



**DILLON**  
CONSULTING

CITY OF LONDON

# **Trail Standards Review for Conformance to Provincial and Federal Standards**

# Table of Contents

<b>1.0</b>	<b>Introduction</b>	<b>1</b>
<b>2.0</b>	<b>Policy 3</b>	
2.1	Defining the Priorities for Natural Areas .....	3
2.1.1	City of London .....	3
2.1.2	Province of Ontario .....	3
2.1.3	Parks Canada .....	4
2.2	Governing Trail Systems in a Natural Area .....	5
2.2.1	City of London .....	6
2.2.2	Province of Ontario .....	6
2.2.3	Parks Canada .....	8
2.3	Accessibility of Trails .....	9
2.3.1	City of London .....	9
2.3.2	Province of Ontario .....	9
2.3.3	Parks Canada .....	9
2.4	Requirement to Consult .....	10
2.4.1	City of London .....	10
2.4.2	Province of Ontario .....	10
2.4.3	Parks Canada .....	11
<b>3.0</b>	<b>Process</b>	<b>12</b>
3.1	The Process that Leads to Trail Planning .....	12
3.2	Management Zones Guide Trail Planning .....	14
3.2.1	How Management Zones are Assigned .....	16
3.2.2	Changes to a Management Zone Designation or Boundary .....	17
<b>4.0</b>	<b>Practice</b>	<b>19</b>
4.1	Where Trails are Permitted .....	19
4.1.1	General Description of Trail Types .....	20
4.2	Permitted Activities .....	21
<b>5.0</b>	<b>Summary</b>	<b>22</b>

<b>6.0</b>	<b>Case Studies</b>	<b>23</b>
6.1	Provincial Parks .....	23
6.1.1	Komoka Provincial Park.....	23
6.1.2	Pinery Provincial Park.....	24
6.2	National Parks.....	25
6.2.1	Georgian Bay Islands National Park .....	26
6.2.2	Point Pelee National Park .....	27
<b>7.0</b>	<b>Conclusion</b>	<b>29</b>
<b>8.0</b>	<b>Discussion</b>	<b>30</b>
<b>9.0</b>	<b>Recommendations</b>	<b>32</b>
<b>10.0</b>	<b>References</b>	<b>34</b>

#### Tables

Table 1:	Summary of Objectives for Protected Natural Areas .....	5
Table 2:	Summary of Process Tasks for Each Level of Government .....	12
Table 3:	Descriptions of Management Zones.....	14
Table 4:	Overview of Management Zones that Permit Trails .....	19
Table 5:	Descriptions of Trail Types .....	20
Table 6:	Overview of Permitted Activities on Trails in Protected Natural Areas .....	21
Table 7:	Summary of Conformance to Provincial and/or National Standards.....	22
Table 8:	Komoka Provincial Park Management Zones and Trail System .....	24
Table 9:	Pinery Provincial Parks Management Zones and Trail System.....	25
Table 10:	Beausoleil Island Management Zones and Trail System .....	26
Table 11:	Point Pelee Management Zones and Trail System .....	27

#### Appendices

A	Komoka Provincial Park
B	Pinery Provincial Park
C	Georgian Bay Island National Park: Beausoleil Island
D	Point Pelee National Park
E	Point Pelee Species at Risk

# Introduction

On October 14, 2015, the Municipal Council (the "Council") for the City of London (the "City") requested the Civic Administration review the *Planning and Design Standards for Trails in Environmentally Significant Areas* (2012; herein referred to as the "Trail Standards") by the end of the City's second fiscal quarter in 2016. As a first step towards this review, the City has requested Dillon Consulting Limited ("Dillon") provide a supporting document outlining available evidence to determine if the City's current Trail Standards conform to provincial and national standards. The June 2012 Council resolution that approved the Trail Standards noted that "the Standards should conform to Provincial and National standards".

This document is a comparative assessment of the City's Trail Standards (dated June 4, 2012) against equivalent standards in place for use by provincial and/or federal government bodies. The goal of the assessment is to compare the following principles related to trail planning and design:

- **Policies:** What is the overall purpose for management planning within a protected natural area<sup>1</sup> and how does a trail system fit with that purpose? What governs the planning and implementation of a trail system? Is implementation of action items in the management plan completed?
- **Process:** What process is followed to develop trails within protected natural areas? How are protected natural areas characterized to determine where trails can be located?
- **Practice:** How is environmental sensitivity considered when determining the types of trails and activities permitted?

For comparison to national (i.e. federal) standards, the following sources were reviewed:

- National Parks Act, 2000
- Parks Canada Guide to Management Planning (2008)
- Parks Canada Trail Guidelines: Trail Classification System - Trail Specifications and User Guide (2012)
- Point Pelee National Park Management Plan (2010)
- Georgian Bay Islands National Park Management Plan (2010)

<sup>1</sup> Unless otherwise described, a protected natural area refers to a City Environmentally Significant Area, a provincial park or conservation reserve, and/or a national park.

For comparison to provincial standards, the following sources were reviewed:

- Provincial Parks and Conservation Reserves Act, 2006
- Ontario Protected Areas Planning Manual (2009) including supporting guidelines and tools
- Ontario Provincial Parks: Planning and Management Policies (1992)
- Bill 100; the Ontario Trails Act, 2015 (first reading May 12, 2015)
- Ontario Trails Strategy (2005)
- Ontario's Best Trails (2006)
- Komoka Provincial Park Management Plan (2010)
- Pinery Provincial Park Management Plan (1986)

Following the comparative assessment, an opinion whether the City's Trail Standards conform to provincial and national standards will be provided.

## 2.0 Policy

### 2.1 Defining the Priorities for Natural Areas

Whether the natural area is a national park, a provincial park or conservation reserve or an Environmentally Significant Area (ESA) identified as part of a natural heritage system in an Official Plan, the first step towards management of the natural environment is defining the purpose or priorities for it. Below is an overview of how the City, the Province of Ontario and Parks Canada (Government of Canada) direct management priorities for the natural areas under their care.

#### 2.1.1 City of London

Chapter 15 of the Official Plan (OP) describes the policies for Environmentally Significant Areas and Conservation Master Plans. Chapter 8 in the OP describes the objectives of the Open Space policies including the provision of recreation and enhanced accessibility where significant natural features and ecological functions can be protected. As stated in Section 1 of the City's Trail Standards, the primary purpose of an ESA is the protection of the natural features and ecological functions that support ecological integrity and ecosystem health. The Trail Standards further state that the ecological integrity and ecosystem health of an ESA shall have priority in any trail use or design-related decisions. The secondary purpose of an ESA is to provide appropriate recreational and educational opportunities.

#### 2.1.2 Province of Ontario

The Province of Ontario broadly oversees natural areas on both provincially-owned and not-provincially owned lands. On lands owned and managed by the provincial government, lands that are classified as provincial parks and conservation reserves are governed by the *Provincial Parks and Conservation Reserves Act, 2006*. The purpose of this Act is to both protect ecosystems and to provide opportunities for compatible, ecologically sustainable recreation. The objectives for establishing and managing provincial parks and conservation reserves include:

1. To permanently protect representative ecosystems, biodiversity and provincially significant elements of Ontario's natural and cultural heritage and to manage these areas to ensure that ecological integrity is maintained.
2. To provide opportunities for ecologically sustainable outdoor recreation opportunities and encourage associated economic benefits.

According to Section 3 of the Act, the first priority for management planning within provincial parks is to maintain ecological integrity and provide consideration for the restoration of ecological integrity where applicable.

On lands not owned and managed by the provincial government, typically the natural area is included under municipal jurisdiction and applicable legislation (federal and/or provincial) would apply. The Provincial Policy Statement, 2014, states that natural heritage systems in Ecoregions 6E and 7E are required to be identified, protected, and also that healthy, active communities should be promoted by planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for *recreation*, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources.

### 2.1.3 Parks Canada

According to Section 8 (2) of the *National Parks Act*, 2002, the maintenance or restoration of ecological integrity must be the first priority when undertaking all aspects of management planning (which includes trail systems) in a national park. The Parks Canada mandate generally consists of three elements:

1. Protecting heritage resources
2. Facilitating opportunities for visitor experience
3. Providing public education

**Based on this review, the City's prioritization of protecting ecological integrity is aligned and conforms to both federal and provincial policies. Ecological integrity is prioritized above public use/visitor experience at all levels of government.**

**Table 1** summarizes the types of natural areas that are the focus of this document and the specific priorities and objectives each level of government has defined for the management of the natural area.

TABLE 1: SUMMARY OF OBJECTIVES FOR PROTECTED NATURAL AREAS

Level of Government	City of London	Government of Ontario (Provincial Park)	Government of Canada
Protected Natural Area	ESA	Provincial Park (Wilderness, Nature Reserve and Natural Environment Classes)	National Park
Description of Natural Area(s)	Contain natural features and perform ecological functions that warrant their retention in a natural state. Identified by Council as being of city-wide, regional or provincial significance.	Areas selected to represent the distinctive natural habitats and landforms of the province. These areas are protected to provide high quality Recreational and educational experiences.	A representative natural area of Canadian significance. National parks represent each of Canada's distinct natural regions.
Management Priority	Protection of the natural features and ecological functions that support ecological integrity and ecosystem health	Maintain ecological integrity and provide consideration for the restoration of ecological integrity	Maintenance or restoration of ecological integrity
Objectives/ Mandate	<ol style="list-style-type: none"> <li>1. Protect natural area</li> <li>2. Facilitate opportunities for nature-based passive recreation</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect natural area</li> <li>2. Facilitate opportunities for high quality, low-impact recreation.</li> <li>3. Support education and research</li> </ol>	<ol style="list-style-type: none"> <li>1. Protect natural area</li> <li>2. Facilitate opportunities for visitor experience</li> <li>3. Provide public education</li> </ol>

## 2.2 Governing Trail Systems in a Natural Area

At all levels of government, public access and use of protected natural areas for recreation and education is acknowledged as a secondary priority for the management of these areas.

With over 64,000 km of trails in Ontario (Ministry of Health Promotion, 2005), trails are recognized in playing a vital role in our well-being. Ontario's existing trail system was largely built by volunteers. Given the varied landscape in Ontario, trails often cross lands which are environmentally sensitive. The various levels of government that manage/own natural areas have recognized the importance of trails to the visitor experience and many have policies or guidelines in place to guide the use, development and long-term maintenance of trails in order to preserve the ecological integrity of our protected natural areas. The following sections overview these policies and guidelines.



### 2.2.1 City of London

As City-owned and managed ESAs are located within the City's limits, it stands to reason that the majority of people who reside in London are in proximity one of these ESAs and their associated trails. Many neighborhoods are arranged around the boundaries of ESAs and surrounding residents value these natural areas. The permitted uses, access and provision for recreational activities within City designated ESAs are governed by Chapter 15 (Environmental Policies) of the City's Official Plan (2006). Under OP Section 15.3.2 (ii)(b), recreational uses associated with the passive enjoyment of natural features (e.g., trails) are permitted within natural heritage areas (e.g., ESAs) provided such uses are designed, constructed and managed to minimize potential impact to the feature.

Through the application of the Trail Standards, as approved by Council at its June 26/27, 2012 session, public use of an ESA is generally only permitted if it can be demonstrated that the use is compatible with the conservation of the native biota and natural processes within the ESA. Use of the ESA by the public is generally restricted to passive, nature-based uses. The Trail Standards establish the policy, process and practice that must be followed when planning, designing and/or managing trails in the City's ESAs. Trail planning is one of the matters addressed through the preparation of a Conservation Master Plan for an ESA, as outlined in Section 15.3.8 ii)(c) of the City's Official Plan (2006).

### 2.2.2 Province of Ontario

Under Section 1.5 of the PPS 2014 (Public Spaces, Recreation, Parks, Trails and Open Space), it is identified that *"healthy, active communities should be promoted by planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources"*.

In 2003, an inter-ministerial working group on trails was formed by the Government of Ontario to begin working towards a long-term plan for trails in Ontario. On October 6, 2005, the Ontario Trails Strategy (Ministry of Health Promotion<sup>2</sup>, 2005) was launched. The vision outlined in the strategy is *"a world-class system of diversified trails, planned and used in an environmentally responsible manner that enhances the health and prosperity of all Ontarians"*. This strategy identifies the need for trail organizations across Ontario to develop common standards to guide the development and use of trails. As part of the core values of the strategy, the Government of Ontario recognized the value of regional differences and importance of local decision-making. This effectively promotes the ability for municipal governments, such as the City, to put their own process in place to develop and maintain a trails system that works for the community it serves.

<sup>2</sup> In 2012, the Ministry of Health Promotion became the Ministry of Health and Long-Term Care.

In 2006, the Trails for All Ontarians Collaborative, a joint partnership of local, regional and provincial organizations involved with trails or representing people with disabilities, released the *Guidelines and Best Practices for the Design, Construction and Maintenance of Sustainable Trails for All Ontarians*. The guidelines and best practices were developed to support the vision outlined in the Ontario Trails Strategy and ensure trails follow the principles of sustainable design and development, and are universally designed to include people of diverse abilities. These guidelines and best practices are intended for lands not owned or managed by the provincial government, and are referenced in the City's Trail Standards.

