




**GTA
West**

GTA West Corridor
Environmental Assessment



**GTA West Corridor
Environmental Assessment
Revised Draft Overview of Environmental
Conditions and Constraints**

December 2010



PREFACE

The draft *GTA West Overview of Environmental Conditions and Constraint Working Paper (2008)* is one of several interim reports which depicts the study process culminating in the Transportation Development Strategy. The draft *GTA West Overview of Environmental Conditions and Constraint Working Paper (2008)* was made available publicly to solicit comments and receive input on the information contained herein. Workshops were also held with Conservation Halton, Toronto and Region Conservation, Credit Valley Conservation and Grand River Conservation Authorities for feedback following the July 2008 submission. A summary of input received on the draft document is provided in the tables contained in *Appendix A – Part 1, Summary of Comments* and *Appendix A – Part 2, Summary of Environmental Information Received from Conservation Authorities*.

Appendix A - Part 1 has been organized categorically to identify the author of comments, specific section of this document on which the comment is based, responses and actions planned/taken and the resultant changes to this revised draft document. Appendix A - Part 2 provides a summary of environmental information received from the conservation authorities during workshops held in May 2009. This supplemental information is cross-referenced in Part 1 of Appendix A where the information provided was used to update this report.



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1. OVERVIEW OF STUDY PROCESS

The Greater Toronto Area (GTA) West Corridor Environmental Assessment (EA) is being undertaken in accordance with the Ontario Environmental Assessment Act, the Canadian Environmental Assessment Act, and the GTA West Corridor Environmental Assessment Terms of Reference, approved March 4, 2008. The EA is being conducted in two stages. Stage 1, consists of three phases: the EA Terms of Reference (already completed); Stage 2, the Area Transportation System Planning; and Stage 3, the Preliminary Planning.

The Area Transportation System Planning contains two key steps: (1) Identify Problems and Opportunities and Screen the Modal Alternatives to the Undertaking; and (2) Assemble Combination Alternatives to the Undertaking and Assessment Process.

The process of Identifying Problems and Opportunities includes:

- An overview of transportation, land use, economic and environmental conditions;
- An assessment of future travel demands, deficiencies and area transportation system needs; and
- An identification of Area Transportation System Problems and Opportunities.

The outcome of these study tasks will be two (2) overview reports (Working Papers #1 – Overview of Transportation and Economic Conditions and #2 – Overview of Environmental Conditions and Constraints) and the Area Transportation System Problems and Opportunities Report (Working Paper #3). Public consultation will take place to provide members of the public an opportunity to review and comment on the draft reports.

This report is Working Paper #2 – Overview of Environmental Conditions and Constraints.

1.1 INTRODUCTION

Over the last several decades Central Ontario has evolved from a Toronto based employment centre to a large geographic region with many centres of economic activity, employment, and population. Travel demand is now more dispersed, with travel occurring between many employment and residential areas within and outside the GTA. Future population and employment growth in major urban centres will result in an increase in travel demand for both people and goods movement between the centres that are spread across the Greater Golden Horseshoe (GGH).

One of the Province of Ontario's (the Province) efforts to deliver a long-term sustainable plan for transportation and better transit in the GTA – Hamilton area is Metrolinx (formerly known as the Greater Toronto Transportation Authority), which has been established to create a seamless, integrated transportation network.

Additionally, the Minister of Energy and Infrastructure released the *Growth Plan for the Greater Golden Horseshoe* (the *Growth Plan*) in June 2006. The *Growth Plan* outlines a set of policies for managing growth and development and guiding planning decisions in the GGH over the next

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30-years. This plan represents a planning “vision” for the Province. *The Places to Grow Act* (2005) requires that planning decisions made by the Province, municipalities and other authorities conform to the policies contained in the *Growth Plan*.

To realize the *Growth Plan’s* policy directions, the Ontario Ministry of Transportation (MTO) has commenced the study of people and goods movement in the GTA West Corridor through the EA process. The study will identify and validate the transportation problems and opportunities within the Study Area and evaluate a variety of alternatives to address them. MTO will coordinate with Metrolinx, and other ministries and municipalities as the EA study moves forward.

The first phase of the GTA West Corridor Planning and EA Study was the preparation of an EA Terms of Reference (ToR). The *GTA West Corridor Environmental Assessment Terms of Reference* (EA ToR) outlines the framework for completing this EA study. The EA ToR document was submitted to the Ontario Ministry of the Environment (MOE) under Section 6 (2)(a) of the *Environmental Assessment Act* on July 15, 2007, and approved on March 4, 2008. The relevance of the EA ToR to this document is that it sets out the level of detail to be used in documenting existing environmental conditions in the first stage of the EA process and includes supporting documentation on environmental factors and sub-factors.

