

DRAFT

**Urban Natural Area 92  
Petrie Islands and Mainland**

**Stewardship Plan**

**September 2007**



Blanding's Turtle, Petrie Island, 2007

Friends of Petrie Island

Ottawa Stewardship Council

DRAFT

<b><u>Table of Contents</u></b>	<b><u>Page</u></b>
Acknowledgements	
Executive Summary	
Introduction	1
Purpose	3
Vision	3
City of Ottawa Environmental Management Plans	3
Valued Ecosystem Components	5
Management Strategies	9
Partnering	9
Physical Master Plan	12
Conservation Strategy	13
Maintenance Program	16
Recreation and Education Programs	16
Communications Program	17
Environmental Monitoring and Program Evaluation	17
Priorities, Resources, and Plans	18
Annex A	UNA 92 Site Evaluation (less appendices) (City of Ottawa)
Annex B	Bibliography
Map 1	UNA 92 Area Map (City of Ottawa)
Map 2	Petrie Islands Wetlands (OMNR)
Map 3	Petrie Island Provincially Significant Candidate ANSI (OMNR)

## **Acknowledgements**

The Petrie Islands Stewardship Plan draws extensively on previous studies and reports concerning the Islands, and on City of Ottawa environmental management policies and plans. Most of the information and recommendations in the document has been adopted verbatim and/or adapted from source material, but in the interests of brevity and clarity, sources are usually not cited.

A complete list of references is at Annex B. The primary sources from which material has been drawn are:

- City of Ottawa
- Daniel Brunton
- Christine Hanrahan
- Stephen Darbyshire
- Ottawa Field-Naturalist's Club
- Township and City of Cumberland
- Rideau Valley Conservation Authority
- Ottawa Stewardship Council
- Friends of Petrie Island

The Stewardship Plan is a joint initiative of the Friends of Petrie Island & the Ottawa Stewardship Council.

## **Update to the September 2007 Draft**

The draft Stewardship Plan was presented to the Ottawa Forests and Advisory Committee (OFGAC) on 26 November, 2007.

Following the presentation, OFGAC passed the following motion:

**Whereas OFGAC has visited Petrie Island, and;**

**Whereas OFGAC has received the presentation on Petrie Island and Mainland Stewardship Plan, and ;**

**Whereas OFGAC is supportive of the work of the Friends of Petrie Island (FOPI) and the Ottawa Stewardship Council on Petrie Island (OSC) ;**

**Therefore be it resolved that OFGAC recommends that the Parks and Recreation Branch Work with FOPI and the OSC to finalize and implement the Stewardship Plan.**

## **Executive Summary**

The area addressed by this plan is described in the City of Ottawa *Urban Natural Areas Environmental Evaluation Study (UNAEES)* as *Urban Natural Area (UNA) 92: Petrie Islands and mainland*. It comprises approximately 300 ha. of alluvial islands, riparian deciduous swamp forests, and mainland deciduous and mixed upland forests along the Ottawa River.

The *UNAEES*, commissioned in 2002, states that “encouraging motivated citizen volunteers to take stewardship over their natural areas is an important protective measure and management recommendation.” The *UNAEES* recommended that “the public can play a key role in development of a stewardship, or environmental management plan for an urban natural area.”

The purpose of this stewardship plan is to recommend a strategic framework for the environmentally responsible and sustainable management and development of the Petrie Islands and mainland (UNA 92).

The goal is to maintain, protect, and (where feasible) enhance:

- the natural areas and wetlands of the Islands which are highly valued for their biodiversity
- the Ottawa River’s riparian and aquatic resources in the area

while allowing an appropriate and sustainable level of public access, passive daytime recreational use year-round, and enjoyment of the Islands.

The stewardship plan builds on a strong existing framework of municipal environmental management practices, volunteer engagement, and existing natural resource inventories and studies.

By bringing together these various elements together in one coherent plan, the stewardship plan will facilitate the coordinated efforts of the several concerned groups, organizations and jurisdictions that have an interest in the sustainable development and management of the Islands.