Also in 2006, the *Provincial Parks and Conservation Reserves Act, 2006* was given Royal Assent. It came into force on September 4, 2007. This Act provides conservation direction to the planning and management of Ontario's system of protected natural areas (i.e., lands owned by the province). Under Section 10 of the Act, there is a requirement for the Ministry of Natural Resources and Forestry (MNRF<sup>3</sup>) to prepare a management direction that applies to each Provincial Park or Conservation Reserve. A management direction includes, among other things, a statement of policy, including management zoning, and addresses the protection, planning, development and management of significant resources and values (value categories include outdoor recreation such as trail use). Management zoning is used to describe the policies and management priorities within a protected natural area, including if trails are permitted. This management direction may or may not include a management plan or management statement. If in place, a management plan or management statement is a document required to be approved by the MNRF that outlines the site-specific policies for a provincial park or conservation reserve and addresses issues or proposals for capital infrastructure (e.g., new trails) or resource management projects. However, it is important to note that a management plan or management statement is not a legal obligation under the Act (Eagles 2007).

Upon completion of a management direction, some projects may also need to follow the Class Environmental Assessment (EA) for Provincial Parks and Conservation Reserves. This EA process is divided into four categories (Category A, B, C or D) based on potential for negative effects associated with the project. Typically, new trail development is evaluated as a Category B (low to medium net negative effects causing a medium public or agency concern) project and the re-establishment of unmanaged trails or realignment of a trail less than 100 m as a Category A project (low net negative effects and/or public or agency concern) under the Class EA process for provincial parks and conservation reserves. Projects screened as Category A are typically allowed to proceed without further public review or evaluation.

---

<sup>3</sup> Note, the MNRF was previously referred to as the Ministry of Natural Resources (MNR). The Ministry was renamed following the 2014 election. For reference purposes, use of MNR and MNRF will be interchangeable in this document and reflect the name of the Ministry at the time of reference publication.

To further support trail systems in Ontario, the Ontario Ministry of Tourism, Culture and Sport (MTCS) introduced Bill 100 in the spring of 2015. On May 12, 2015, this Bill, titled the *Supporting Ontario Trails Act, 2015*, passed the first reading. Once passed, the proposed legislation would, among other things, proclaim an annual trails week, allow for the establishment of voluntary best practices and a voluntary trails classification system and targets, and provide for the recognition of trails of distinction. The Act would require that a trails strategy, similar to the one released in 2005, would be maintained and reviewed periodically. Upon review of the proposed Act after its first reading, it appears the province is committed to supporting municipalities by providing guidelines and materials that could be used to implement and manage trail systems in their jurisdictions if required. The provision for voluntary compliance allows for municipalities to remain autonomous.

### 2.2.3 Parks Canada

The management of national parks by Parks Canada on behalf of all Canadians is done through a park management plan. Management plans are required under Section 11 of the *National Parks Act, 2000* and contain the long-term ecological vision for the park, a set of ecological integrity objectives and indicators, provisions for resource protection and restoration, management zoning based on ecosystem protection requirements, and targets for visitor use, public awareness and performance evaluation. A national park management plan is subject to review at least every ten years. Following the creation of a management plan and delineation of management zones, placement of trails follows *Parks Canada Trail Guidelines: Trail Classification System - Trail Specifications and User Guide* (2012). The objectives of these guidelines are to assist park managers with balancing the needs, expectations and preferred experiences of the visitor with the zoning/environment where a trail is to be located. Management plans are also subject to a strategic environmental assessment which may be incorporated into the plan.

***Based on this review of how trail systems are governed, the City's Trail Standards conform with both federal and provincial legislation, policies and/or guidelines. All levels of government have legislation in place that protect significant natural areas and describe a planning document. The planning document includes the characteristics and significance of the protected natural area, and delineates the natural area into management zones that in turn determine further policies and management priorities. Both the City's Trail Standards and Parks Canada clearly designate the specifications for which types of trails are permitted in each management zone. The Government of Ontario does not provide specific guidelines. It should be noted that only the City identifies no public access, trails or structures in the most sensitive management zone (i.e, Nature Reserve) unless special circumstances are identified (with a Special Feature overlay).***

## 2.3 Accessibility of Trails

It is widely noted throughout management plans and guidelines for protected natural areas that not all trails will be accessible to all users in all places. Where possible and practical, advice offered to resource managers is to ensure that the full spectrum of trail opportunities is available to all members of the community within their local area.

### 2.3.1 City of London

The City of London's Facility Accessibility Design Standards (FADS 2007) states that outdoor recreation should provide a fulfilling recreational experience for all persons with a varying level of ability. Under Section 4.5.2 of FADS 2007, it is stated that within natural areas, accessible pathways, trails and footbridges shall be provided where environmental considerations will permit them. For boardwalks, trails, footbridges and/or pathways that are located in ESAs, the City's FADS (2007) document can be used to plan and design for these features to be accessible.

### 2.3.2 Province of Ontario

At the provincial level, Ontario Regulation 191/11 under the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) includes accessibility standards for recreational trails in built environments that are to be followed by the province and the municipalities. However, the protected natural areas being discussed in this review document would not be considered part of the built environment and, under Section 80.6 of the regulation, wilderness trails are exempted.

### 2.3.3 Parks Canada

At the federal level, Parks Canada has not developed accessibility guidelines. Based on documentation reviewed, a nationally recognized set of guidelines for outdoor accessibility does not exist in Canada. Parks Canada has adopted best available information from the U.S. Access Board. At the time Parks Canada guidelines were published, the U.S. Guidelines were in draft. As of November 25, 2013, the final rule became effective and provides Accessibility Guidelines for Outdoor Developed Areas. Review of these guidelines will not be provided in this document. In Canada, an accessible trail is most likely to fall under the federal Type 1 trail classifications, which are paved or hard packed surfaced trails with no obstacles in the surface and at least 1.5 m in width (Parks Canada 2012). Parks Canada (2012) provides for expanded descriptions of making this type of trails accessible in specific circumstances in their guideline.

**Based on the above overview, the City's Trail Standards are aligned with and conform to the federal provision for accessibility considerations on paved or hard packed trails. Federally classed Type 1 trails are similar to Level 2 pedestrian trails as described in the City's Trail Standards. When compared to the provincial requirements under Ontario Regulation 191/11, the City's standards outlined in FADS 2007 exceed the requirements. Under the provincial regulation, trails in wilderness areas are exempt; the City requires accessible trail systems be provided in natural areas where environmental considerations allow.**

## 2.4 Requirement to Consult

The importance of consultation with stakeholders cannot be underestimated when planning for resource management. The range of potential stakeholders can include, but are not limited to, Aboriginal peoples, non-government organizations, local communities and/or interest groups, and interested individuals. Requirements for consultation exist at all levels of government.

### 2.4.1 City of London

When Council approved the Trail Standards in 2012 after a two year community engagement process, it was on the condition that the community continues to be engaged in natural areas protection and the trail planning process to build awareness, foster education, and encourage participation. The process of trail planning follows an environmental planning process and Council mandated that the process shall include consultation with the City's Environmental and Ecological Planning Advisory Committee (EEPAC), public participation meetings, and a public meeting before the Planning Environment Committee.

The City of London's ESA Conservation Master Plan (CMP) consultation process has proven to be extensive. Recently, the CMP for the Coves ESA was developed and included a four year public consultation process. The CMP public engagement process included four public meetings where the opportunity to participate in the process, review and comment on draft CMP documents was provided. In addition to required consultation with EEPAC, the City also formed a Local Advisory Committee (LAC). The LAC was formed to obtain input on goals, objectives, recommendations included in the CMP and to assist with creating a long term implementation plan for the CMP based on the priorities identified. The LAC met 6 times to review the CMP over two years. Multiple notices about the CMP process were published in the local newspaper and a minimum of five separate letters outlining the process and inviting participation in the CMP ESA process were mailed out to area residents. Following the completion of the CMP, public consultation is continuing through the formation of a Coves ESA CMP Implementation Committee who periodically meet and provide input as the CMP is implemented.

### 2.4.2 Province of Ontario

The second principle that guides all aspects of the planning and management of Ontario's system of provincial parks and conservation reserves is that "*opportunities for consultation shall be provided*" (Section 3 of the *Provincial Parks and Conservation Reserves Act, 2006*). Each protected area planning process must provide at least one opportunity to consult with the public during the development of a management statement and at least two opportunities to consult during the development of a management plan. Beyond this, each protected area consultation process is unique and is afforded the flexibility to create a consultation plan designed to best meet the needs of identified stakeholders (e.g., opportunities to view planning documents online, open houses, stakeholder workshops, etc.).

For trail projects that are evaluated as a Category B Class EA for Provincial Parks and Conservation Reserves, consultation requirements begin by mailing a Notice of Commencement to identified stakeholders and/or publishing the Notice in a local newspaper as an advertisement. Once a Notice of Commencement is issued, there is an invitation to comment within 30 days. If comments received do not result in elevation of the project to Category C, the next step is a Notice of Completion that is sent to those stakeholders that provided comments or who asked to be notified of the decision on the project. In the event a project is elevated to Category C, a Notice of Opportunity is sent to everyone on the current project mailing list and/or published in a local newspaper to make them aware of the opportunity to inspect the Draft Environmental Study Report. Stakeholders have 30 days to provide comments for consideration.

In addition to the public consultation requirements, the MNRF may be required to consult with Aboriginal communities on a Class EA project to comply with the Crown's constitutional duty to consult. The MNRF may delegate this duty to consult to a third-party, subject to oversight.

### 2.4.3 Parks Canada

At the federal level, Section 12 of the *National Parks Act, 2000* prescribes that “*the Minister shall, where applicable, provide opportunities for public participation at the national, regional and local levels, including participation by aboriginal organizations, bodies established under land claims agreements and representatives of park communities, in the development of parks policy and regulations, the establishment of parks, the formulation of management plans, land use planning and development in relation to park communities and any other matters that the Minister considers relevant*”. It is typical that notices are mailed to park visitors and stakeholders included in the park's database, local public meetings held, meetings with Aboriginal peoples arranged and “by invite” targeted stakeholder meetings held locally and regionally.

**Based on the above, the consultation requirements outlined in the City's Trail Standards conform to the provincial and federal requirement for consultation (i.e., all levels of government require consultation). In most cases, consultation programs are designed to meet the specific needs of the project being undertaken. This can often exceed the legislated requirements. However, it is likely that in practice, the City's consultation process greatly exceeds the average level of consultation done by the Province of Ontario and/or the Government of Canada, as evidenced by the extensive consultation undertaken to complete the Coves ESA CMP. Based on this, it has been determined that the City exceeds provincial and national standards.**

## 3.0 Process

### 3.1 The Process that Leads to Trail Planning

As outlined in the City's Trail Standards, the general process followed to develop a Conservation Master Plan and guide trail planning uses the same approach employed in provincial and national park planning. Within a City-owned ESA, the process is as follows:

*Collect baseline/ecological data > Analyse and Assess > Refine protected area boundaries > Identify management zones > Identify maintenance and restoration priorities > Determine visitor use > Evaluate trail options, including alternatives > Develop a monitoring program.*

In **Table 2** below, we overview this general process and provide information to compare how each level of government is aligned with the process of how the City develops a Conservation Master Plan. In addition, the reported implementation of actions identified to restore ecological integrity in a protected natural area has been included to demonstrate each level of government's commitment to their overall objectives/mandate.

**TABLE 2: SUMMARY OF PROCESS TASKS FOR EACH LEVEL OF GOVERNMENT**

Process Task	City of London	Government of Ontario (Provincial Park)	Government of Canada
Protected Natural Area	ESA	Provincial Park	National Park
Planning Document(s) Required	Conservation Master Plan	Management Direction (may also include Management Statement or Management Plan)	State of the Park Report. Management Plan.
Natural Heritage Baseline Data Collection	3 season inventory	Background information may be collected and compiled into a Summary Report. Planning document may identify need for surveys/inventory completed as supporting activities. Surveys/inventories not stated to be required in policy. Guidance document <sup>1</sup> states detailed inventories of park features should be prepared prior to defining zones.	Ongoing monitoring of natural resources required for State of the Park Report every five years. Required prior to development of Management Plan.
Analysis and Assessment of Natural Area	Identify and evaluate significant natural heritage features using accepted criteria (wetlands, wildlife habitat/Species at Risk, woodland, etc)	Park Classification system. Identification and evaluation of natural heritage features identified as priorities. Emphasis on Species at Risk habitat	Delineation of park into ecosystem units typically undertaken and significance of ecosystem outlined. Identification of Species at Risk critical habitat a priority

Process Task	City of London	Government of Ontario (Provincial Park)	Government of Canada
Refinement of Natural Area Boundaries	Refinement based on criteria developed by City. Identification of key lands for acquisition included.	Undertaken through Class EA process for Provincial Parks and Conservation Reserves. May be coordinated with management direction/plan	Not required.
Identification of Management Zones	Nature Reserve, Natural Area 1, Natural Area 2, Access, Cultural Heritage, Restoration Overlay, Special Feature Overlay, Utility Overlay	Nature Reserve, Wilderness, Natural Environment, Historical, Access, Development	Special Preservation, Wilderness, Natural Environment, Outdoor Recreation, Park Services
Identification of Maintenance and Restoration Priorities	Required. Restoration overlay(s) applied to relevant areas of management zones.	Required part of planning document	Required part of planning document
Visitor Use	Existing community connections considered	Required part of planning document	Required part of planning document
Evaluation of Alternatives for Trail Options	Required to follow a standard environmental planning process as part of the Conservation Master Plan	Not typically included in planning document. Required as part of Class EA process for specific projects. Trails development aligned with management zones.	Not typically included in planning document. Trails development aligned with management zones and Parks Canada Trail Guidelines.
Development of a Monitoring Program	Required. Ecosystem indicators identified	Required. Objective is to monitor environmental change	Required. Ecosystem indicators identified
Implementation of Projects to Maintain and Restore Ecological Integrity	Required. Undertaken in accordance to and in advance of completion of the planning document. Documented restoration projects in ESAs since 2007.	Required. Ecological restoration projects have not been a priority <sup>2</sup> .	Required. Ecological restoration projects carried out in accordance with planning document <sup>3</sup> .