1.2 STUDY BACKGROUND

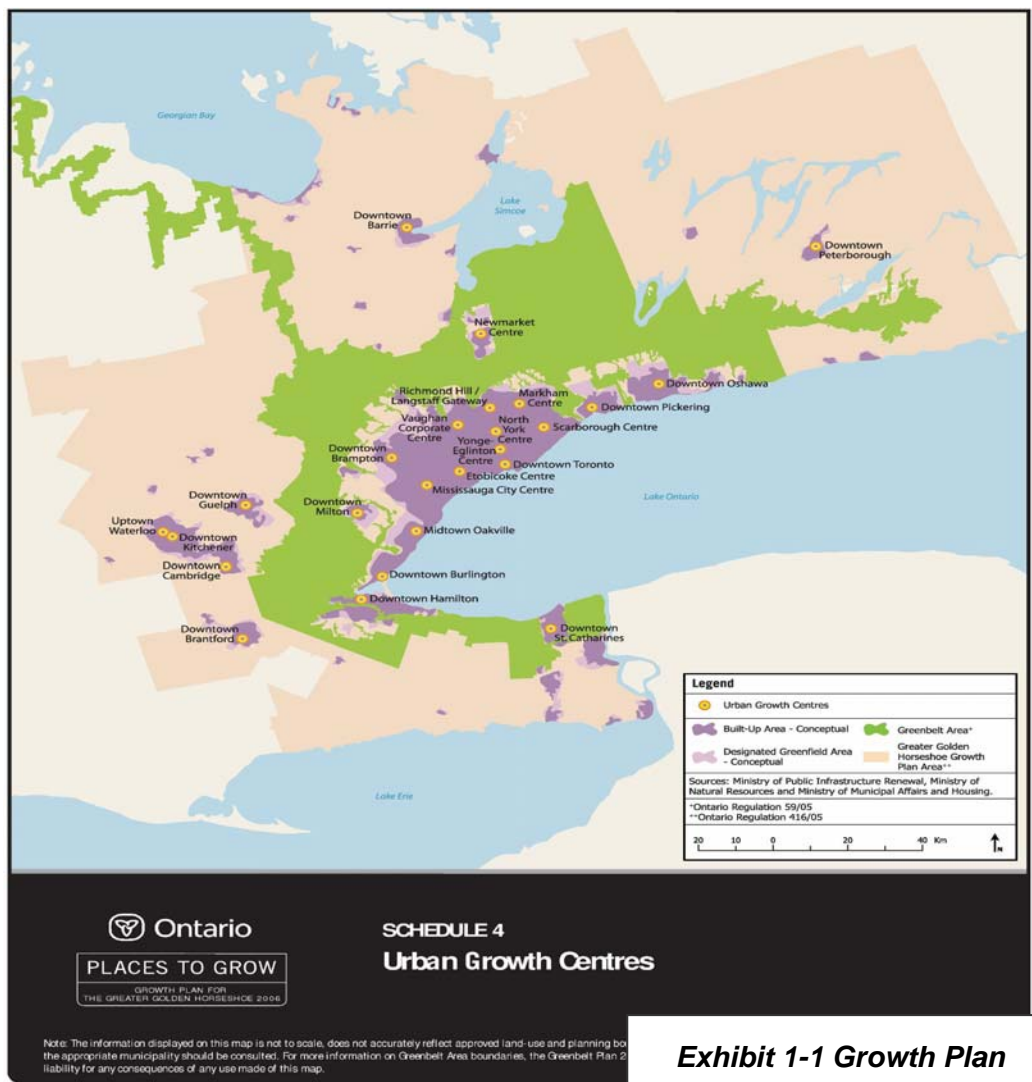
Prior to approval of the Province’s *Growth Plan for the Greater Golden Horseshoe* (February 2006), a number of studies, including MTO’s *Central Ontario Strategic Transportation Directions* (Draft 2002) indicated that MTO should examine long-term transportation needs to address a number of areas, including future growth in the GTA from Highway 400 westerly to the Guelph area. The GTA West Corridor, identified in the *Growth Plan* as a “Future Transportation Corridor”, represents a strategic link between the “Urban Growth Centres” in the west of the GTA including Downtown Milton, Downtown Brampton, Vaughan Corporate Centre and Downtown Guelph. The Urban Growth Centres identified in the *Growth Plan* are presented in **Exhibit 1-1**.

As economic activities in the GGH evolve from a Toronto based platform to an economy of multiple centres, the Guelph - Kitchener/Waterloo - Cambridge triangle is becoming an important economic area in addition to Toronto’s downtown (and the several economic centres that surround the latter).

The concentration of population and employment in the Guelph - Kitchener/Waterloo - Cambridge triangle introduces new transportation challenges in the western portion of the GGH, because it is important that these economic centres be adequately linked. This is true not only for the continuing needs of commuter travel, which provide the economic workforces, but also for the increasing needs of goods movement between these centres.