**PETRIE ISLANDS  
STEWARDSHIP PLAN  
2007**

**1. INTRODUCTION**

Petrie Islands have long been known for their natural and recreational values. The uniqueness of the Petrie Islands environment is recognized in their classification as a Provincially Significant Wetland and as a candidate provincially significant Area of Natural and Scientific Interest (ANSI).

The Friends of Petrie Island (FOPI), a local volunteer organization, have promoted conservation and passive recreation in the area for more than a decade. In its 2005 report to City Council, FOPI recommended the development of “a management plan for the Islands for the interim and long term including policies to protect the environmentally sensitive areas.”



This recommendation is consistent with the City of Ottawa environmental management program and the *Urban Natural Areas Environmental Evaluation Study (UNAEES)*, commissioned in 2002. The study, which is an important contribution to the Greenspace Master Plan, defined and assessed the environmental value of selected urban natural areas, with the objective of developing management recommendations (ecological, stewardship and recreational) for each evaluated site.

The UNAEES Report stated that “encouraging motivated citizen volunteers to take stewardship over their natural areas is an important protective measure and management recommendation.” The Report recommended that “the public can play a key role in development of a stewardship, or environmental management plan for an urban natural area.” The stewardship plan that is described in the following pages is in response to this recommendation.

This plan does not define new directions for the sustainable management of the Islands, but rather recommends a stewardship plan specific to the Petrie Islands and mainland (UNA 92) by building on earlier studies and on existing environmental management policies and programs.

**The Petrie Islands**

The area addressed by this plan is described in the *Urban Natural Areas Environmental Evaluation Study* as *Urban Natural Area (UNA) 92: Petrie Islands and mainland*. It comprises approximately 300 ha. of alluvial islands, riparian deciduous swamp forests, and mainland deciduous and mixed upland forests along the Ottawa River. The UNAEES

evaluation for the area is at Annex A. The UNAEES map of the area is shown at Map 1, the boundaries of the wetlands are shown on Map 2, and the bounds of the candidate ANSI are shown on Map 3.

The area is bordered to the west by UNA 188 Petrie West, to the South by the urban area of Orléans, and to the East by a beach and public park on the site of a former sand extraction operation. For the purposes of this plan, the beach and park are considered as an integral component of the area, although strictly speaking, they are not included in UNA 92. The area also extends southeast to privately owned land occupied by a marina and tackle shop. In close proximity are UNA 88 St. Joseph Blvd. Woods, UNA 93 Taylor Creek Valley, UNA 94 Cardinal Creek Valley, and UNA 192 Tenth Line Woods.

### **Related studies and plans**

The Petrie Islands have been the subject of numerous environmental studies, natural resource inventories, planning proposals, and other reports. A list of references is at Annex B.

### **Historical background**

The Petrie Islands have been used for hunting, fishing and trapping since ancient times. The 20th century saw the continuation of those uses, along with the development of a sand extraction and summer recreation area.

Petrie Island was officially named in 1939. Current local usage is “Petrie Island” in the singular, but official gazetteers, rover charts and maps list the feature as “Petrie Islands.”

In 1956, Donat Grandmaître acquired the islands. The Grandmaître family subsequently operated a sand extraction plant on the site until 2002. A bridge and road to the island were constructed during this time. Portions of the island beyond the causeway were used as a dump from the 1950s to the 1970s.

The present Bill Holland Trail (extending westward from the picnic area) was originally built as a road with 50 cottage lots. Only four cottages were built and two other lots were sold but never developed. Two vacant lots and the existing home west of the Interpretation Centre are now the only privately held land on Petrie Island.

Between 1959 and 1963, Hydro-Québec’s newly built Carillon power dam raised the water levels by 1 to 1.5 m. This caused the 6 to 8 metre wide natural sand beach on the river side of the island to be reduced to a few metres and created much of today’s marshy areas and backwaters. Some of the downstream islands were inundated.