<sup>1</sup>MNR 1992; <sup>2</sup>ECO 2015; <sup>3</sup>Office of the Auditor General of Canada 2013

**The City's process most closely aligns and conforms to Parks Canada's process. When compared to the process used in provincial parks, the City's process exceeds the Government of Ontario as it has more required "steps" and the City has been consistently implementing ecological restoration projects in ESAs since 2007. With a focus on invasive species removal, these restoration projects are essential to protect the ecological integrity of ESAs (Dillon 2015). The City is an identified leader in demonstrating a proactive approach to the management and control of invasive species in protected natural areas and the policies, actions and best management practices implemented by the City are under review by the MNRF as they work determine how to implement the Ontario Invasive Species Act when it comes into force on November 3, 2016.**



### 3.2 Management Zones Guide Trail Planning

A strategy used by the City, the Government of Ontario and Parks Canada to protect the ecological integrity of a protected natural area while managing the expectations of visitors is to allocate management zones to various areas within the boundaries of the park/ESA. As outlined in **Section 2**, the first priority for all levels of government is the ecological integrity of the protected natural area. For each management zone, the ecological significance and sensitivity to disturbance of the area is considered first. In **Table 3** below, the various zones defined by the City (2012), the Government of Ontario (MNR 1992) and Parks Canada (Parks Canada 2008) are outlined. Zones described in each row of the table represent equivalent zone types across the levels of government.

For the Government of Ontario, provincial parks are first defined according to park class, which in turn dictates the range of management zone possibilities (MNR 1992). For clarity, this review concentrates on provincial parks classified as nature reserve, wilderness or natural environment.

**TABLE 3: DESCRIPTIONS OF MANAGEMENT ZONES**

City of London <sup>1</sup>	Government of Ontario <sup>2</sup>	Parks Canada <sup>3</sup>
<p><b>Nature Reserve</b> Includes Species at Risk habitat, provincially rare communities, communities with unique species assemblages, critical wildlife habitat, areas of forest interior, special features within evaluated wetlands, groundwater discharge and seepage areas, areas of unique geology, aboriginal burial grounds or spiritual sites.</p>	<p><b>Nature Reserve</b> Provincially significant earth and/or life science features. A protective buffer area may be included where minimal development may be permitted.</p>	<p><b>Special Preservation</b> Contain or support unique, threatened or endangered natural or cultural features, or are among the best examples of the features that represent a natural region.</p>
<p><b>Natural Area 1</b> Terrestrial, wetland and aquatic landscapes and waterscapes with moderate to high sensitivity.</p>	<p><b>Wilderness</b> Wilderness landscapes of appropriate size and integrity to protect natural and cultural values, and to support extensive types of back-country recreation.</p>	<p><b>Wilderness</b> Areas that are good representations of a natural region and will be conserved in a wilderness state with minimal management intervention.</p>
<p><b>Natural Area 2</b> Supporting habitat such as shrub thickets, old fields, younger woodlands, and plantations that contribute to diversity, connectivity, internal linkages and, visual and spatial buffers.</p>	<p><b>Natural Environment</b> Natural landscapes which permit the minimum level of development required to support low-intensity recreational activities.</p>	<p><b>Natural Environment</b> Areas managed as natural environments, and that provide opportunities for visitors to experience a park's natural and cultural heritage values through outdoor recreation activities requiring minimal services and facilities of a rustic nature.</p>

City of London <sup>1</sup>	Government of Ontario <sup>2</sup>	Parks Canada <sup>3</sup>
<p><b>Cultural Heritage</b> Important cultural heritage landscapes, historically significant buildings or structures, archaeological sites, mill sites, aboriginal sites, views and vistas.</p> <p>Note: small, isolated cultural heritage features may be recognized and managed within other zones.</p>	<p><b>Historical</b> Provincially significant cultural resources in a park that are generally focused on a specific site and that site's relationship to the surrounding landscape. A protective buffer may be included.</p>	<p>N/A. Culturally Sensitive Sites may be shown on a zoning map, but not in sufficient detail.</p>
<p><b>Access</b> Controlled access locations and staging areas for visitors to an ESA.</p>	<p><b>Access</b> Staging areas that support the use of other zones.</p>	<p>N/A</p>
<p>N/A</p>	<p><b>Development</b> Contain the areas of the park geared towards the support of intensive day-use and car camping activities.</p> <p>Note: this zone is not possible within nature reserve or wilderness park classes.</p>	<p><b>Outdoor Recreation.</b> Areas capable of accommodating a broad range of opportunities for understanding, appreciation and enjoyment of the park's heritage values.</p>
<p><b>Utility Overlay</b> Pre-existing conditions such as a utility site or corridor, or other similar infrastructure or facility that has ongoing access requirements.</p>	<p>N/A</p>	<p><b>Park Services</b> Communities which contain a concentration of visitor services and support facilities. Major park operation and administrative functions.</p>
<p><b>Special Feature Overlay</b> Areas within other management zones that represent unique or important features and/or functions, have important educational and/or scientific value, including historic access points that can be controlled to limit impacts.</p>	<p>N/A</p>	<p>N/A</p>
<p><b>Restoration Overlay.</b> Areas managed for conservation by active management intervention of species and habitats.</p>	<p>N/A</p>	<p>N/A</p>

<sup>1</sup>City of London 2012; <sup>2</sup>MNR 1992; <sup>3</sup>Parks Canada 2008

**Based on the descriptions provided for management zones applied in ESAs, provincial parks and national parks, the various levels of government are aligned in how they characterize the various management zones for protected natural areas. The key difference between the City descriptions and those provided provincially and federally is the MNRF and Parks Canada include recreation and/or development language in many of their management zone descriptions.**

### 3.2.1 How Management Zones are Assigned

Although the range of possible management zones is similar across the various levels of government (see **Table 2**), the criteria used to guide the decision-making process on how to assign a management zones varies. Overall, the application of a management zone to an area within a protected natural area is to follow the priorities for the protected natural area. In order to maintain and restore ecological integrity, the application of management zones must first be based on ecologically and scientifically supported decision-making and second on visitor experience and use.

#### 3.2.1.1 City of London

The City's approach to identify and delineate management zones is guided by a matrix of ecological indicators and the relative sensitivity of each indicator feature. This matrix is included in the City's Trail Standards (2012). Each management zone category is based on ecological sensitivity and significance and the zones determine the range of passive recreational use opportunities. The application of Nature Reserve, Natural Area 1 or Natural Area 2 management zones is based on the seven criteria that ESAs are defined by. Each of these seven criteria is represented by a series of related ecological indicators. The sensitivity range for each indicator is predefined within the matrix. By determining the appropriate level of sensitivity for each indicator using scientifically supported decision-making, the user is able to apply an appropriate management zone. If more than one indicator is applicable to a defined area, the management zone is dictated by the most sensitive ecological indicator. For cultural heritage and archaeological features, the management zone is also based on the significance and sensitivity of the feature. The use of overlays within a management zone is used to highlight specific features or existing utilities that require ongoing access. The factors considered during the decision-making process to apply management zones are to be outlined in the Conservation Master Plan and transparent for relevant stakeholders to review.

#### 3.2.1.2 Government of Ontario

Management zones have been used in provincial parks for decades. After review of the Ontario Provincial Parks: Planning and Management Policies (MNR 1992) and the Ontario Protected Areas Planning Manual (MNR 2009), limited information is presented on how the management zones are to be applied in a manner that is consistent. It is outlined that the site objectives and management focus should be addressed through the designation of management zones. General guidance from the MNRF to resource managers has been to apply a management zone designation on the basis of resource significance and recreation potential and development. In 2014, the MNR published the Guideline to Management Planning for Protected Areas in the Context of Ecological Integrity as a supporting document to the Protected Areas Planning Manual. This guideline includes best practices for creating management zones and highlights that zoning should be based on the best available information, clearly communicated, transparent, defensible and replicable (MNR 2014).

Where defined, management zones are to be mapped, preferably in a way that allows their boundaries to be identifiable on the ground. Within provincial management plans, typically each zone identified is described and the resource uses, recreational uses and types of development permitted outlined.

### 3.2.1.3 Parks Canada

As outlined in Parks Canada (2008) Guide to Management Planning, management plans for national parks should provide:

- A brief explanation of the zoning system
- An explanation of how the zones have been applied
- A brief description of environmentally sensitive sites and culturally sensitive sites, if any
- A zoning map of the protected heritage area

A detailed process is not provided by Parks Canada that describes consistent methods to be used to determine which management zone should be applied. From the management zone descriptions, Parks Canada follows the priorities for park management; the first descriptor of a management zone speaks to the ecological foundation, with recreation value considered next.

**Based on this review, the City's process of applying management zones does not conform to provincial and federal standards as it is the only one that focuses solely on the ecological characteristics of the area. Both the Government of Ontario and Parks Canada blend the ecological and cultural features of the area with its recreational value. Further, the City has the most defined and transparent process for determining which management zone to apply to a specific area. This process allows for consistency in how management zones are applied across City ESAs.**

### 3.2.2 Changes to a Management Zone Designation or Boundary

From time to time, changes that occur naturally and as a result of disturbance processes (ex. wind, ice storms, fire, disease, urban development, etc.) may occur within a protected natural area. When a detectable and obvious change has occurred, and natural processes within the predefined zone are not anticipated to recover, changes to the management zone may be required to allow for adequate planning and/or modify permitted uses. Below, we overview if the various levels of government have a process to facilitate changes to a management zone designation and/or boundary.

### 3.2.2.1 City of London

The City considers changes within a management zone to be the result of one of two disturbance types:

1. **Natural Disturbances.** These disturbances include windstorms, ice storms, fire, flood and disease where, even if a significant change occurs, it is viewed as being critical to natural renewals and succession within the ecosystem. Changes to management zone designations and/or boundaries are not permitted in response to natural disturbances.
2. **Human Disturbance.** In instances where the disturbance is caused by human influence, such as urban development or the installation of infrastructure<sup>4</sup>, the designation and/or boundary of the ESA may be modified to reflect the new conditions if they are expected to be permanent.

The process for changes to management zones within an ESA after a Conservation Master Plan (CMP) has received Council approval is generally described in the Trail Standards. It is noted that the City will update most ESA CMPs approximately every ten years, and disturbance effects documented at that time. Through the CMP process, the management zones and the boundary of the entire ESA are reviewed and updated.

### 3.2.2.2 Government of Ontario

Management directions, including management statements and management plans, are intended to look 20 years forward. However, at least every ten years, examination of the management direction is undertaken. If changes to the management zone designation and/or boundary are required prior to the ten year review point, proposals for amendments are accommodated by undertaking a secondary plan and/or follow the Class EA process for provincial parks and conservation reserves. If the change proposed is substantial or complex in nature, a new management directive may be required in advance of the ten year review cycle. Typically, similar consultation requirements are required to consider the amendment proposed as outlined in **Section 2.3.2**.

### 3.2.2.3 Parks Canada

Within national parks, any change to management zones constitutes a major amendment to a management plan and may only be made following a strategic environmental assessment, public notice and public participation (Parks Canada 2008). Management plans are reviewed every five years to determine if amendments are needed to the management direction previously set. A “state of” report is a critical part of the review process.

**Based on the information reviewed, the City conforms to both the Government of Ontario and Parks Canada’s standards for accommodating changes to management zoning and/or protected natural areas.**

<sup>4</sup> It should be noted the City’s OP outlines that “it is the preference of the Municipal Council that the preferred location of infrastructure not be within the Natural Heritage System”.

## 4.0 Practice

Trails have been recognized as playing an important role in building strong communities and play a vital role in our well-being (Ontario Ministry of Health Promotion 2005). For many users, trails provide meaningful outdoor experiences that connect people with the natural environment and provide opportunities to appreciate and value our natural heritage systems. Where trails are permitted to be developed largely depends on the management zone of the land. The relative sensitivity assigned to the management zone then provides direction on the types of trails and activities permitted.

### 4.1 Where Trails are Permitted

The application of management planning to the installation of trails is done by using the management zones defined and determining which type of trail is appropriate. In **Table 4** below, an overview of where trails are permitted based on management zones is provided. Where specified, the types of trails that are permitted within each management zone are provided and described in **Section 4.1.1**.

**TABLE 4: OVERVIEW OF MANAGEMENT ZONES THAT PERMIT TRAILS**

City of London <sup>1</sup>	Government of Ontario <sup>2</sup>	Parks Canada <sup>3</sup>
<b>Nature Reserve</b> No trails permitted unless a special feature overlay applied*. Existing accesses, trails and structures will be reviewed for long term appropriateness*	<b>Nature Reserve</b> Trails permitted^	<b>Special Preservation</b> Type 3* and Type 4
<b>Natural Area 1</b> Level 1	<b>Wilderness</b> Trails permitted^	<b>Wilderness</b> Type 1*, Type 2, Type 3 and Type 4
<b>Natural Area 2</b> Level 1, Level 2 and Level 3*	<b>Natural Environment</b> Trails permitted^	<b>Natural Environment</b> Type 1, Type 2, Type 3 and Type 4
<b>Cultural Heritage</b> Level 1, Level 2 and Level 3*	<b>Historical</b> Trails permitted^	N/A
<b>Access</b> Level 1, Level 2, and Level 3	<b>Access</b> Trails permitted^	N/A
N/A	<b>Development</b> Trails permitted^	<b>Outdoor Recreation</b> Type 1, Type 2, Type 3 and Type 4
<b>Utility Overlay</b> Generally trails should be consistent with underlying management zone		<b>Park Services</b> Type 1, Type 2 and Type 3

^indicates trail type not specified; \*indicates trail type is only permitted in exceptional circumstances

**The City does not conform to provincial and federal standards as it is the only level of government where trails are largely discouraged in the most protected level of management zone (i.e., not permitted in a nature reserve unless a Special Feature Overlay is applied). Beyond this, the types of trails allowed in the various management zones are similar when comparing the City and Parks Canada. The City also does not conform to federal standards as Parks Canada allows for paved surface trails within Wilderness zones. A direct comparison of a Parks Canada Wilderness zone is the City's Natural Area 1 zone where paved pathways are not permitted.**

#### 4.1.1 General Description of Trail Types

For the purposes of this review, information provided on trail types will be limited to a description of the trail type, trail width and surface considerations and associated permitted structures. As stated above, only information published by the City and Parks Canada was found in time for this review. The descriptions for the various trail types are outlined in **Table 5** below.