In meeting the challenges as described above, it is important that MTO takes a comprehensive and long-term approach in planning for future transportation infrastructure. The *GTA West Corridor Planning and EA Study* will reflect the government policy objectives as outlined in the *Growth Plan*. These policy objectives call for a transportation network that links Urban Growth Centres through an integrated system of transportation modes characterized by efficient public transit, a highway system for moving people and goods with improved access to inter-modal facilities, international gateways (e.g., border crossings), airports, and transit hubs.

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Source: Schedule 4 – Urban Growth Centres –Growth Plan for the Greater Golden Horseshoe (2006).

1.3 PRELIMINARY STUDY AREA AND AREA OF INFLUENCE

The Preliminary Study Area can be seen in **Exhibit 1-2**. This area includes the regions of York, Peel and Halton, County of Wellington, and the City of Guelph. These municipalities are home to over 2.3 million people. The area is characterized by a mix of urban and rural communities (as well as numerous rural residential clusters and settlements), and falls within the area designated under the *Greenbelt Act* and *Greenbelt Plan* (February 2005).

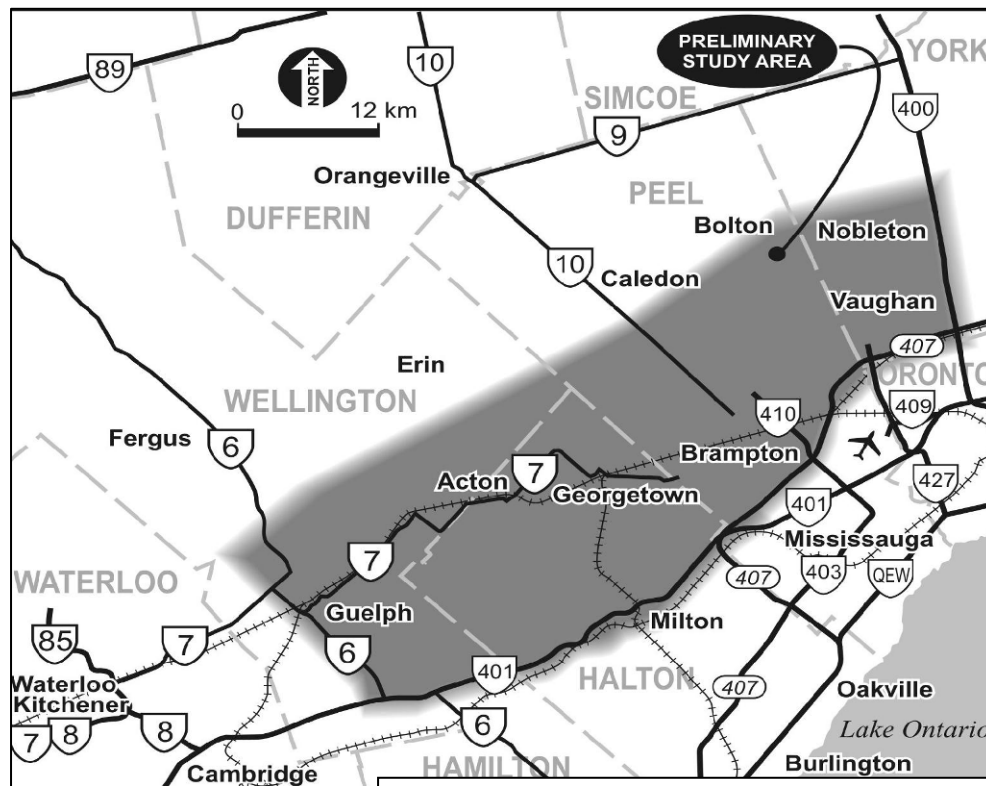


Exhibit 1-2 Preliminary Study Area for GTA -West

The Preliminary Study Area illustrates an initial area in which problems and opportunities will be studied and alternatives will be considered. This Preliminary Study Area will be refined as the process evolves and is not intended to be a fixed area at this time. As such, boundaries of the area are approximate and subject to refinement as the study progresses.

1.4 STUDY PURPOSE

In general terms, the purpose of this study is to build upon the work completed previously, as described in Section 1.1 of this report. This will include:

- Confirming and characterizing the need for additional transportation capacity between Urban Growth Centres in the GTA West Corridor Preliminary Study Area;
- Identifying the specific transportation problems and opportunities within the area depicted in **Exhibit 1-2**;
- Developing, assessing and evaluating a range of Area Transportation System Alternatives (“Alternatives to the Undertaking”) to address the identified transportation problems and opportunities within the Study Area. These alternatives (e.g., rail, road transit, and marine) represent fundamentally different ways of addressing the identified transportation problems and opportunities; and

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- Recommending a Transportation Development Strategy (TDS) based on the area Transportation System Alternatives carried forward from the evaluation.

The TDS will make recommendations with respect to transportation improvements required throughout the Study Area. All of the recommendations that fall within the jurisdiction of the MTO (e.g., provincial highway and transit ways) will be reviewed, and the MTO will decide whether to proceed to Stage 2 of the study. Stage 2 of the study would involve the development, assessment and evaluation of alternative methods of carrying out the TDS. All recommendations that fall outside of the jurisdiction of the MTO will be forwarded to the relevant agencies/authorities for their consideration, as described above.