The Regional Municipality of Ottawa-Carleton purchased the island from the Grandmaître family in 1983. The Friends of Petrie Island developed and operated a picnic area in August of 1998 with funds provided by the then City of Cumberland. The sand

extraction continued in operation until March 2002. The beach and park facilities were developed by the City of Ottawa in the years following the closure of the sand operation.

## 2. PURPOSE

*Ontario Stewardship (OMNR)* defines stewardship as follows:

**“STEWARDSHIP is an ethic by which citizens care for our air, land and water as parts of a natural life-support system and collectively act to sustain and enhance it for generations to come.”** (*Stewardship Strategy for Ontario, January 2006*).



Guided by this overall ethic, the purpose of this stewardship plan is:

**To recommend a strategic framework for the environmentally responsible and sustainable management and development of the Petrie Islands and mainland (UNA 92).**

## 3. VISION

The goal is to maintain, protect, and (where feasible) enhance:

- the natural areas and wetlands of the Islands which are highly valued for their biodiversity
- the Ottawa River’s riparian and aquatic resources in the area

while allowing an appropriate and sustainable level of public access, passive daytime recreational use year-round, and enjoyment of the Islands.

## 4. CITY OF OTTAWA ENVIRONMENTAL MANAGEMENT STRATEGIES AND PLANS

The City of Ottawa is the principal landowner of the area. Most of the area within UNA 92 is designated as a City park and is therefore under the responsibility of the City of Ottawa Parks and Recreation Branch.

As such, the stewardship plan for the Islands must be consistent with City of Ottawa environmental management strategies and guidelines.

## **Greenspace Master Plan**

The Greenspace Master Plan describes the lands that can be considered as greenspace and sets strategic directions for managing and extending these lands in order to achieve the community's vision for greenspace. This vision is expressed in terms of five objectives:

- an adequate supply of greenspace
- accessibility to all communities and residents
- high quality in design and character, preserving natural features and functions of natural areas
- connectivity among greenspaces to allow for movement through green corridors
- sustainability, minimizing the need for human intervention and public spending, and relying on natural processes as well as innovative methods for protecting greenspace.

## **Urban Natural Areas Environmental Evaluation Study**

The City of Ottawa commissioned the *Urban Natural Areas Environmental Evaluation Study (UNAEES)* in 2002. The study, which is an important contribution to the Greenspace Master Plan, defined and assessed the environmental value of selected urban natural areas within the City, with the objective of developing management recommendations (ecological, stewardship and recreational) for each evaluated site.

The main study steps were to:

- Identify and select candidate urban natural areas;
- Assess and describe each candidate site based on field investigations;
- Evaluate the site, applying evaluation criteria to assign a High, Moderate or Low ecological value; and,
- Develop management recommendations (ecological, stewardship and recreational) for each evaluated site.

## **Management Plans**

In accordance with the Greenspace Master Plan, the City will manage city-owned lands in a manner consistent with the long-term maintenance of greenspace values identified in the UNAEES by preparing management plans and policies for City-owned natural lands. These plans will focus on the protection of environmental features and functions while accommodating public access and leisure uses where appropriate. Plans and policies for natural lands will:

- Identify measures to preserve, enhance and manage natural lands in a manner consistent with the purpose for which the land is acquired
- Inventory and update the City's information on the environmental assets of the land and identify potential issues and opportunities, both on and off-site, for the ongoing management of the land

- Incorporate opportunities for public access and recreation
- Identify the bodies responsible for the implementation of the management plans and the ongoing cost of doing so
- Incorporate opportunities for community participation in the preparation of the management plan and identify opportunities for community partnerships in the ongoing implementation of the plan.