**TABLE 5: DESCRIPTIONS OF TRAIL TYPES**

Trail Type	Description	Trail Width	Trail Surface	Associated Structures
<b>City of London</b>				
Level 1 Hiking	Natural surface	0.5 m – 1.5 m	Natural earth, woodchips, wooden logs, stepping stones	Boardwalks, viewing platforms, stairways, clear-span bridges, stepping stones, water diversions
Level 2 Pedestrian	Hiking trails improved with surface hardening	1.0 m – 2.5 m	Natural surface, granular or asphalt surface; trail hardeners permitted	Boardwalks, viewing platforms, stairways, bridges, control structures
Level 3 Pathway	Multi-use paved pathway.	3.0+ m	Asphalt or other suitable non-erodible material	N/A. Not typically permitted in an ESA
<b>Parks Canada</b>				
Type 1	Paved or hard packed surfaced double track trail, all weather use, no obstacles in surface	Minimum width 1.5 m	Compacted crushed rock, mineral soil, asphalt or chip-seal coat surface	No or minimal stairs, bridges, boardwalks, viewing platforms
Type 2	Natural surfaced packed single or double track trail	Minimum width 1.0 m	Natural mineral soils or rock for surfacing, or native material from site. May be a paved surface	Stairs, bridges, boardwalks, viewing platforms

Trail Type	Description	Trail Width	Trail Surface	Associated Structures
Type 3	Natural surface single track trail	Minimum width 0.25 m	Natural native materials from site	Stairs, bridges, boardwalk
Type 4	Not a constructed trail. May be wildlife path or not exist	N/A	N/A	N/A

**Based on the above, the trail types are relatively similar between the City and Parks Canada. The trail types that share similarities are:**

**Level 1 – Hiking (City), and Type 3 and Type 4 (Parks Canada)**

**Level 2 – Pedestrian (City) and Type 2 (Parks Canada), noting Type 2 could be paved**

**Level 3 – Pathway (City), and Type 1 and Type 2 (Parks Canada)**

## 4.2 Permitted Activities

Within protected natural areas, management planning includes determining which activities are permitted in a protected natural area and/or management zone. Determining appropriate activities involves assessing the risk associated with the potential impacts of the activity on the ecological integrity of the system being protected. In **Table 6** below, an overview of what activities are generally permitted on trails within protected natural areas is provided.

**TABLE 6: OVERVIEW OF PERMITTED ACTIVITIES ON TRAILS IN PROTECTED NATURAL AREAS**

City of London	Government of Ontario	Parks Canada
Hiking Cross-country Skiing Snowshoeing Cycling*	Hiking Cross-country Skiing Snowshoeing Cycling Mountain Biking Horseback Riding	Hiking Cross-country Skiing Snowshoeing Cycling Mountain Biking Horseback Riding Horse Drawn Carriages Dog Sledding

\*Cycling is only permitted on select pathways in three of eight ESAs

**The City does not conform to provincial and federal standards as does not permit the same types and number of activities on its trails in ESAs. Within provincial and national parks, mountain biking and horseback riding is permitted in certain zones where the activity is deemed appropriate based on the underlying ecological sensitivity of the management zone.**



## 5.0 Summary

Based on comparative assessment provided in **Sections 2, 3 and 4** of this document, there are multiple areas of the City's Trail Standards that do not conform with provincial and/or national standards. In many cases, the City's Trail Standards exceed the provincial and/or national standard and provide for a level of environmental protection that is not required in provincial or national parks. **Table 7** below overviews the areas where the Trail Standards do, or do not, conform.

**TABLE 7: SUMMARY OF CONFORMANCE TO PROVINCIAL AND/OR NATIONAL STANDARDS**

Area of Comparison	Determination of Conformance
Priorities for Protected Natural Areas	Conforms
How Trail Systems are Governed	Conforms
Accessibility of Trails	Does not conform - Exceeds. The City requires accessible trails be implemented where environmental conditions permit. This exceeds what the federal and provincial governments require.
Consultation Requirements	Does not conform - Exceeds. Though all levels of government undertake consultation, the City's process allows for a level of consultation that exceeds what the federal and provincial governments are required to undertake
Management Plan Process	Does not conform - Exceeds. The City's process exceeds the Government of Ontario as the Conservation Master Plan process has more defined requirements than a management direction and the City has a proven record of implementing restoration projects to protect and maintain ecological integrity.
Types of Management Zones	Conforms
Assigning Management Zones	Does not conform. The City focuses solely on ecological characteristics when assigning management zones rather than both the ecology and the recreational value. Public access is not permitted in Nature Reserves unless a Special Feature Overlay applies. Public access is permitted in all management zones in provincial and national parks.
Making Changes to Management Zones	Conforms
Where Trails are Permitted	Does not conform. The City is the only level of government where trails are largely discouraged in nature reserve management zones. Further, Parks Canada includes a provision for paved trails within management zones the City does not.
Permitted Activities	Does not conform. The list of recreational activities permitted by the City is more restrictive than what is allowed by the Province of Ontario or Parks Canada. Both the federal and provincial governments allow cycling, mountain biking and horseback riding in their protected natural areas.

## 6.0 Case Studies

The next step in this review is to apply the City's practices to select provincial and national parks to determine if the City's approach to trail planning and design would permit the trail systems as currently managed in those parks.

For the purposes of this review, mapping provided in publically-accessible management plans of management zones will be used and the corresponding equivalent City management zone (see **Table 2**) applied to determine if trails are permitted and, if so, which types of trails. Mapping of trail systems within each provincial or national park will be obtained from the park's website. This review will not focus on determining if the management zone applied to the provincial or national park would meet the equivalent management zone defined by the City as the required data is not readily-available for review and analysis.

### 6.1 Provincial Parks

As outlined in **Section 3.2**, comparisons of provincial parks to the City's ESAs focused only on provincial parks classified as nature reserve, wilderness or natural environment. These classes of provincial parks are equivalent to an ESA based on their ecological sensitivity.

#### 6.1.1 Komoka Provincial Park

Komoka Provincial Park (Komoka) is a natural environment class provincial park. The Komoka Park Management Plan was last approved in 2010 by the MNR. This class of Provincial Park may include all six types of management zones. With a total size of only 324 ha (MNR 2010); Komoka has been predominantly zoned as nature reserve, with some natural environment zones and limited access zones. The boundary and management zoning for Komoka is provided in Figure 2 of the Management Plan (MNR 2010). Mapping of the trail system and permitted activities was obtained from the Ontario Park's website (Ontario Parks 2010). For ease of reference, these figures have been extracted and are provided in **Appendix A. Table 8** overviews the various management zones within Komoka and the types of trails currently associated with each zone.

TABLE 8: KOMOKA PROVINCIAL PARK MANAGEMENT ZONES AND TRAIL SYSTEM

Management Zone	Trails Located within Zone	Does the City Permit Trails in this Zone?
<b>Nature Reserves (equivalent City management zone is Nature Reserve)</b>		
NR1 Thames Valley	Trails occur throughout the management zone. Permitted activities on trails included horseback riding and mountain biking along all trails except the one nearest to the Thames River (uses under review). As outlined in the management plan, a review of the trail system was pending to determine which trails should be closed or relocated and where new trails should be developed.	No
NR2 Glendon Drive Woodlot	These lands were identified as lands to be acquired and pending regulation in the management plan.	No
<b>Natural Environment Zone (equivalent City management zone is Natural Area 2)</b>		
NE1 The Ponds	These lands were identified as lands to be acquired and pending regulation in the management plan.	Yes

**Based on the above, and after reviewing the park's Management Plan (MNR 2010), NR1 was zoned as nature reserve based on life science and earth science areas of natural and scientific interest (ANSI) and habitat for threatened and endangered Species at Risk. Following the City's process, the only option for this area is to be designated as a nature reserve zone (due to the Species at Risk indicator), which prohibits public access and trails unless a special feature overlay is applied.**

### 6.1.2 Pinery Provincial Park

The Pinery Provincial Park (Pinery) is a natural environment class provincial park. The Pinery Park Management Plan was last approved in 1986 by the MNR. This class of Provincial Park may include all six types of management zones. With a total size of 2532.5 ha (MNR 2010), the Pinery has been predominantly zoned as nature reserve and natural environment. Approximately 25% of the park is zoned as development, which is where various camping facilities are located. As stated above, development zones will not be reviewed as there is no equivalent management zone permitted in City ESAs. The management zoning for Pinery is provided in Figure 3 of the Management Plan (MNR 1986). Mapping of the trail system and permitted activities was obtained from park's website. For ease of reference, these figures have been extracted and are provided in **Appendix B. Table 9** overviews the various management zones within Pinery and the types of trails currently associated with each zone.

TABLE 9: PINERY PROVINCIAL PARKS MANAGEMENT ZONES AND TRAIL SYSTEM

Management Zone	Trails Located within Zone	Does the City Permit Trails in this Zone?
<b>Nature Reserves (equivalent City management zone is Nature Reserve)</b>		
NR1 Low Dune Ridge Road	<ul style="list-style-type: none"> <li>Bittersweet trail: Includes a viewing platform and stairs.</li> <li>Wilderness trail: Includes a viewing platform and stairs.</li> </ul>	No
NR2 Lakeshore Dune	<ul style="list-style-type: none"> <li>Lookout trail: Includes a viewing platform and stairs.</li> <li>Heritage trail: Includes a viewing platform and is wheelchair accessible.</li> <li>Hickory trail: Includes stairs.</li> <li>Riverside trail: Includes a viewing platform and is wheelchair accessible.</li> <li>Pine trail (portion of): Includes stairs.</li> <li>Includes majority of park bicycle trail.</li> </ul>	No
NR3 Dune Meadows	<ul style="list-style-type: none"> <li>Cedar trail: Includes a viewing platform. Looped portion of trail is wheelchair accessible.</li> </ul>	No
NR4 Ausable Lowlands	<ul style="list-style-type: none"> <li>Carolinian trail: Includes stairs.</li> </ul>	No
NR5 Burley Wet Meadows	<ul style="list-style-type: none"> <li>No trails</li> </ul>	No
<b>Natural Environment Zone (equivalent City management zone is Natural Area 2)</b>		
NE All non-NR or Development	<ul style="list-style-type: none"> <li>Nipissing trail: Includes a viewing platform and stairs.</li> <li>Pine trail (portion of): Includes stairs.</li> </ul>	Yes

**Based on the above, and after reviewing the park's Management Plan (MNR 1986), all nature reserve zones within the provincial park provide habitat for threatened and endangered Species at Risk. Following the City's process, the only option for this area is to be designated as a nature reserve zone (due to Species at Risk indicator), which prohibits public access and trails unless a special feature overlay is applied.**

## 6.2 National Parks

National parks are chosen as representative natural areas of Canadian significance and represent a distinct natural region. The management zones applied to national parks are aligned with those applied in City ESAs.

### 6.2.1 Georgian Bay Islands National Park

The Georgian Bay Islands National Park of Canada (Georgian Bay Islands) is comprised of 63 dispersed islands and shoals. The Georgian Bay Islands Management Plan was last approved in 2010 by Parks Canada.

With a total size of approximately 14 km<sup>2</sup> (Parks Canada 2010a), Georgian Bay Islands has been predominantly zoned as wilderness, with islands lacking visitor facilities zones as special preservation. Some small areas on Beausoleil Island are zoned as outdoor recreation. These areas will not be discussed further as there is no equivalent City management zone.

As more than 75% of the national park land area (approximately 11 km<sup>2</sup>) is comprised of Beausoleil Island, the review will focus on the wilderness zones in this portion of the park. The management zoning for Beausoleil Island is included as an inset in the park zoning section of the Management Plan (Parks Canada 2010a). Mapping of the trail system and permitted activities was obtained from the Parks Canada's website. For ease of reference, these figures have been extracted and are provided in **Appendix C. Table 7** below overviews the wilderness management zone on Beausoleil Island and the types of trails currently associated with that zone.

**TABLE 10: BEAUSOLEIL ISLAND MANAGEMENT ZONES AND TRAIL SYSTEM**

Management Zone	Trails Located within Zone	Does the City Permit Trails in this Zone?
<b>Wilderness (equivalent City management zone is Natural Area 1)</b>		
Beausoleil Island	<ul style="list-style-type: none"> <li>All 15 formal trails are within this zone.</li> <li>Permitted activities on Georgian, Tonch, Treasure and Huron trails include cycling</li> <li>Cabins provided at Christian Beach</li> <li>Various campgrounds, picnic areas and docks/wharfs</li> </ul>	Yes (but no other uses)

**Based on the above, and after reviewing the park's Management Plan (Parks Canada 2010), the City's process would allow for trails in a wilderness zone. However, cycling, cabins and campgrounds would not be permitted in a City ESA. From reviewing the park's Management Plan (Parks Canada 2010), Beausoleil Island has been identified as providing critical habitat for threatened and endangered Species at Risk. This island is well known for its diversity of reptiles and amphibians and each year groups such as Ontario Nature co-host a survey course with the MNRF where year-over-year records of Species at Risk snakes and turtles are documented. Following the City's process, it is likely that the majority of Beausoleil Island, if not all of it (including the outdoor recreation zones) would be zoned as nature reserve due to the Species at Risk indicator, which prohibits public access and trails unless a special feature overlay is applied.**

## 6.2.2 Point Pelee National Park

Point Pelee National Park of Canada (Point Pelee) is Canada's southernmost national park and covers an area of approximately 15.5 km<sup>2</sup>. The Point Pelee Management Plan was last approved in 2010 by Parks Canada. Point Pelee includes the following management zones: special preservation; natural environment; and, outdoor recreation (Parks Canada 2010b).