1.5 PURPOSE OF THE OVERVIEW OF ENVIRONMENTAL CONDITIONS AND CONSTRAINTS REPORT

The main purpose of this report is to document the existing environmental conditions and constraints. The environmental investigations that take place during the study will identify significant and sensitive features of the natural, socio-economic and cultural environments so they can be avoided, or so impacts can be minimized and/or mitigated to these areas during the generation and evaluation of planning alternatives during the study. This initial compilation of existing conditions information is intended to present a summary of the environmental data that has been collected to date. Data collection is undertaken at an increasing level of detail as the study progresses.

This report has been prepared to provide a basis for analysis in two subsequent study processes:

- To assist in the generation of “Area Transportation System Planning Alternatives”. Data will be obtained from secondary sources, public and agencies input, and focus on interests specified in the *Provincial Policy Statement* (PPS); and
- To assist in the generation and the analysis of “Preliminary Planning Alternatives”. This data will build upon the secondary source information collected previously and will be enhanced with additional secondary source data supplemented with public and agency input and reconnaissance level field review, as required, focusing on the specific alternatives to be assessed.

In general, the data collected for Area Transportation System Planning Alternatives is from secondary source information. For many factors, this will be sufficient for the assessments required for this stage of the EA.

For some factor areas (e.g., natural environment and land use), additional data was collected once specific alternatives were identified. This will include field reviews and additional discussions with agencies, municipalities and other stakeholders on specific features within the corridor areas identified for further study.

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1.6 ENVIRONMENTAL FACTORS AND SUB-FACTORS

The factors and sub-factors to be considered for the evaluation of the shortlist of Area Transportation System Alternatives are presented in the EA ToR. The environmental factors and sub-factors are provided in **Exhibit 1-3**.

Public and agency input for the environmental factors and sub-factors was previously obtained during consultation on the Draft EA ToR as described in the Consultation Records on the project website at www.gta-west.com. These are the approved factors and sub-factors.

Exhibit 1-3: Preliminary Environmental Factors and Sub-Factors for Evaluating the Short-List of Area Transportation System Alternatives

FACTORS	SUB-FACTORS
1. Natural Environmental Factors	
1.1 Fish and Fish Habitat	1.1.1 Fish Habitat
	1.1.2 Fish Community
1.2 Terrestrial Ecosystems	1.2.1 Wetlands
	1.2.2 Wildlife, Habitats, and Movements
	1.2.3 Woodlands and Other Vegetated Areas
1.3 Groundwater	1.3.1 Areas of Groundwater Recharge and Discharge
	1.3.2 Groundwater Source Areas and Wellhead Protection Areas
1.4 Surface Water	1.4.1 Watershed/Subwatershed Drainage Features/Patterns
1.5 Designated Areas	1.5.1 Designated Areas are defined by resource agencies, municipalities, the government and/or the public, through legislation, policies, or approved management plans to have special or unique value.
2. Land Use/Socio-Economic Factors	
2.1 Land Use Planning Policies, Goals, Objectives	2.1.1 First Nations Land Claims
	2.1.2 Provincial/Federal land use planning policies/goals/objectives
	2.1.3 Municipal (regional and local) land use planning policies/goals/objectives (Official Plans)
2.2 Land Use/Community	2.2.1 First Nations Reserves
	2.2.2 First Nations Sacred Grounds
	2.2.3 Urban and Rural Residential
	2.2.4 Commercial/Industrial
	2.2.5 Tourist Operations
	2.2.6 Community Facilities/Institutions
2.3 Noise	2.3.1 Transportation Noise
2.4 Air	2.4.1 Local and Regional Air Quality (total contaminant and greenhouse gas emissions)
2.5 Land Use / Resources	2.5.1 First Nations Treaty Rights or Use of Land and Resources for Traditional Purposes
	2.5.2 Agriculture
	2.5.3 Recreational Lands and Natural Areas of Provincial Significance
	2.5.4 Aggregates and Mineral-Resources

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FACTORS	SUB-FACTORS
2.6 Major Utility Transmission Corridors	
2.7 Contaminated Property	
3. Cultural Environmental Factors	
3.1 Cultural Heritage – Built Heritage and Cultural Heritage Landscapes	3.1.1 Buildings or “Standing” Sites of Architectural or Heritage Significance or Ontario Heritage Properties
	3.1.2 Heritage Bridges
	3.1.3 Areas of Historic 19 th Century Settlement
	3.1.4 Cemeteries
3.2 Cultural Heritage – Archaeology	3.2.1 Pre-Historic and Historic First Nations Sites
	3.2.2 Historic Euro-Canadian Archaeological Sites

Most of these environmental factors and sub-factors are discussed in the following sections of this report. As the study proceeds from a broad overview of environmental conditions and constraints to higher levels of detail, new factors and sub-factors may be added and the remaining factors and sub-factors will be developed further as the Preliminary Planning Alternatives are developed.