### **Land Use Planning Provincial Policy Statement (2005)**

The Greenspace Master Plan is one of the main supporting plans for the City's Official Plan. The Province of Ontario, Ministry of Municipal Affairs and Housing, *Land Use Planning Provincial Policy Statement (2005)* provides policy direction to decision makers on matters of provincial interest related to land use planning and development, including the following:

#### **Public Spaces, Parks and Open Space**

Healthy, active communities should be promoted by:

- providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, open space areas, trails and, where practical, water-based resources;
- providing opportunities for public access to shorelines; and
- considering the impacts of planning decisions on provincial parks, conservation reserves and conservation areas.

#### **Natural Heritage**

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

In accordance with the provincial policy statement, development and site alteration are not permitted in significant wetlands in Ecoregion 6E (Petrie Island is in Ecoregion 6E), or in significant habitat of endangered and threatened species.

### **5. VALUED ENVIRONMENTAL COMPONENTS OF THE ISLANDS**

The valued environmental components of the Petrie Islands have been described in many studies. For reasons of brevity, extracts from only a few of the relevant studies are provided below:

## **Urban Natural Areas Environmental Evaluation Study**

Petrie Island and the adjacent mainland (UNA 92) were evaluated in 2005 and were rated “High” overall. The evaluation described Petrie Island as “a natural creation of the Ottawa River in a critical wildlife corridor position, with exceptionally diverse plant and animal life, vegetation of provincial interest and good recreational access. This urban natural area led all sites evaluated in 2005 in overall average rating, number of high-rated coefficient of conservation species (63), rare species (18), including three Provincially Rare species, and number of communities (10). It was the only natural area to score a ‘5’ for wildlife habitat in the east sub-area in 2005.”

The adjacent St. Louis Woods and Petrie West natural areas (UNA 188) are described as “excellent examples of native Ottawa River riparian swamp forest with exceptional special feature values and high potential for additional special features. Together the three natural areas form the largest riparian complex in the study area.”

The UNA 92 evaluation report (less appendices) is at Annex A

### **A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System – 2005**

This study described the area as follows: “Now only 12 kilometres in length, the [Petrie] island complex is a tiny vestige of the vast delta that covered the area more than 8,000 years ago. The flood-prone area supports at least 29 rare species of plant, including Gattinger’s Panic Grass, Moss-Like Love Grass, Wild Madder, and the only major stand of Hackberry trees in the region.... Many plants depend upon the Ottawa River’s annual spring flooding and continual shifting of shoreline sediments for their survival, and have adapted their reproduction and growth patterns to this cyclical water inundation. The quiet backwaters, flooded forests and sandy dunes of the Petrie Island ecosystem attract a wide variety of resident and migratory birds, including the Red-winged Blackbird, Bonaparte’s Gull, the Black Tern and the Marsh Wren. Bird watchers have recorded in the area at least 16 species of warblers, including Magnolia Warblers, the Northern Waterthrush, and the Ovenbird. Woodcocks can be observed in the wooded areas.”

### **Ontario Ministry of Natural Resources**

Petrie Islands and wetlands are included in the OMNR Natural Heritage Information Centre database: *Area ID 1514* Provincially Significant ANSI-LS (confirmed as candidate status in communications with OMNR), *Area ID 7262* Area recognized as having ecological interest, and *Area ID 8365* Provincially Significant Wetland. In the comments in the report *Area ID 1514*, D.F. Brunton wrote: “Few comparable marsh and sand-bar communities exist along the Ottawa River ... Given the rarity in Site District 6E-12 of the landform-vegetation complex represented here, it is appropriate to apply a provincially significant level of ecological importance to this site.”

## **Natural Environment Inventory & Interpretive Concepts Petrie Island Study Area**

This study, conducted by Daniel F. Brunton Consulting Services in December 1999, included the following observations:

- Study area is one of only a handful of island/wetland complexes in the Region in a predominantly natural condition
- Woodlands
  - predominantly deciduous swamp forest.
  - Provincially Rare Hackberry swamp forest on the central portions of the major islands
  - Suspected to support Provincially Rare plant species (Cat-tail Sedge)
  - Several Regionally and Locally Rare vascular plant species
- Sandy shorelines
  - Provincially Rare plant species (Gattinger's Prairie Grass)
  - Large number of Regionally and Locally Rare plant species
  - Important turtle breeding sites
  - Extensive open water vegetation complex with Regionally Rare plant species and a number of locally significant species
- Queenswood Forest - remnant of forest which formerly dominated Ottawa River shores
- Rich assemblage of significant vascular plants, including very large population of Provincially Rare Tear-thumb
- 324 of the 430 recorded species of vascular plants in the study area are native species
- Over 10% of the native flora is Regionally or Provincially Rare, an exceptionally high score for the Region
- Recreational use is possible without the loss of significant ecological values
- Future recreational initiatives, however, must ensure that present ecological and landscape features and processes are protected and thrive if the long-standing appeal of the Petrie Islands study area is to be sustained.

### **The Natural Values And Ecological Significance Of The Petrie Islands**

In November 1998, Christine Hanrahan with Stephen Darbyshire prepared a report on behalf of the Conservation Committee of the Ottawa Field-Naturalists' Club. Aspects of natural value and ecological significance described in this report include:

#### *Ecology*

“The natural environment of the shores, forests, and backwaters along the Ottawa River has all but disappeared and is long past regeneration, apart from a few areas such as the Petrie Islands.” (Stephen Darbyshire)

*Plants*

“Of special interest is the extensive stand of hackberry which Dugal (1977) calls the ‘greatest known concentration...in the Ottawa district.’

Two plant species found on the islands are considered of provincial significance. One of these, Gattinger's Panic Grass (*Panicum gattingeri*) is known within the region only on Petrie Islands (Brunton 1998).

Petrie Islands is also the only currently known location in the RMOC for the regionally rare Mossy Love Grass (*Eragrostis hypnoides*) (IBID).

*Birds*

109 species observed [as of 1998]

“The extensive wetlands, backwaters and the Ottawa River shoreline provide habitat for birds such as pied-billed grebe, American bittern, great blue heron, American coot, and a variety of waterfowl, shorebirds, gulls and terns, belted kingfisher, and red-winged blackbird.

The woods and shrubby thickets host woodpeckers such as the large pileated woodpecker, flycatchers, black-capped chickadee, house wren, thrushes, vireos, warblers, rose-breasted grosbeak, and purple finch.

Edges and open areas are used by various sparrow species, American goldfinch, gray catbird and brown thrasher. All six species of swallows found in the Ottawa area have been observed on the Petrie Islands....

[In the spring and fall] migrations, flycatchers, thrushes, flocks of warblers, and a variety of other birds use the area as a stopover point for resting and feeding.

Many birds also find the quiet woods and backwaters conducive to nesting, and a breeding bird survey of the islands would be useful in determining more precisely the number of nesting birds.

*Butterflies*

Casual observations by naturalists Joyce and Allan Reddoch, Christine Hanrahan, David Hobden, and Peter Hall recorded twenty-two species. [although not mentioned at the time of Hanrahan's report, Hackberry Emperor Butterfly were observed on the Island in 2006 and 2007]

### *Mammals*

“The relatively small size of the islands, as well as the mix of habitat, would not be expected to support a great diversity of mammals. However, small mammals such as weasels, moles and mice are often difficult to census without some form of small-mammal trapping (using live-traps), therefore a mammal survey would undoubtedly reveal more than the nine species recorded to date.”

### *Reptiles and Amphibians*

“Five species of turtles, including one introduced species (Darbyshire 1997), have been recorded, along with three frog species and one species of snake. As with all other surveys noted, a more intensive study should find further additions to this list.”

### **Petrie Island Turtle Nesting Surveys**

Four native species of turtles have been observed nesting on the Islands, including Blanding’s Turtle (designated as a Threatened species by the *Committee on the Status of Endangered Wildlife in Canada - COSEWIC*), Northern Map (a species of Special Concern), Snapping Turtle (status under review), and Midland Painted (status not assessed).