The outdoor recreation zone will not be discussed further as there is no equivalent City management zone. The management zoning for Point Pelee is provided in Figure 5 of the Management Plan (Parks Canada 2010b). Mapping of the trail system and permitted activities was obtained from Park Canada's website for Point Pelee. For ease of reference, these figures have been extracted and are provided in **Appendix D. Table 11** below overviews the various management zones within Point Pelee and the types of trails currently associated with each zone.

**TABLE 11: POINT PELEE MANAGEMENT ZONES AND TRAIL SYSTEM**

Management Zone	Trails Located within Zone	Does the City Permit Trails in this Zone?
<b>Special Preservation (equivalent City management zone is Nature Reserve)</b>		
Middle Island	<ul style="list-style-type: none"> <li>No documented, established trails. Likely Type 4 trails exist.</li> <li>Island is closed to the public between April 1 and September 30 each year to protect the nesting colonies of five species of waterbirds.</li> </ul>	No
Marsh and East Beach Ridge	<ul style="list-style-type: none"> <li>Water route provided within the marsh. Non-motorized vessels only. Area of marsh boardwalk within the zone has been delineated and designated an outdoor recreation zone.</li> </ul>	No
Ridge and Trough Swamp Forest	<ul style="list-style-type: none"> <li>None</li> </ul>	No
Sections along Western Shoreline	<ul style="list-style-type: none"> <li>Sanctuary trail. Includes picnic area, parking and washrooms.</li> <li>Centennial bike and hike trail (portions of)</li> </ul>	No
<b>Natural Environment (equivalent City management zone is Natural Area 2)</b>		
Henry Community Youth Camp	<ul style="list-style-type: none"> <li>Chinquapin Oak Trail</li> <li>Centennial bike and hike trail (portions of)</li> </ul>	Yes
East Beach (south of marsh to tip)	<ul style="list-style-type: none"> <li>Shuster trail</li> <li>Tilden Woods trail (portions of)</li> <li>Woodland Nature trail including Redbud Footpath</li> <li>West Beach Footpath</li> <li>Sparrow Field Footpath</li> <li>Tip Trails</li> </ul>	Yes

Management Zone	Trails Located within Zone	Does the City Permit Trails in this Zone?
Western Shoreline between Dunes and Pioneer	<ul style="list-style-type: none"> <li>• Dunes Footpath. Includes picnic shelter and washrooms.</li> <li>• Sleepy Hollow Footpath. Includes picnic shelter and washrooms.</li> <li>• Pioneer Footpath. Includes picnic shelter and washrooms.</li> <li>• Footpath connections between Dunes, Sleepy Hollow and Pioneer</li> </ul>	Yes
DeLaurier Homestead	<ul style="list-style-type: none"> <li>• DeLaurier Homestead and Trail. Wheelchair accessible and includes picnic area.</li> </ul>	Yes
White Pine	<ul style="list-style-type: none"> <li>• White Pines Footpath. Includes picnic shelter.</li> </ul>	Yes

Based on the above, and after reviewing the park's Management Plan (Parks Canada 2010b), the City's process would not allow for trails, cycling, parking and washroom facilities within the areas zoned as special preservation (which is equivalent to a nature reserve zone in an ESA). From Parks Canada zone descriptions (Parks Canada 2008) and trail classification system (Parks Canada 2012), these facilities are also not permitted by Parks Canada in this management zone. It is assumed these trails and facilities predate the application of zones to the park.

From reviewing the park's Management Plan (Parks Canada 2010) and from the Species at Risk critical habitat mapping received from Point Pelee (Dan Dufour, Project Coordinator, Point Pelee National Park, via email November 2015), the entire extent of the national park has been identified as critical habitat for one or more of the numerous birds, plants, turtles and/or snake Species at Risk that are found in Southwestern Ontario (see Appendix E for mapping; not included in versions of this report meant for public distribution). This includes the outdoor recreation zones. Following the City's process, Point Pelee in its entirety would be zoned as nature reserve due to the Species at Risk indicator, which prohibits public access and trails unless a special feature overlay is applied.

Of particular note is Point Pelee's management of Middle Island. Added to the park in 2000, Middle Island is a good example of how public access to a special preservation zone can be managed to permit both nature appreciation and protection of sensitive wildlife. There are no managed trails on the island (i.e., only Type 4 trails are to be expected) and the public is prohibited from accessing the island during the bird breeding season when the populations of Species at Risk that use the island as habitat are most-vulnerable to disturbances. Outside of this season, public access is permitted.

## Conclusion

---

Upon comparing the policies, processes and practices used to plan and design trail systems in protected natural areas, the City's Trail Standards are not in conformance with provincial and national standards. In half of the key areas assessed, the Trail Standards either require the City to exceed what is required for national and provincial parks or prohibits trails and/or recreational activities that are generally permitted by the provincial and federal governments.



## Discussion

At this time, the Government of Ontario has not legislated how trail systems are planned for or implemented on lands not under provincial management and/or ownership. Provided municipalities conform to the environmental legislation that may be applicable for the area where they are working, and follow any suitable planning processes (e.g. master plan, Class EA, etc.), municipalities are able to put trail guidelines in place that best suit the community it serves. In 2012, this is what the City did when Council approved the Trail Standards as a planning and design tool for use in the development of trail master plans and/or Conservation Master Plans for ESAs.

During the City's CMP process for ESAs, the focus to date has been more on either rationalizing the presence and/or location of existing trails, not building new trails. When Council approved the Coves ESA CMP in 2014, the recommendations included the closure of approximately 6 km of existing informal/unmanaged trails. No new trails were proposed in the CMP. In addition to the closing of trails, recommendations included improving or realigning existing trails to be sustainable and reduce identified impacts.

From reviewing the oral submissions made to Council at its session held on June 26 and 27, 2012 (included in the letter correspondence from C. Saunders, City Clerk, dated June 27, 2012), concerns about potential trail closures were communicated to Council based on the realization the majority of many ESA would eventually be zoned nature reserve.

Trail systems do not need to be viewed as an impact that cannot be mitigated. It is generally accepted that well-designed trails lead users along defined paths and can act as environmental buffers to protect more sensitive features while allowing users to experience the natural surroundings (Ontario Ministry of Health Promotion 2005).

Overall, the City's priority to maintain and restore ecological integrity in protected natural areas is aligned with other levels of government. As outlined in **Section 2**, all levels of government have policies that prioritize ecological integrity over public use/visitor experience. Where the differences lie is with where trails are permitted and how they are used. In general, where the City defines a nature reserve management zone in an ESA, the current policy is to:

- Prohibit public access
- Refrain from building new trails
- Review existing trails and structures for appropriateness and, if necessary, close or reroute trails if needed

The exception is if a special feature overlay has been applied.

By following the City's process to define management zones, all areas that are habitat for Species at Risk under either the Ontario *Endangered Species Act, 2007* or federal *Species at Risk Act, 2002* are to be zoned as nature reserve and therefore existing accesses, trails and structures would require review for long term appropriateness. Given the biodiversity of species and natural communities found in the City ESAs, and the number of Species at Risk located in Southwestern Ontario, it can be expected that a large amount of the City's ESAs will be zoned as nature reserves. Unless the majority of these have special feature overlays, the logistics of enforcing a prohibition on ESA access may not be possible. As such, recommendations are provided in **Section 9** for the City to consider as they move forward with reviewing the Trail Standards in 2016.

## Recommendations

At its meeting on October 13, 2015, Council requested the City's Civic Administration review the Trail Standards by the end of the second fiscal quarter (Q2) in 2016. The review provided in this report has outlined evidence that the City's Trail Standards largely do not conform to provincial and national standards. As summarized in **Section 5**, the City's Trail Standards surpass both provincial and national standards when it comes to the protection of ecological integrity.

Based on this, and Dillon's experience with the current Trail Standards, the following recommendations are provided for consideration for areas where the City's Trail Standards exceed or do not conform to provincial and/or national standards.

### Accessibility of Trails

- Continue to meet the City's FADS 2007 requirements, which exceed the provincial AODA requirements.

### Consultation Requirements

- Determine an appropriate level of consultation for both the CMP process and/or for site-specific issues and/or projects within an ESA.

### Assigning Management Zones

- Review the descriptions of nature reserves and natural area 1 management zones and more clearly define the differences between them (if any).
- The matrix for identifying and delineating management zones in ESAs should be reviewed. Where indicators are listed, greater emphasis could be placed on directing users to specific guidelines and criteria developed for identifying and evaluating these natural features (if available). By revising the matrix in this way, the Trail Standards would have greater longevity and would maintain currency with changing legislation. In addition, the Trail Standards would direct the user to collect data and information that would be relevant prior to any new trail construction.
- Following guidance from MNR (2014) for provincial parks, the number of zones within a protected natural area should be minimized to the extent possible and should be contiguous.
- Temporal zoning has been identified as a complement to management zoning (Parks Canada 2008). Temporal zoning can take seasonal variations into account without compromising management objectives implied by the zone designation. An example of how this works well is provided in **Section 5.2.2** (Point Pelee's Middle Island).

### Where Trails are Permitted

- The prohibition of the public, trails and/or structures within nature reserves should be reviewed. With appropriate planning and design, trail impacts can be mitigated. Further, not all natural features are sensitive to trails and/or trail use. Given habitat for federally and/or provincially protected Species at Risk in a City ESA requires the designation of a nature reserve zone (as per the current Trail Standards), a process should be in place to define the sensitivity of the specific species in relation to the development of new or relocated trails. This should be done in consultation with the MNRF as activities that have the potential to impact Species at Risk may require authorization under the Ontario *Endangered Species Act, 2007* or submission of a Notice of Activity form to the MNRF Registry (as outlined under Ontario Regulation 242/08).
- The description of the special feature overlay and how it is applied within nature reserves should be reviewed and revised for clarity.

### Permitted Activities

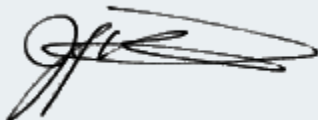
- Consider expanding the scope of recreational activities permitted in ESAs to reflect permitted activities within provincial and national parks if the primary goal of protection can be achieved and user conflicts addressed.

### Other

- Since the City ESAs are well-used features by the residents of and visitors to the City, a process that adopts progressive elaboration should be explored. For those ESAs that currently have numerous formal and informal trails and access points, decisions on management zones, trail closures/re-routes, and any new trails can have a significant impact on a community. The City's current process is to define and finalize management zones as the first stage of the Conservation Master Plan process. In the second stage, a conceptual plan for the trail system in the ESA is created. As it is currently followed, the Trail Standards do not allow for the City to "go back" and complete successive iterations of the management zones as the process of planning the trail system evolves. By providing for progressive elaboration, the full Conservation Master Plan could be completed as one continuous process.

Yours sincerely,

**DILLON CONSULTING LIMITED**



Jennifer Petruniak, M.Sc.  
Project Manager

JP:lld

## 10.0 References

- City of London. 2006. Official Plan and associated Schedules.
- City of London, 2012. Planning and Design Standards for Trails in Environmentally Significant Areas. Prepared by: Parks Planning and Design, Planning Division with Schollen & Company Inc. and North-South Environmental.
- City of London, 2007. Facility Accessibility Design Standards, 108 pp.
- Dillon Consulting Limited. 2015. Invasive Species Control Program Results. Medway Valley Heritage Forest ESA. 32 pp.
- Eagles, P.F.J, 2007. Review of the Ontario Provincial Parks and Conservation Reserves Act, 2006. Published in the Science and Management of Protected Areas Association 2007 Conference Proceedings.
- Environmental Commissioner of Ontario 2015. Annual Report 2014/2015: Small Things Matter. 180 pp.
- Government of Canada. *Canada National Parks Act, 2000*. <http://laws-lois.justice.gc.ca/eng/acts/n-14.01/> Last amended 2015-09-01.
- Government of Ontario. Ontario Regulation 191/11 Integrated Accessibility Standards under the *Accessibility for Ontarians with Disabilities Act, 2005*. Last amended January 1, 2013.
- Government of Ontario. *Provincial Parks and Conservation Reserves Act, 2006*. <http://www.ontario.ca/laws/statute/06p12> Last amended June 2, 2012.
- Office of the Auditor General of Canada, Fall 2013. Chapter 7: Ecological Integrity in National Parks. 42 pp.
- Ontario Ministry of Health Promotion, 2005. Ontario Trails Strategy. Queens Printer for Ontario. 27 pp.
- Ontario Ministry of Municipal Affairs and Housing. 2014. Provincial Policy Statement under the *Planning Act*.
- Ontario Ministry of Natural Resources. 1986. Pinery Provincial Park Management Plan. Queens Printer for Ontario. 27 pp.
- Ontario Ministry of Natural Resources, 1992. Ontario Provincial Parks: Planning and Management Policies. 1992 Update. 125 pp.
- Ontario Ministry of Natural Resources. 2004. A Class Environmental Assessment for Provincial Parks and Conservation Reserves. Queen's Printer for Ontario. 131 pp.
- Ontario Ministry of Natural Resources. 2009. Ontario Protected Areas Planning Manual. Peterborough. Queen's Printer for Ontario. 50 pp.
- Ontario Ministry of Natural Resources. 2010. Komoka Park Management Plan. Queens Printer for Ontario. 43 pp.
- Ontario Ministry of Natural Resources. 2014. Guideline to Management Planning for Protected Areas in the Context of Ecological Integrity. Peterborough. Queens Printer for Ontario. 79 pp.