1.6.1 Environmental Work Plan

The “Environmental Work Plan” comprises of further environmental investigations including secondary source reviews and limited field reconnaissance which will occur after Study Area(s) for Area Transportation System Alternatives are identified.

The Environmental Work Plan will be carried out in accordance with the Ontario *Environmental Assessment Act* and the approved EA ToR for this project.

As the study progresses and the Preliminary Planning Alternatives are developed, additional environmental investigations will be undertaken. The level of detail and scale of mapping will increase as the Project Team begins to focus in on specific areas or corridors within the Preliminary Study Area.

2. POLICY CONTEXT

In addition to the EA ToR, the provincial, federal, regional and local policy documents establish the policy framework within which transportation problems and opportunities and potential solutions will be identified and assessed as part of this EA. The final, approved or latest versions of these policy documents (as well as other pertinent provincial planning and policy documents) will be utilized during the EA:

- *Growth Plan for the Greater Golden Horseshoe*, Ministry of Public Infrastructure Renewal, June 2006;
- *Greenbelt Act* and *Greenbelt Plan*, Ministry of Municipal Affairs and Housing, February 2005;
- *Provincial Policy Statement*, Ministry of Municipal Affairs and Housing, March 2005 (the *Planning Act* amendment) has established a new standard that requires all decisions “shall be consistent with” the PPS 2005;
- *Central Ontario Strategic Transportation Directors*, MTO, (Draft) February 2002;
- *Southwest Ontario Strategic Transportation Directions*, MTO, (Draft) February 2002;
- *Environmental Protection Requirements for Transportation Planning and Highway Design, Construction, Operation and Maintenance*, MTO, 2006;
- Official Plans of the Regional Municipalities of York, Peel, and Halton, County of Wellington, the City of Guelph, and associated lower tier municipalities;
- *Straight Ahead – A Vision for Transportation in Canada*, Transport Canada, February 2003;
- *Niagara Escarpment Plan*, Niagara Escarpment Commission, June 2005; and
- *Oak Ridges Moraine Conservation Plan*, Ministry of Municipal Affairs and Housing, 2002.

This study will work within the context of the above policy documents and as such, these policies will be taken as a starting point. It is not the intent of this study to change the above noted approved government policies.

2.1 GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE

The Minister of Energy and Infrastructure released the final *Growth Plan* for the GGH in June 2006. The *Growth Plan* outlines a set of policies for managing growth and development, and guiding planning decisions in the GGH for over the next 30-years. Municipalities within the Study Area are currently completing, or have recently completed, planning exercises to ensure that their Official Plans conform to the Growth Plan with respect to growth management.

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In the *Growth Plan*, Section 3.2.2.3 policies relate to the “development, optimization, and/or expansion of new or existing transportation corridors.” It states that government bodies will:

- Ensure that corridors are identified and protected to meet current and projected needs for various travel nodes;
- Support opportunities for multi-modal use where feasible, in particular prioritizing transit and goods movement needs over those of single occupant vehicles;
- Consider increased opportunities for moving people and moving goods by rail, where appropriate;
- Consider separation of modes within corridors, where appropriate; and
- For goods movement corridors, provide for linkages to planned or existing intermodal opportunities where feasible.

The *Growth Plan* identifies proposed transportation infrastructure intended to move people and goods efficiently within and through the GGH. These plans are conceptual in nature and need to be supported through appropriate studies, such as this report.

The *Growth Plan* shows a conceptual Future Transportation Corridor from Highway 400 in the east, north of Highways 401 and 407, to Guelph in the west. This Future Transportation Corridor lies with the Study Area for this EA.

This broad based plan represents a planning “vision” for the Province. As part of the vision, the *Growth Plan* outlines a strategy for “Where and How to Grow”, “Infrastructure to Support Growth”, “Protecting What is Valuable”, and “Implementation”. The *Growth Plan* indicates that planning decisions made by the Province, municipalities, and other authorities would have to conform to its policies. Municipalities must conform to the *Growth Plan*.

The *Growth Plan* identifies the need to consider solutions to the significant transportation deficiencies in the GGH area. The consideration of alternatives and the implementation of individual infrastructure solutions needs to be examined within the framework of the Ontario *Environmental Assessment Act* and as described in the approved EA ToR document.

2.2 ENVIRONMENTAL PROTECTION REQUIREMENTS

Over 60 federal and provincial statutes, regulations and formal policies have been identified as applicable to the environmental aspects of transportation planning and highway design, construction, operation, and maintenance activities. Some of these statutes supporting regulations and/or formal policy have overlapping or complimentary requirements. To clarify its legislative obligations, the MTO reviewed and synthesized the statutes and the supporting and formal policies, interpreted how each is applied to the transportation planning and highway design, construction, operation and maintenance activities, and developed concise statements called “Environmental Protection Requirements”. The Environmental Protection Requirements were developed by the MTO in consultation with various agencies mandated with the statutes to ensure a common interpretation. The Environmental Protection Requirements can be found in MTO’s *Environmental Protection Requirements for Transportation Planning and Highway Design, Construction, Operation and Maintenance* (2006).