Map Turtle nesting, edge of parking area

In 2006 and 2007, the Ottawa Stewardship Council (OSC) and FOPI combined forces to undertake a survey of turtle nests on the Islands. In 2006, more than 200 nesting sites were recorded, including nesting activity in publicly used areas such as the beach (Stuemer Park) and along the Holland Trail.

### **Regional Butternut Recovery Program**

Butternut canker disease is threatening the existence of Butternut across its natural range. The Butternut was listed as an endangered species by COSEWIC in 2005 and has been adopted into the *Endangered Species List* by the Canadian Wildlife Service under the *Species at Risk Act (SARA)*. The Rideau Valley Conservation Authority and the Ferguson Forest Centre initiated a Regional Butternut Recovery Program in 2006. The program aims to assess mature seed-producing trees in order to locate butternut trees that exhibit signs of resistance to the canker. Butternut trees on Petrie Island are being assessed as part of this program.

## **6. MANAGEMENT STRATEGIES**

The sustainable development and management of the Petrie Islands, under the lead of the City of Ottawa, is built upon a framework of several complementary plans and programs:

- Partnering of City, community, and other key organizations

- Physical Master Plan
- Conservation Strategy
- Maintenance Program
- Recreation and Education Program
- Communications Program
- Environmental Monitoring and Program Evaluation
- Establishing priorities, identifying resources, and developing an action plan

## 7. PARTNERING

The successful sustainable management of the Islands depends on significant community involvement and on partnering between the City and other key organizations.

**Petrie Island Advisory Committee (PIAC)** PIAC was established in 2006 as a consultative group to the City Parks and Recreation Department. PIAC provides a forum for community input into the planning, strategic development, management and use of Petrie Islands and its facilities. PIAC's membership includes local community associations and local organizations such as FOPI, OSC and the Rideau Valley Conservation Authority (RVCA).

**Friends of Petrie Island (FOPI)** The Friends of Petrie Island originated in 1997. FOPI's objectives are to participate with the City of Ottawa and relevant agencies in the planning, development and management of the Island, with particular attention to the environmentally sensitive nature of the site, respecting its biodiversity, maintaining its ecological integrity, and ensuring appropriate public consultation. FOPI provides volunteers for the conduct of activities on the Island, for the support of special projects aimed at the preservation and/or enhancement of the Island, and for the development and delivery of educational programs for the general public and interested groups as the need arises.

FOPI and the City have a formal agreement through which FOPI has specific responsibilities for the management of the picnic area, interpretation centre, and trails. FOPI has provided input to Petrie Island inventories and studies and been instrumental in obtaining grants in support of the interpretive program and other aspects relevant to the environmental integrity of the Islands.



Interpretation Centre

**Rideau Valley Conservation Authority (RVCA)** The RVCA is an inter-municipal environmental protection and advisory agency. Working together with local municipalities, government agencies, special interest groups and the general public, the mission of the RVCA is to have clean water, natural shorelines and sustainable land use throughout the Rideau Valley watershed. Petrie Islands lie within the area of responsibility of the RVCA.

The RVCA is empowered to protect and regulate many environmentally sensitive areas such as floodplains, wetlands and shorelines by administering and enforcing *Ontario Regulation 174/06-Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (implementing Ontario Regulation 97/04) (Conservation Authorities Act R.S.O. 1990)*

**Ottawa Stewardship Council** The Ottawa Stewardship Council (OSC) is established and funded through the Ontario Stewardship Program. The mission of the OSC is to be a leading partner with individuals, organizations and communities throughout the Ottawa area to promote and maintain a healthy environment. The OSC has co-sponsored or co-developed several projects on the Islands, including the amphibian educational pond, a canoe launch, and a turtle nesting survey. The goals of the OSC include:

- Facilitating programs that assist in protecting, restoring and enhancing and managing land in a sustainable manner
- Promoting educational opportunities relating to environmental stewardship
- Assisting in developing programs which encourage people to set objectives for their properties and to achieve those objectives.