- Ontario Ministry of Natural Resources. 2013. An amendment to: A Class Environmental Assessment for Provincial Parks and Conservation Reserves. Queen's Printer for Ontario. 83 pp.
- Ontario Ministry of Tourism, Culture and Sport. Bill 100, *Supporting Ontario's Trails Act, 2015*. [http://www.ontla.on.ca/web/bills/bills\\_detail.do?locale=en&BillID=3338](http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=3338) First Reading May 12, 2015.
- Ontario Parks 2010. Komoka Trail System and Permitted Activities. [http://www.ontarioparks.com/english/planning\\_pdf/komo/komo\\_authorized\\_trails.pdf](http://www.ontarioparks.com/english/planning_pdf/komo/komo_authorized_trails.pdf) Accessed December 2015
- Parks Canada 1994. Parks Canada Guiding Principles and Operational Policies. <http://www.pc.gc.ca/eng/docs/pc/poli/princip/index.aspx> Accessed November 2015
- Parks Canada 2008. Guide to Management Planning. 100 pp.
- Parks Canada 2010a. Georgian Bay Island National Park of Canada Management Plan. 59 pp. Including map of Beausoleil Island. [file:///C:/Users/20jlp/Downloads/Beausoleil%20Map\\_en%20\(2\).pdf](file:///C:/Users/20jlp/Downloads/Beausoleil%20Map_en%20(2).pdf) Accessed December 2015.
- Parks Canada 2010b. Point Pelee National Park of Canada Management Plan. 95 pp. Including map of Point Pelee. <http://www.pc.gc.ca/eng/pn-np/on/pelee/visit/visit2.aspx> Accessed December 2015.
- Parks Canada. 2012. Parks Canada Trail Guidelines: Trail Classification System User Guide (20 pp.) and Trail Specifications (16 pp.)
- The Friends of Pinery Park. Pinery Provincial Park Interpretive Walking Trails and Mapping. [http://www.pinerypark.on.ca/walking\\_trails.html](http://www.pinerypark.on.ca/walking_trails.html). Accessed December 2015.
- Trails for All Ontario Collaborative, 2006. Ontario's Best Trails: Guidelines and Best Practices for the Design, Construction and Maintenance of Sustainable Trails for All Ontarians. 309 pp.

**Appendix A**  
*Komoka Provincial Park*



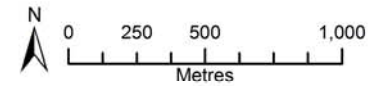
Figure 2



# Komoka

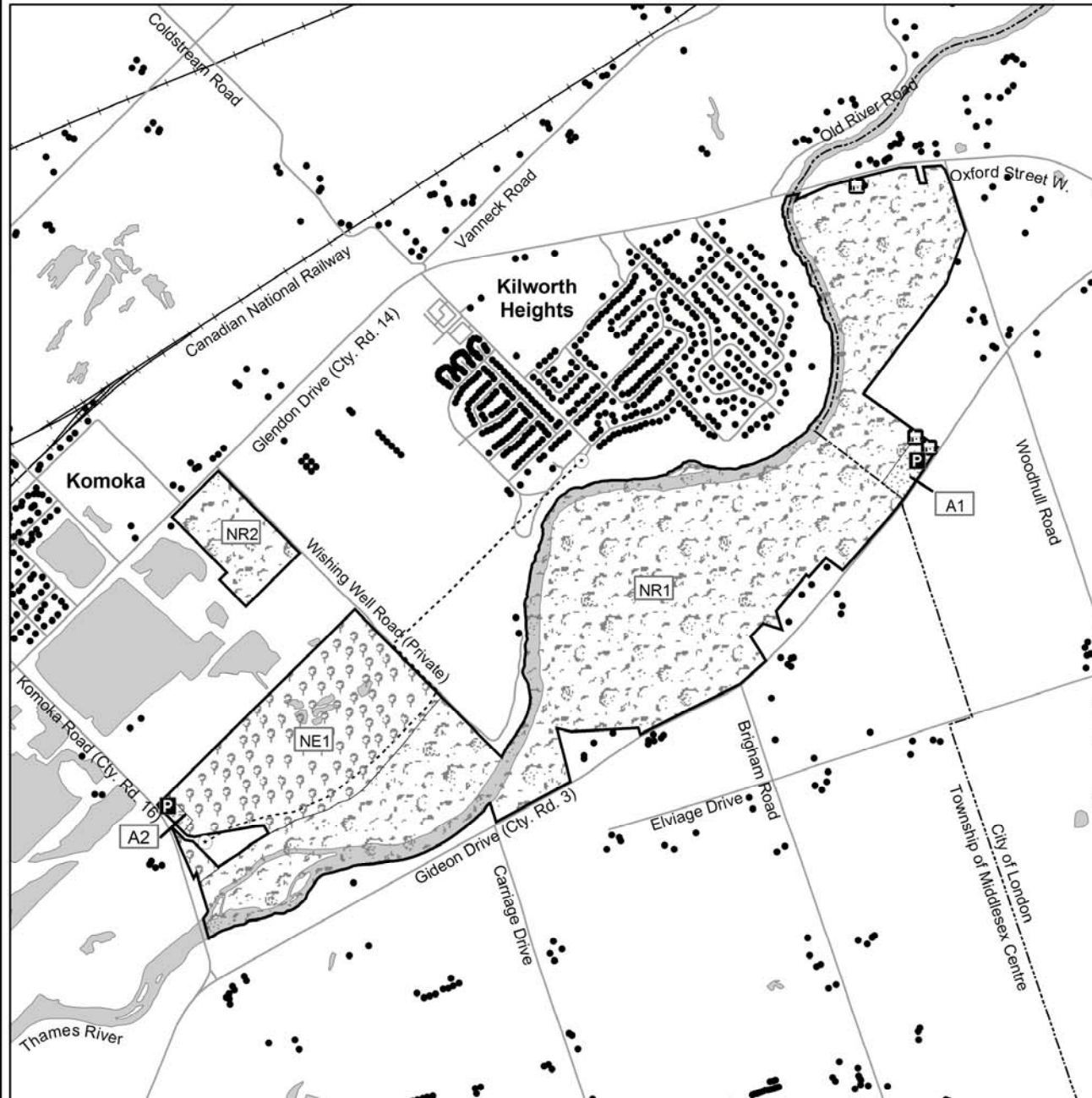
## Legend

- Proposed Park Boundary
- Proposed Zoning**
- Access Zones (A1, A2)
- Natural Environment Zone (NE1)
- Nature Reserve Zones (NR1, NR2)
- Park Buildings
- Proposed Parking Lot
- Municipal Sewage Treatment Facility
- Proposed Sanitary Sewer
- Municipal Boundary
- Building
- Primary Road
- Railway
- Waterbody



Copyright November 2008  
 Queen's Printer for Ontario  
 Produced by Ontario Parks, Southwest Zone

This map is for illustrative purposes only.  
 Do not rely on it as being a precise indicator of  
 Routes, locations of features nor as a guide to  
 Navigation.





**Provincial Parks and Conservation Reserves Act, 2006**

"Sec. 37. An officer (Park Warden) has all of the power and authority of a member of the Ontario Provincial Police within a provincial park", PPCRA, 2006, c.12, s.37

Authority of a Park Warden includes powers of **ARREST, INSPECTION, SEARCH & SEIZURE**

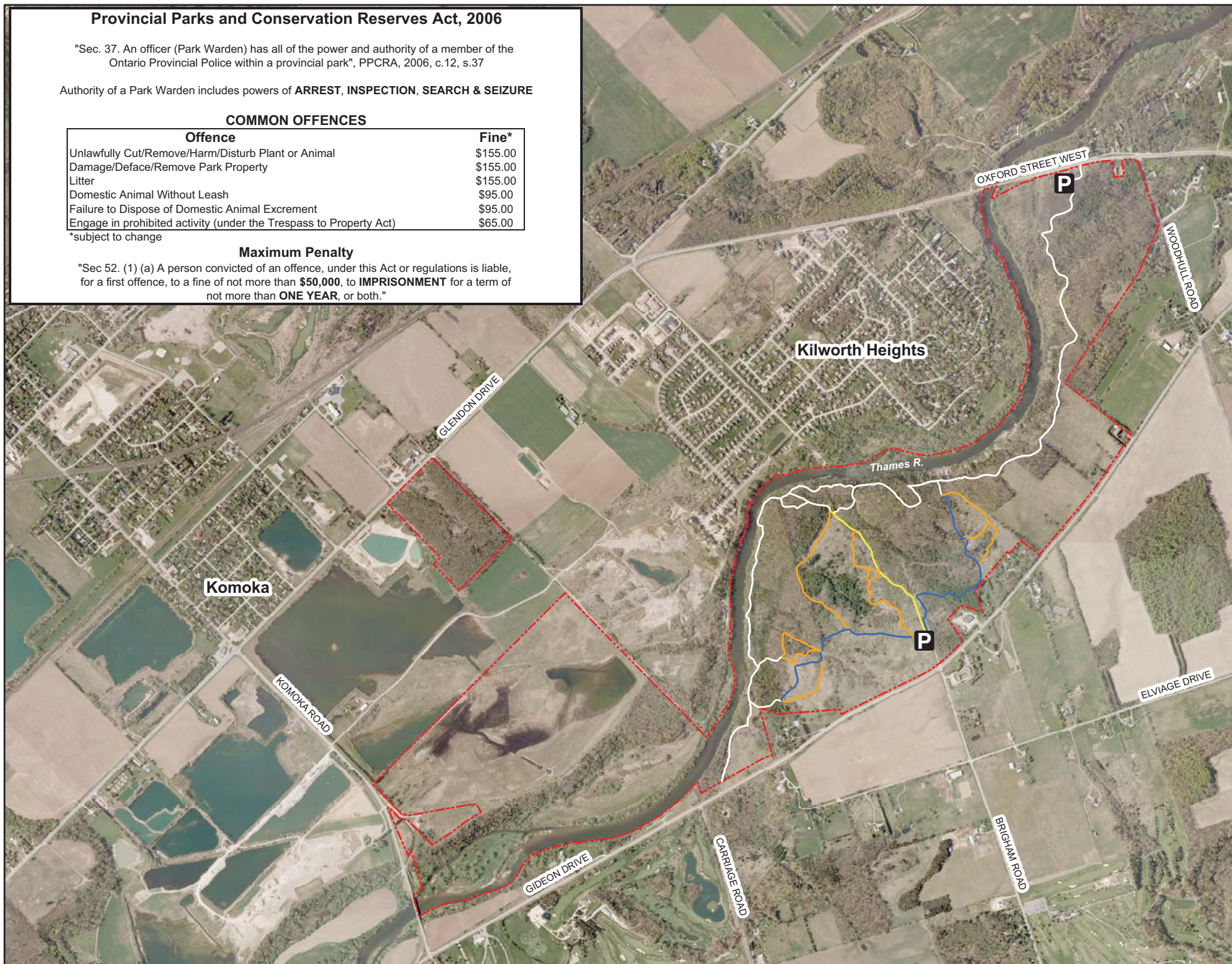
**COMMON OFFENCES**

Offence	Fine*
Unlawfully Cut/Remove/Harm/Disturb Plant or Animal	\$155.00
Damage/Deface/Remove Park Property	\$155.00
Litter	\$155.00
Domestic Animal Without Leash	\$95.00
Failure to Dispose of Domestic Animal Excrement	\$95.00
Engage in prohibited activity (under the Trespass to Property Act)	\$65.00

\*subject to change

**Maximum Penalty**

"Sec 52. (1) (a) A person convicted of an offence, under this Act or regulations is liable, for a first offence, to a fine of not more than **\$50,000**, to **IMPRISONMENT** for a term of not more than **ONE YEAR**, or both."



**Komoka**

**Trail System & Permitted Activities**

**Legend**

Trail System	Permitted Activities
Blue	Hiking
Orange	Mountain Biking
Yellow	Horseback Riding
White	Hiking
P	Parking Area
(Red dashed line)	Komoka Provincial Park



This map is for illustrative purposes only. Do not rely on it as being a precise indicator of routes, locations or features nor as a guide to navigation.

