic prosperity should be supported by:

i) promoting energy conservation and providing opportunities for development of *renewable energy systems* and *alternative energy systems*, including district energy;

**PPS - 1.6.11.2** Planning authorities should promote *renewable energy systems* and *alternative energy systems*, where feasible, in accordance with *provincial and federal requirements*.

## Species at Risk Act (SARA)

The Species at Risk Act (SARA) is one part of a three part strategy the Government of Canada has implemented for the protection of wildlife species at risk. It was proclaimed in June 2003 and it provides legal protection of wildlife species and conservation of biological diversity.

The purpose of the Act is to prevent Canadian indigenous species, subspecies and distinct populations from becoming extirpated or extinct. It aims to provide the tools necessary for the recovery of threatened and endangered species. It also encourages management of other species to prevent them from becoming at risk. SARA is the result of the implementation of the Canadian Biodiversity Strategy.

Permits are required for persons conducting activities that may affect species listed on Schedule 1 of SARA, as extirpated, endangered or threatened. Depending on the species and its location, the permit should be directed to the appropriate authority. Applications regarding activities outside of Parks Canada protected heritage areas or of non-aquatic species, are to be completed and submitted to the appropriate Environment Canada regional office.

With regard to enforcement, Provinces and Territories are responsible for enforcing prohibitions for the conservation of species at risk under their jurisdiction. Species within protected heritage areas are protected by Parks Canada and the Department of Fisheries and Oceans protect aquatic species.

## Endangered Species Act

The Endangered Species Act (ESA) was enacted to protect Ontario wildlife species at risk for future generations. The purpose of the Act is to:

1. Identify species at risk based on the best available scientific information, including information obtained from community knowledge and aboriginal traditional knowledge;
2. To protect species that are at risk, including their habitats, ;
3. And to promote stewardship activities to assist in the protection and recovery of species that are at risk.

The Minister of the Natural Resources and Forestry has the ability to issue permits or authorizations for activities which would otherwise be prohibited that involve species listed on the Species at Risk in Ontario List as extirpated, endangered or threatened species. Different types of authorizations include agreements, regulatory exemptions and permits. There are 5 types of permits issued under the Endangered Species Act: health and safety, protection or recovery, social or economic benefit to Ontario, Aboriginal, and overall benefit.

The ESA is enforced by conservation officers, park wardens and other persons appointed or designated by the Minister as enforcement officers.

## Conservation Authorities Act

Under the Conservation Authorities Act, conservation authorities regulate development and other activities through a permitting process for purposes of natural hazard management and prevention. A permit from the local conservation authority is required for development in areas related to water-based natural hazards, such as floodplains or shorelines and for any activity that could interfere with or alter a watercourse or wetland.

Throughout the Town there are lands that are subject to flooding and/or erosion. These lands are associated primarily with the flood plain and erosion prone areas of the North Thames River, and Trout Creek and their associated tributaries. These watercourses, and their adjacent valley lands fall within the jurisdiction of the Upper Thames River Conservation Authority (UTRCA).

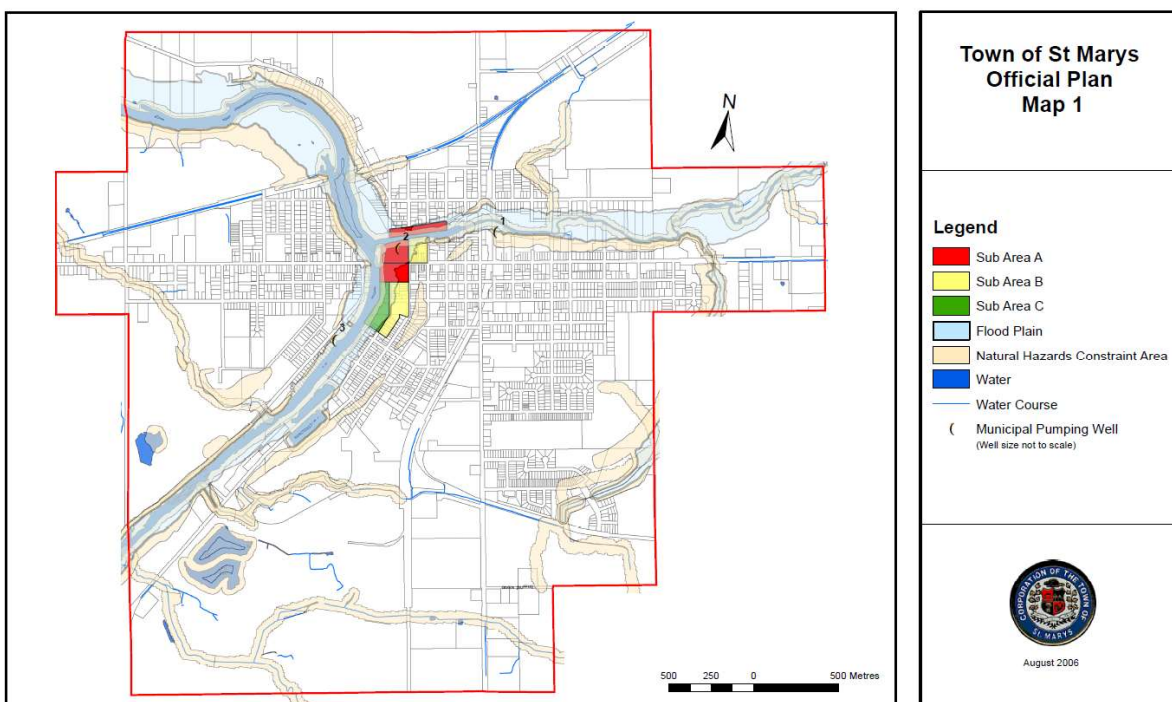
In several of these flood prone areas, the Conservation Authority has prepared detailed flood line mapping. While the specifics of the various studies may differ, they are common in that they identify flood line elevations for the 1:100 year storm and the Regulatory Flood Standard. The Regulatory Flood Standard for the Upper Thames River Conservation Authority is the Regulatory Storm (1937 Observed Flood) which represents a 1:250 year storm event.