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2.3 PROVINCIAL POLICY STATEMENT

The PPS is issued under the authority of the *Planning Act*. It provides direction on matters of provincial interest related to land use planning and development, and promotes the provincial planning system. The current PPS came into effect on March 1, 2005. This coincides with the effective date of Section 2 of the *Strong Communities Act*, 2004, which requires that planning decisions on applications that are subject to the PPS “shall be consistent with” the new policies.

The PPS recognizes the complex inter-relationships among economic, environmental and social factors in planning and embodies good planning principles. It includes enhanced policies on key issues that affect our communities, such as:

- The efficient use and management of land and infrastructure;
- Protection of the environment and resources; and
- Ensuring appropriate opportunities for employment and residential development, including support for a mix of uses.

The PPS guides towards growth within settlement areas away from significant or sensitive resources and areas that may pose a risk to public health and safety. Furthermore, it recognizes that the wise management of development may involve directing, promoting or sustaining growth. It states that land use must be carefully managed to accommodate appropriate development to meet the full range of current and future needs, while achieving efficient development patterns.

The PPS states that the Province’s natural heritage resources, water, agriculture lands, mineral resources, and cultural heritage and archaeological resources provide important environmental, economical and social benefits. The wise use and management of these resources over the long-term is a key provincial interest. Through the PPS, the Province wants to ensure that its resources are managed in a sustainable manner to protect essential ecological processes and public health and safety, minimizing environmental and social impacts to meet long-term needs.

Section 1.6.6 of the PPS notes that “when planning for corridors and rights-of-ways for significant transportation infrastructure facilities, consideration will be given to the significant resources in Section 2.0: Wise Use and Management of Resources”. Section 2.0 of the PPS includes the resources, as noted above.

The PPS includes two sections that relate directly to environmental conditions and constraints, Wise Use and Management of Resources and Protecting Public Health and Safety. They are summarized in the following sections.

2.3.1 Wise Use and Management of Resources

The PPS identifies six broad categories for protection:

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Natural Heritage (Section 2.1 of the PPS)

This section includes statements about the protection of:

- Natural features and areas for the long-term;
- The long-term ecological function and biodiversity of natural heritage systems;
- Significant habitat of endangered species and threatened species;
- Significant wetlands, woodlands and valleylands, as well as significant wildlife habitat and areas of natural and scientific interest;
- Fish habitat;
- Natural heritage features; and
- Agricultural uses.

Water (Section 2.2 of the PPS)

This section includes statements about the protection of:

- Quality and quantity of water; and
- Sensitive surface and groundwater features.

Agriculture (Section 2.3 of the PPS)

This section includes statements about the long-term protection of the “Prime Agricultural Areas” and “Speciality Crop Areas”. It also describes permitted uses that are compatible with agricultural operations, guidelines on types, sizes and intensities of the agricultural land uses and new land uses in agricultural areas. Sub-sections include:

- Permitted uses;
- Lot creation and lot adjustments; and
- Removal of land from Prime Agricultural Areas.

Minerals Petroleum (Section 2.4 of the PPS)

This section identifies a need to protect minerals and petroleum resources for long-term use. Sub-sections 2.4.2, 2.4.3, and 2.4.4 describe:

- Protection of long-term resource supply;
- Rehabilitation; and
- Extraction in Prime Agricultural Areas.

*Overview of Environmental Conditions and Constraint Working Paper December 2010**Mineral Aggregate Resources (Section 2.5 of the PPS)*

This section states that mineral aggregate resources shall be protected for long-term use. Guidelines are listed for:

- Protection of long-term resource supply;
- Rehabilitation;
- Extraction in Prime Agricultural Areas; and
- Wayside pits and quarries, portable asphalt plants, and portable concrete plants.

Cultural Heritage and Archaeology (Section 2.6 of the PPS)

This section includes guidelines for the conservation of:

- Significant built heritage resources and cultural heritage landscapes;
- Potential and significant archaeological resources; and
- Lands adjacent to protected heritage property.

The protection of these resources is included in the *GTA West Corridor Planning and Environmental Assessment Study*, through the inclusion of relevant environmental factors and criteria to be used in assessing planning alternatives during the study. A description of existing environmental features is provided in subsequent sections of this report.