Prepared by Ontario Parks, Southwest Zone  
Copyright 2010, Queen's Printer for Ontario

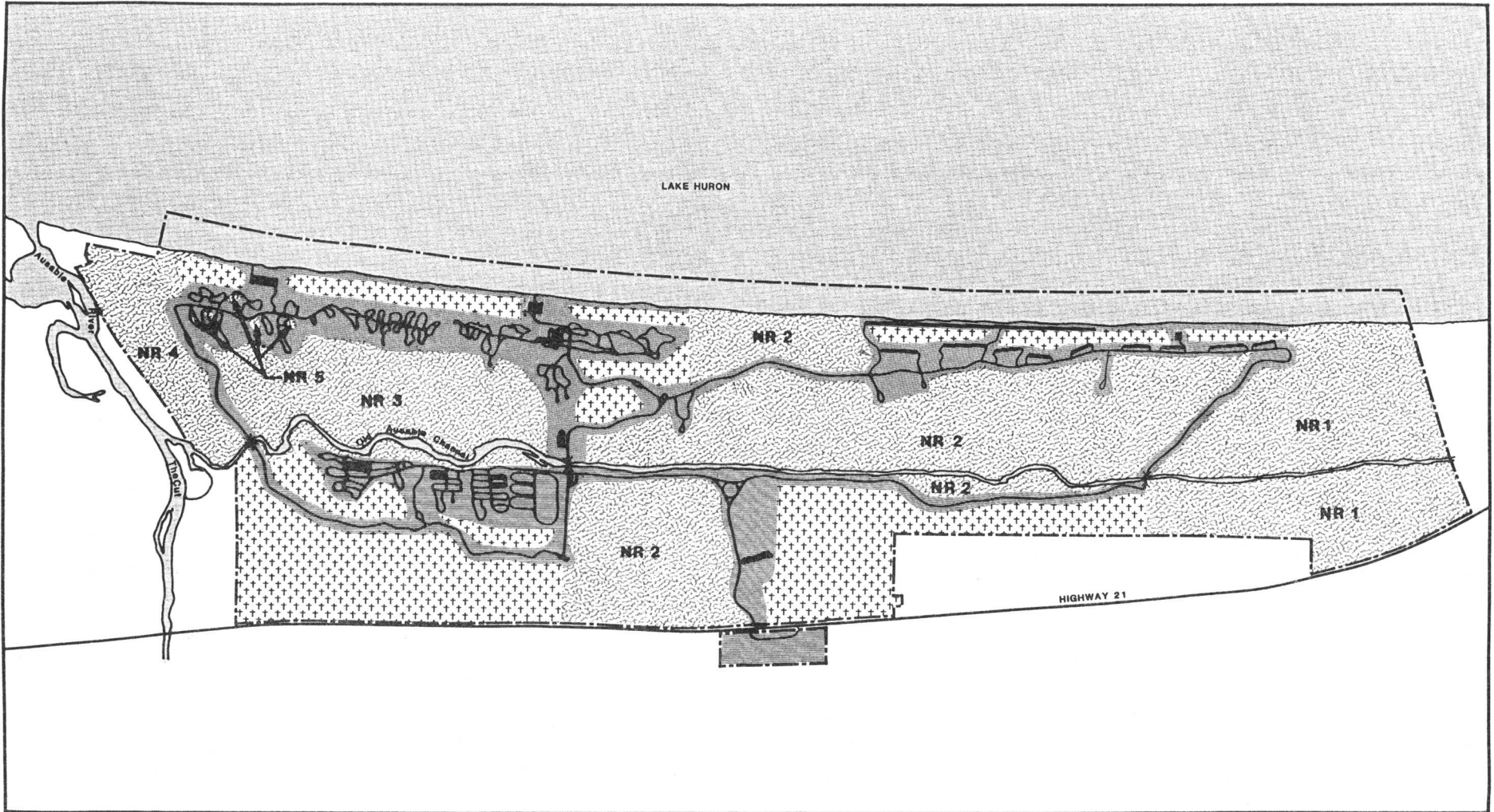
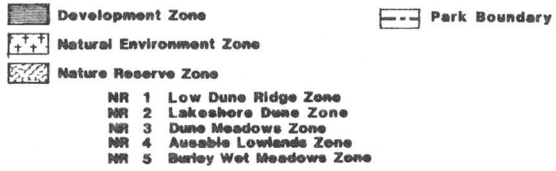


**Appendix B**  
*Pinery Provincial Park*



Figure 3

Park Zoning

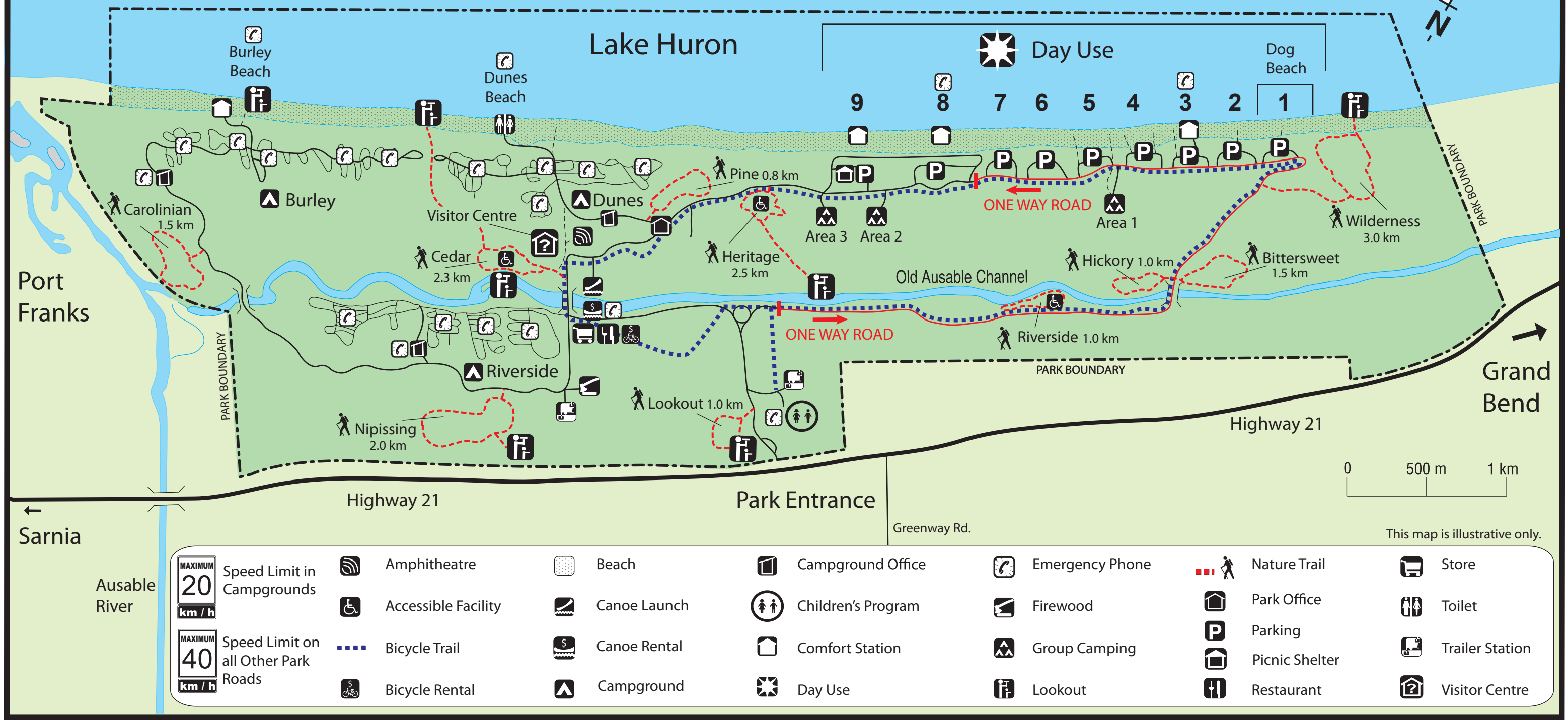


0 250 500 1000 2000m



North

# Pinery Provincial Park



**Emergency Telephones:** located at each comfort station in the campgrounds, Picnic Areas 3 & 8, Dunes and Burley Beach Access Areas, canoe rental dock and at the children's program chalet.  
**Public Telephones:** located at the park store and each campground office.

**Visitor Centre:** open daily, 10:00am - 5:00pm during the summer season. Open weekends year-round.  
**Park Store:** open daily, 8:00am - 10:00pm during July and August.  
**Dog Beach:** Picnic Area 1. **Dogs must be leashed at all times, owners clean up after pets.**

**Firewood:** available at the Main Gatehouse and the woodyard which is located between the park store and Riverside Campground Office.  
**Drinking Water:** treated water is available from all park taps. Visitors should not drink lake or river water. **Do not wash dishes at water taps.**

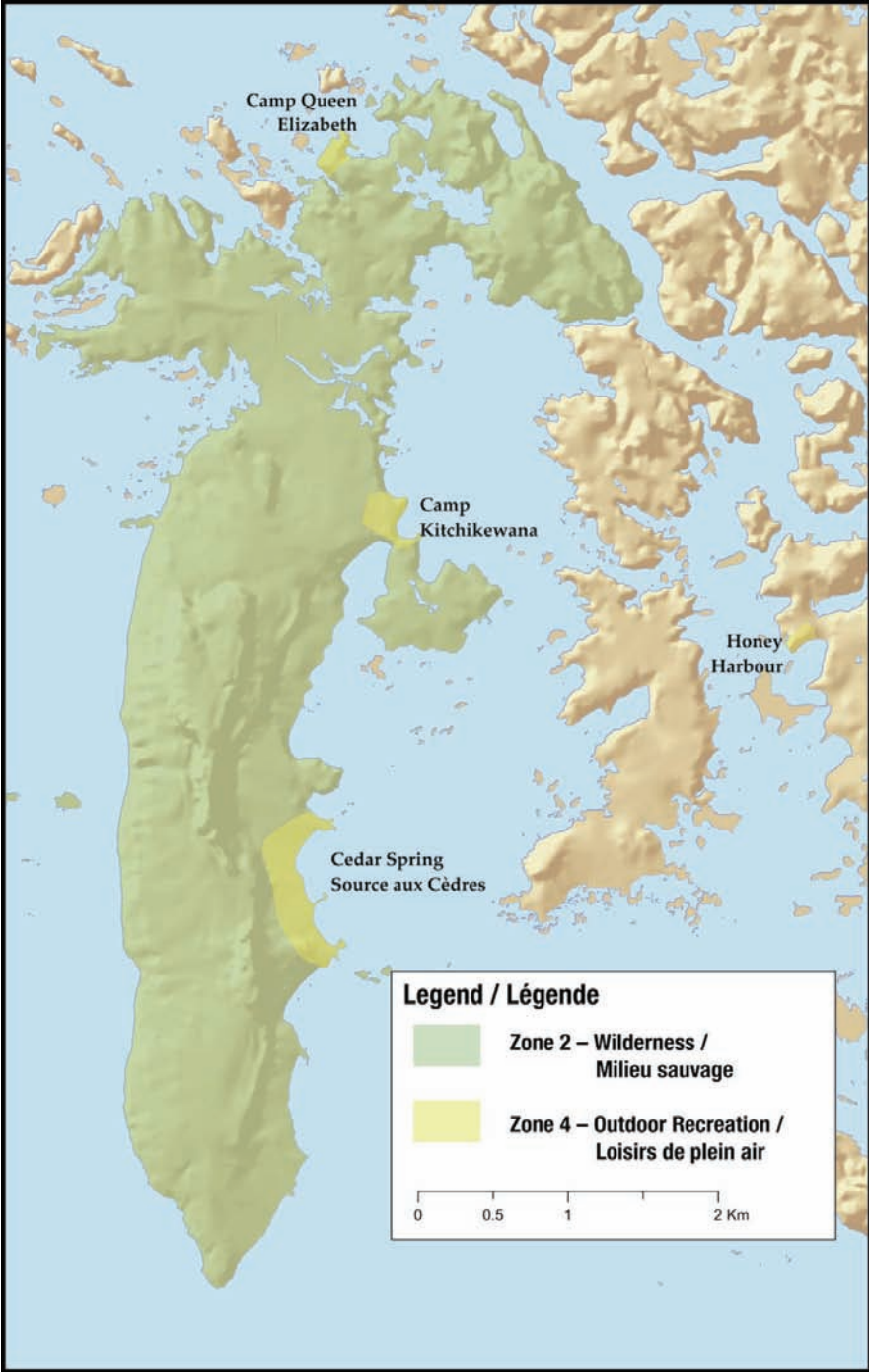
**Trailer Sanitation:** located adjacent to the Lookout Trail parking lot and the woodyard.  
**One Way Road:** Please note the day-use road between the traffic circle and Picnic Area 8 is a one way road; please obey signage.

This map is illustrative only.