In areas where flooding has been experienced and where detailed regulatory flood line information is available, it is important that the potential hazards associated with such flooding be recognized and that lands subject to the flooding be appropriately designated in

municipal planning documents. The subject "Natural Hazards" designation has been established for the purpose of addressing flooding concerns and related issues in those areas where detailed regulatory flood line information is available.

The Conservation Authority is also responsible for the ongoing identification and remediation of erosion hazards by encouraging prevention, protection and management of erosion issues.

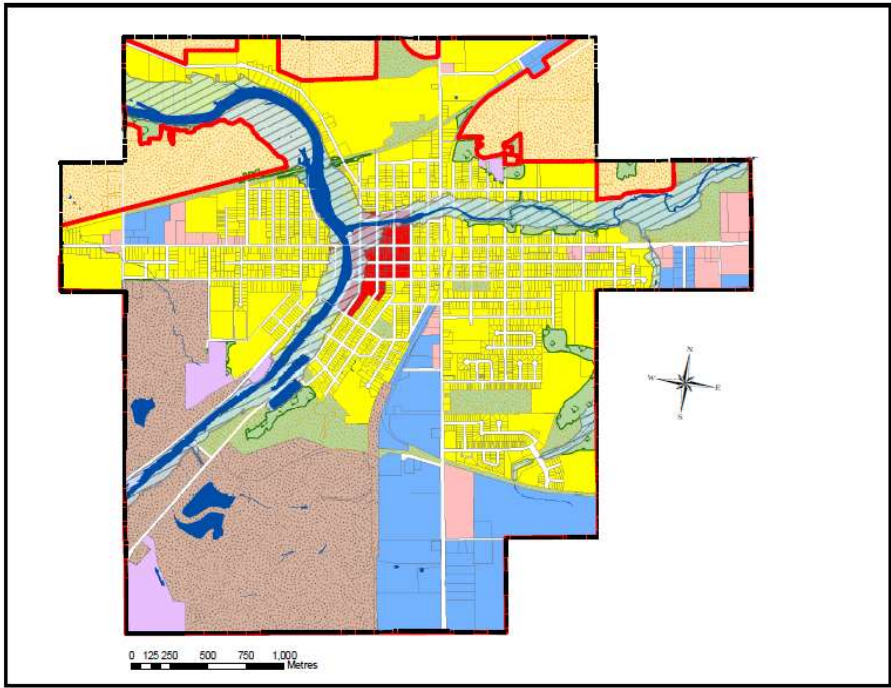
A Special Policy Area designation, affecting a defined area throughout of the Town, was approved by the Province in 1997 to permit controlled development and redevelopment at a level that is less than required to withstand the Regulatory Flood for the purpose of sustaining the economic viability of the Central Commercial area. The policies of the Special Policy Area have been incorporated into this Official Plan with the lands affected along with the Flood Plain, and the Natural Hazards Constraint Areas displayed on Map 1 below.



## Land Use Designation – Natural Heritage

The Natural Heritage designation applies to a limited number of smaller areas spread throughout the Town.





**Town of St Marys  
Official Plan  
Schedule 'A'  
Land Use Plan**

**Designation**

-  Settlement Area Boundary
-  Town Boundary
-  Water
-  Residential
-  Central Commercial
-  Highway Commercial
-  General Industrial
-  Extractive Industrial
-  Environmental Constraint
-  Recreational
-  Flood Plain
-  Natural Heritage
-  Agriculture



October 2007