2.3.2 Protecting Public Health and Safety

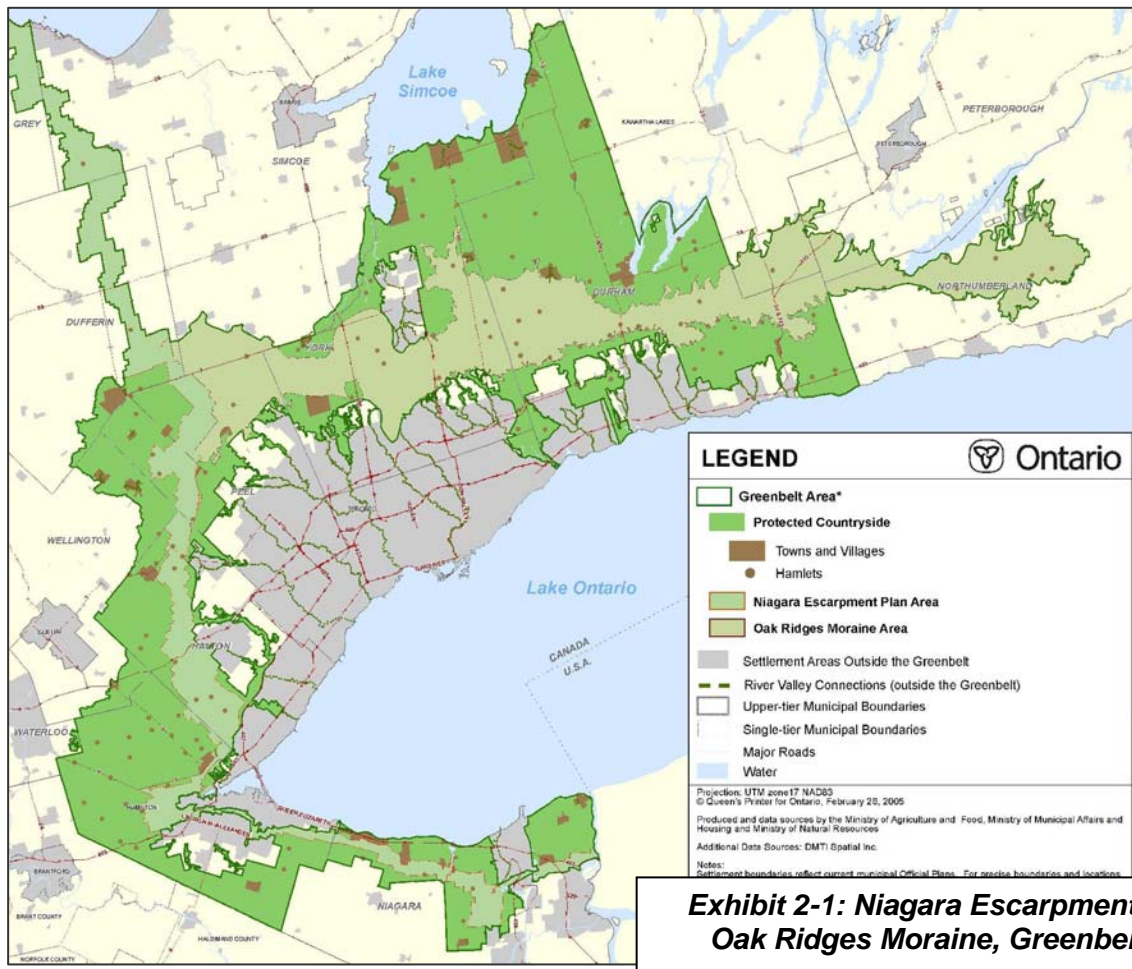
Section 3.0 of the PPS, states that “Ontario’s long-term prosperity, environmental health and social well-being depend on reducing the potential for public cost or risk to Ontario’s residents from natural or human-made hazards. Development shall be directed away from areas of natural or human-made hazards where there is an unacceptable risk to public health or safety or of property damage”.

Natural hazards include hazardous lands adjacent to shorelines or watercourses, beach areas, areas prone to erosion and floodways. Development shall not be permitted on hazardous lands and hazardous sites. This includes institutional (hospitals, nursing homes, daycares, and schools), essential emergency services, or the treatment or storage of hazardous substances.

Human-made hazards include lands affected by mine hazards (i.e., oil, gas, and salt hazards) and contaminated sites.

The protection of the public health and safety as described in the PPS will be accomplished through the application of relevant environmental factors and criteria in the evaluation of planning alternatives during the *GTA West Corridor Planning and Environmental Assessment Study*. Information on natural and human-made hazards is being collected as described in subsequent sections of this report.

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Source: Schedule 1 – Greenbelt Plan Area, *Greenbelt Plan*, 2005

2.4 GREENBELT PLAN

The *Greenbelt Plan*, introduced in 2005, provides direction on where urbanization should and should not occur in southern Ontario. The *Greenbelt Plan* covers a large tract of land within the Preliminary Study Area. **Exhibit 2-1** illustrates the Greenbelt in the GGH.