## Appendix C

### *Georgian Bay Island National Park: Beausoleil Island*

# PARK ZONING





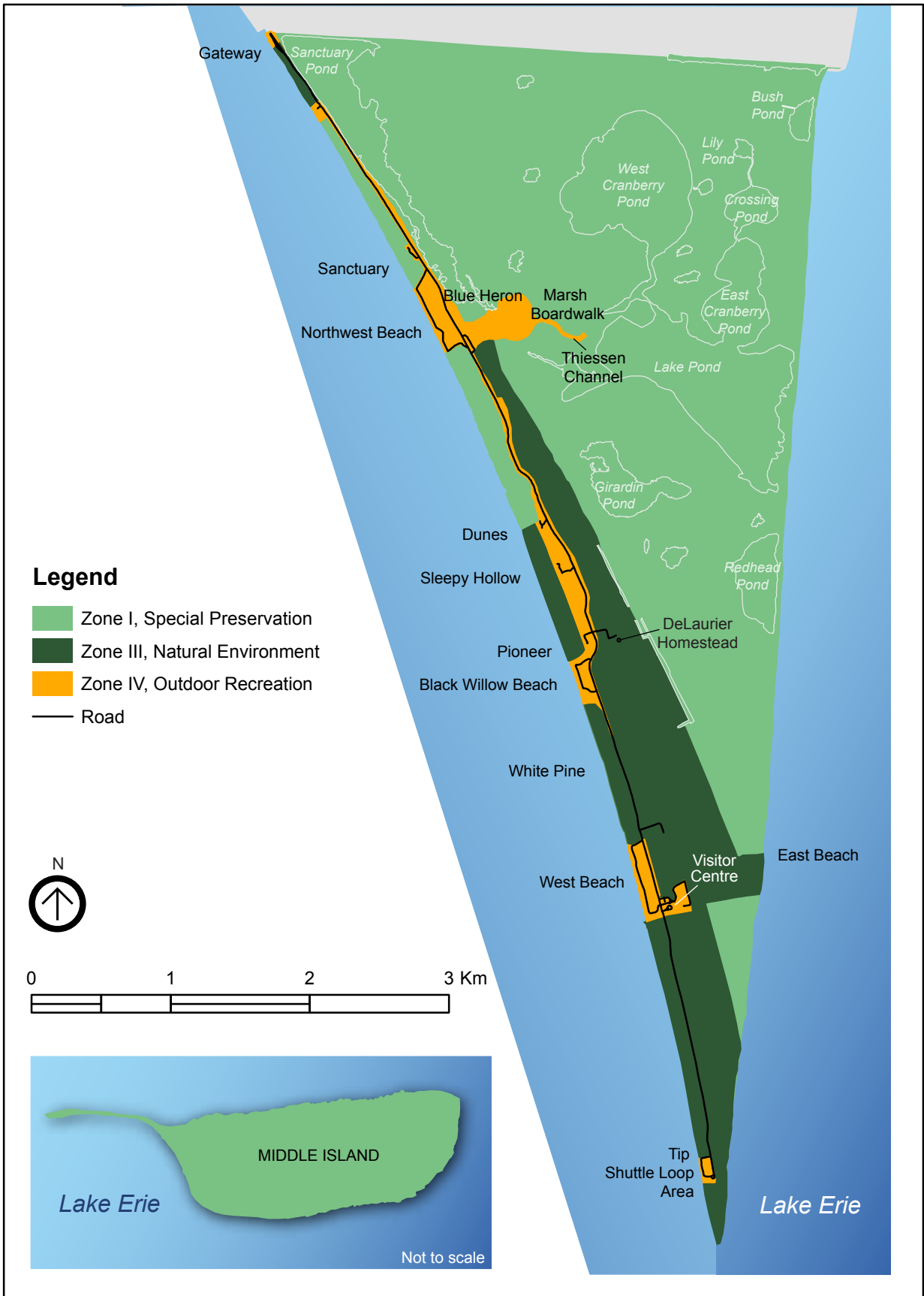
# Appendix D

*Point Pelee National Park*





Figure 5 - Map of Park Zoning



For geocaching enthusiasts, the coordinates of the park entrance kiosk are:  
**N 41° 59.2033 W 082° 32.9417**

**Marsh Boardwalk**  
 1 km (loop), 45 minutes



Boardwalk with observation tower and telescopes. View the most diverse habitat in the park, where cattails, red-winged blackbirds and painted turtles are abundant.

**Centennial Bike & Hike Trail**  
 4 km, (2 hours one-way)



Shaded, winding trail takes you on a journey through dry forest, beach and savannah. Start at the Marsh Boardwalk and peddle your way to the Visitor Centre.

**DeLaurier Homestead & Trail**  
 1.2 km (loop), 50 minutes



Historic house and barn with exhibits and artifacts featuring a small part of the park's cultural and human heritage. Trail leads to open fields, cedar savannah, and swamp forest. View the eagle nesting platform from the observation tower.

**Chinquapin Oak Trail**  
 4 km (loop), 2 hours




Access from Tilden Woods Trail or near White Pine picnic area. Links to Centennial Bike & Hike Trail to create the loop. On the trail, view mixed dry forest that includes the Chinquapin oak, a southern species that grows as far south as the cloud forests of Mexico.

**Shuster Trail**  
 0.5 km, 15 minutes




Begins along Tilden Woods Trail and keeps going straight to East Barrier Beach. Watch for bald eagles scanning the water's edge at dusk.

**Tilden Woods Trail**  
 1 km (loop), 45 minutes




Begins at the northeast corner of the Visitor Centre parking lot. View mature swamp forest and cedar savannah. The boardwalks will keep your feet dry in spring as you enjoy wildflowers like Spring Beauty and Trillium.

**Woodland Nature Trail**  
 2.75 km (loop), 1 hour



Begins behind the Visitor Centre. Stroll through the oldest forest habitat in the park. A self-guide booklet detailing the features of this trail is available for purchase at the Nature Nook Gift Store.

**Tip Trails**  
 1 km (loop), 20-40 minutes



Shuttle from Visitor Centre drops you off at the Tip's outdoor exhibit from April to October. Walk to the most southern point of mainland Canada. A wondrous place to view spring bird and fall monarch, dragonfly and bird migrations.

- Legend**
- Building
  - Wheelchair Accessible
  - Washrooms
  - Parking Area
  - Public Telephone
  - Emergency Telephone
  - Main Road
  - Picnic Shelter
  - Picnic Area
  - Canoe Route
  - Lookout
  - Bicycle Trail
  - Swimming
  - Trail\*
  - Footpath\*\*
  - Forest
  - Marsh
  - Pond
  - Beach
  - Friends of Point Pelee Shuttle Stop
  - Nature Nook Gift Store
  - Food / Beverage
  - Canoe Rentals
  - Bicycle Rentals
  - Youth and Registered Groups Group Campground
  - Henry Community Youth Camp

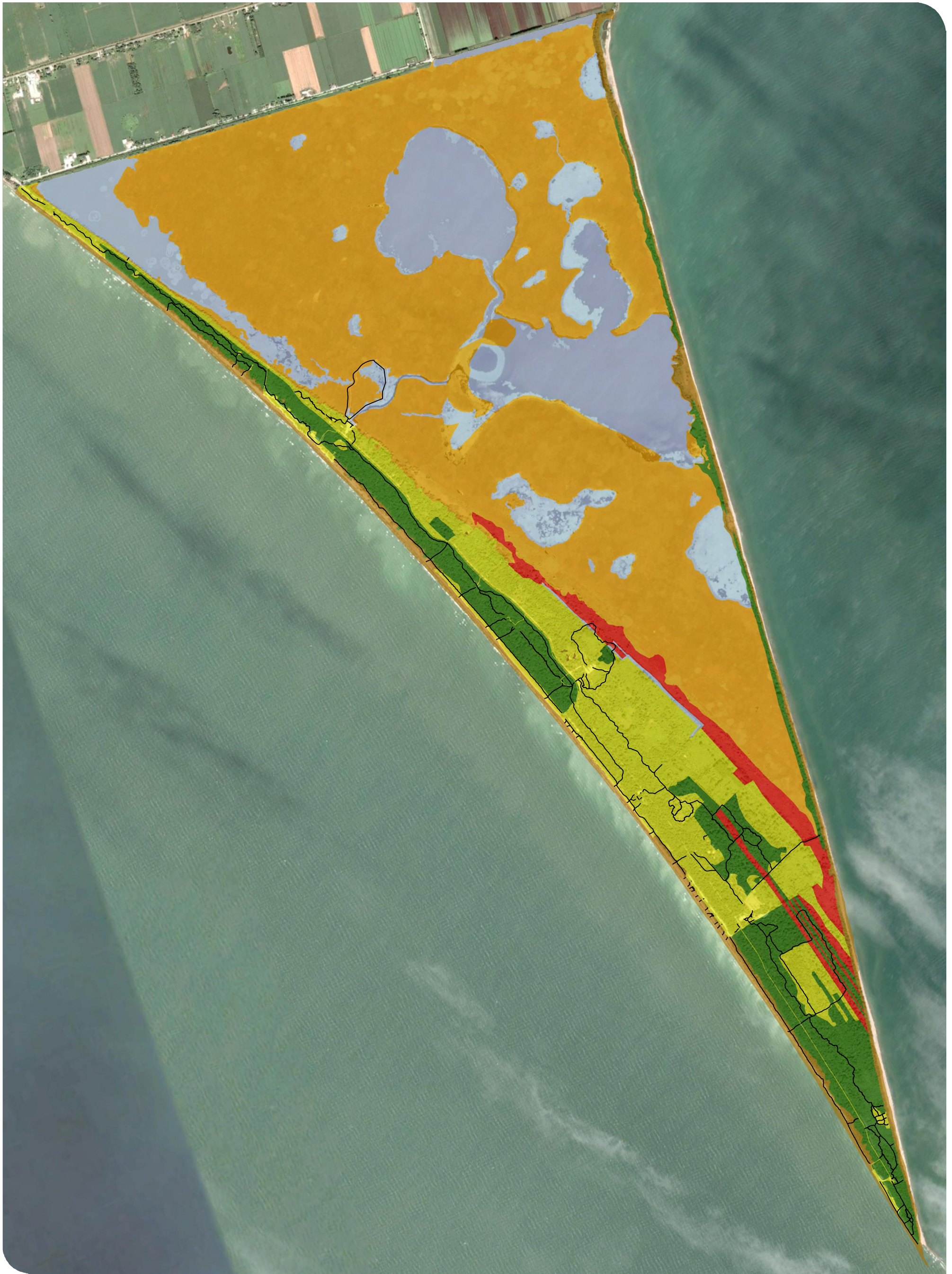
\*Trails are crushed gravel or boardwalk  
 \*\*Footpaths are unmaintained and narrow



**DANGEROUS CURRENTS**  
 No swimming or wading

# Appendix E

## *Point Pelee Species at Risk*



**CITY OF LONDON**  
TRAIL STANDARDS REVIEW

**CASE STUDY:**  
**POINT PELEE NATIONAL PARK**

**FIGURE 1**  
Ecological Land Classification  
& Trail System

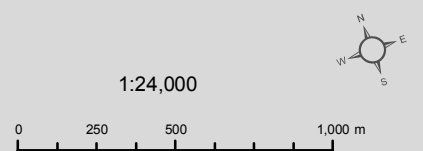
— Trail System (Year Long & Seasonal) **Ecological Land Classification**

- Forest
- Great Lakes Shoreline
- Marsh
- Non-forest
- Open Water
- Swamp



MAP DRAWING INFORMATION:  
Base Data Provided by MNR & Queen's Printer for Ontario  
Trail System & ELC Datasets Provided by  
Point Pelee National Park of Canada,  
407 Monarch Lane, Leamington,  
ON N8H 3V4

MAP CREATED BY: JWH  
MAP CHECKED BY: JLP  
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 15-2889 STATUS: DRAFT DATE: 12/16/2015



**CITY OF LONDON**  
TRAIL STANDARDS REVIEW

**CASE STUDY:**  
**POINT PELEE NATIONAL PARK**

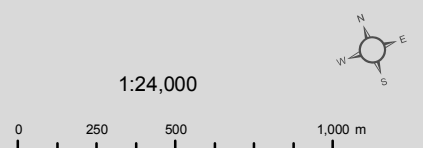
FIGURE 2a  
Critical SAR Habitat (Birds & Plants)  
& Trail System

- Trail System (Year Long & Seasonal)
- Critical Habitat (Prothonotary Warbler)
- Critical Habitat (Least Bittern)
- Critical Habitat (Dwarf Hackberry)
- Critical Habitat (Eastern Prickly Pear Cactus)
- Critical Habitat (Common Hoptree)
- Critical Habitat (Red Mulberry)



MAP DRAWING INFORMATION:  
Base Data Provided by MNR & Queen's Printer for Ontario  
Trail System & ELC Datasets Provided by  
Point Pelee National Park of Canada,  
407 Monarch Lane, Leamington,  
ON N8H 3V4

MAP CREATED BY: JWH  
MAP CHECKED BY: JLP  
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 15-2889 STATUS: DRAFT DATE: 12/16/2015



**CITY OF LONDON**  
TRAIL STANDARDS REVIEW

**CASE STUDY:**  
**POINT PELEE NATIONAL PARK**

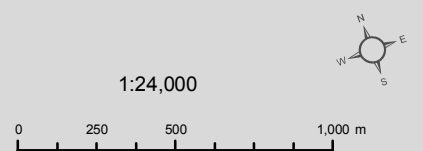
FIGURE 2b  
Critical SAR Habitat  
(Blandings Turtle & Spiny Softshell)  
& Trail System

- Trail System (Year Long & Seasonal)
- █ Critical Habitat (Spiny Softshell)
- █ Critical Habitat (Blandings Turtle)



MAP DRAWING INFORMATION:  
Base Data Provided by MNR & Queen's Printer for Ontario  
Trail System & ELC Datasets Provided by  
Point Pelee National Park of Canada,  
407 Monarch Lane, Leamington,  
ON N8H 3V4

MAP CREATED BY: JWH  
MAP CHECKED BY: JLP  
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 15-2889 STATUS: DRAFT DATE: 12/16/2015



**CITY OF LONDON**  
TRAIL STANDARDS REVIEW

**CASE STUDY:**  
**POINT PELEE NATIONAL PARK**

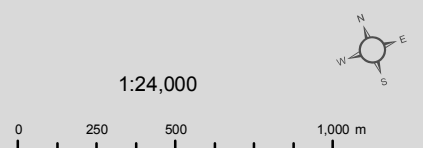
FIGURE 2c  
Critical SAR Habitat  
(Five-lined Skink & Spotted Turtle)  
& Trail System

- Trail System (Year Long & Seasonal)
- ▭ Critical Habitat (Five-lined Skink)
- ▭ Critical Habitat (Eastern Musk Turtle)



MAP DRAWING INFORMATION:  
Base Data Provided by MNR & Queen's Printer for Ontario  
Trail System & ELC Datasets Provided by  
Point Pelee National Park of Canada,  
407 Monarch Lane, Leamington,  
ON N8H 3V4

MAP CREATED BY: JWH  
MAP CHECKED BY: JLP  
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 15-2889 STATUS: DRAFT DATE: 12/16/2015