The goals of the Infrastructure and Natural Resources policies of the plan are to support infrastructure that is consistent with the aim of the *Greenbelt Plan* and *Growth Plan*, while seeking to minimize the impact on the environment. Infrastructure policies allow for the planning of new or expanded infrastructure provided that it serves the expected growth in southern Ontario by creating connections between Urban Growth Centres. Policies further state that the location, construction, and maintenance of the proposed infrastructure shall minimize impacts on the environment wherever possible. Similar to the PPS, lot creation is not generally permitted in rural areas, but may be allowed in order to acquire land for public infrastructure purposes.

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In February 2008 the Ministry of Municipal Affairs and Housing released a document entitled, *Growing the Greenbelt*. Working in partnership with other provincial ministries, draft criteria was developed to consider municipal requests to grow the Greenbelt. The Ministry sought input on the proposed criteria in Spring 2008. Based on this advice, the final document was released in August 2008. Additional information on *Growing the Greenbelt* may be obtained at www.greenbelt.ontario.ca.

Environmental features of the *Greenbelt Plan* are described in greater detail in Section 3.0.

2.5 NIAGARA ESCARPMENT PLAN

The Niagara Escarpment is a significant geological feature that extends 725 km (in Ontario) from Lake Ontario, near Niagara Falls, to the Bruce Peninsula. Once the bottom of an ancient sea, most of the Escarpment corridor is forested and includes wetland complexes, cliff faces, slopes, and aquatic ecosystems. In February 1990, the Niagara Escarpment was designated a World Biosphere Reserve by United Nations Educational, Scientific and Cultural Organisation (UNESCO).

The *Niagara Escarpment Plan*, introduced in 1995, guides land use within the Niagara Escarpment. This document limits development within the area through limitations on new lot creation and permitted uses. Its intent is to balance development, preservation, and public use. The *Niagara Escarpment Plan* area is shown on **Exhibit 2-1**.

The *Niagara Escarpment Plan* includes policies for seven land use designations (“Natural”, “Protection”, “Rural”, “Recreation”, “Urban”, “Minor Urban”, and “Mineral Resource Extraction”), provides development criteria, and establishes objectives for the Niagara Escarpment Parks System as 117 parks and protected areas. The governing body for the Niagara Escarpment is the Niagara Escarpment Commission.

Environmental features of the *Niagara Escarpment Plan* are described in greater detail in Section 3.0.

2.6 OAK RIDGES MORAINES

The Oak Ridges Moraine is one of the Province's most significant landforms. This irregular ridge stretches 160 km from the Trent River in the east to the Niagara Escarpment in the west. The Escarpment and Moraine together form the foundation of south-central Ontario's natural heritage and green space systems. Strategically located north of and parallel to Lake Ontario, the Moraine divides the watersheds draining south into western Lake Ontario from those draining north into Georgian Bay, Lake Simcoe and the Trent River system, while forming the northern edge of the GTA West Preliminary Study Area. The Moraine shapes the present and future form and structure of the Greater Toronto Region, and its ecological functions are critical to the Region's continuing health. The Oak Ridges Moraine is shown on **Exhibit 2-1**.

Environmental features of the Oak Ridges Moraine are described in greater detail in Section 3.0.

In May 2001, the Minister of Municipal Affairs and Housing introduced the *Oak Ridges Moraine Protection Act* (2001), establishing a six-month moratorium on development on the Moraine in

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order to allow the government to consult on how to protect the Moraine. The Ontario Legislature unanimously passed this Act, which took effect on May 17, 2001.

The Oak Ridges Moraine is under increasing pressure for new residential, commercial, industrial and recreational uses, which compete with the present natural environment. The *Oak Ridges Moraine Conservation Plan*, released in April 2002, builds on years of effort by provincial ministries, the three regions of Durham, Peel and York (Tri-Region Oak Ridges Moraine Strategy), the Conservation Coalition, Moraine area municipalities and key stakeholders, to provide clarity and certainty about the long-term protection and management of this vital natural resource.

This plan is ecologically-based, established by the Province's government to provide land use and resource management direction for the 190,000 ha of land and water within the Moraine.

The purpose of the plan is to provide land use and resource management planning direction to provincial ministries and agencies, municipalities, municipal planning authorities, landowners and other stakeholders on how to protect the Moraine's ecological and hydrological features, and functions.

The Province's government vision for the Oak Ridges Moraine is that of "a continuous band of green rolling hills that provides form and structure to south-central Ontario, while protecting the ecological and hydrological features and functions that support the health and well-being of the region's residents and ecosystems".

Through the legislation and the *Oak Ridges Moraine Conservation Plan*, the Province's government has set a clear policy framework for protecting the Oak Ridges Moraine. This is in keeping with the provincial land use planning system within which municipalities are responsible for implementing provincial policy through their Official Plans, and when making decisions on development applications.

Municipal planning decisions shall also conform to the plan, which takes precedence over Municipal Official Plans (Official Plans are required to be brought into conformity with the plan). Nothing is intended to prevent municipalities from adopting Official Plan policies and zoning By-law provisions that are more restrictive than the policies of the *Oak Ridges Moraine Conservation Plan*, except where this plan prohibits.