**Ottawa Forest and Greenspace Advisory Committee (OFGAC)** The Ottawa Forests and Greenspace Advisory Committee (OFGAC) was established in the fall of 2001 to advise Ottawa City Council and provide a forum for citizens on issues related to trees and forests. OFGAC advises the City of Ottawa on aspects such as:

- Protection, acquisition and management of greenspace
- Enhancement of the urban forest
- Management of community forests
- Public private initiatives to protect greenspace

**Ottawa Field-Naturalist's Club (OFNC)** The OFNC have been actively engaged in issues relevant to the Islands for many years. They have made a significant contribution to the wildlife inventories and participated actively in the review of environmental studies and development proposals for the Islands. The objectives of the OFNC are:

- To promote the appreciation, preservation, and conservation of Canada's natural heritage
- To encourage investigation, publish the results of research in all fields of natural history, and diffuse the information as widely as possible
- To support and cooperate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

**Ottawa Riverkeeper** The objectives of the Ottawa Riverkeeper are to achieve a healthy, ecologically sustainable Ottawa River available for the enjoyment and benefit of its Ontario and Québec communities; and to work independently as well as co-operatively with individuals, businesses, community groups and all levels of government on both sides of the river to achieve this mission.

**Ottawa Duck Club** The Ottawa Duck Club is an incorporated, non-profit organization, actively involved in hands-on work to improve the nesting habitat for waterfowl and other birds. Off-sanctuary, nesting boxes are maintained on Watt's Creek, Cedar Hill Golf Course, Log Farm, and Petrie Island.

**Turtle S.H.E.L.L. Tortue** Turtle S.H.E.L.L. is a registered charity established in the fall of 1999 to care for turtles, install highway turtle crossing signs, and provide public education and awareness of the plight of our indigenous turtle populations and habitats.

**Grandmaître family** The Grandmaître family has historical ties with the properties currently owned by the City. These ties are recognized in the designation of a part of the Islands as the Grandmaître Ecological Reserve. The family is also the largest private landowner within Urban Natural Area 92, where their commercial interests include a marina and tackle shop. By virtue of these family and commercial ties, the Grandmaître family are active partners with the City, with the Friends of Petrie Island, and with PIAC in promoting the environmental integrity of the Islands.

**Other groups and organizations** Several other clubs and organizations, such as the Petrie Island Outdoor Club (PIOC) and the Petrie Island Ice Fishing Association (to name but two), conduct all or part of their activities on the Islands or use Island facilities from time to time. While most of these organizations are not normally members of City advisory groups such as PIAC, they have an interest in management and development plans and decisions that may be taken concerning the Islands and these interests should be taken into consideration as appropriate.

## **8. PHYSICAL MASTER PLAN**

Physical Master Plans provide a means for coordinated long-term planning and a basis for consultation with the community and other stakeholders.

A Master Plan can help minimize the risks associated with incremental development and facilitate the evaluation of cumulative environmental effects. Master Plans can also provide a basis for environmental assessments or other environmental studies.

Physical Master Plans may also include planning guidelines or considerations to guide major and/or minor developments as the plan evolves over time.

Although there have been a number of planning studies, there is not, at this time, a current Master Plan for the Island complex as a whole.

The Township of Cumberland prepared a conceptual master plan for Petrie Island in 1997. The purpose of the plan was to initiate discussion regarding possible future use of Petrie Island and adjacent mainland shoreline for recreational uses.

In 2001 W.F. Baird & Associates undertook a review of the conceptual Petrie Island master plan on behalf of the City. The purpose of the review was to determine the public recreation potential for the island. The report set out a three-phase approach to the development of the northeast portion of the island, with the first phase being shoreline erosion control and improvements, park construction, a washroom/change room and canteen building, and new parking areas. An environmental assessment and public consultation were initiated.

*The Planning and Environmental Assessment Study for Petrie Island Park* (the area now known as Stuemmer Park) was completed in May 2003. The study concluded that the project would result in insignificant environmental effects. Much of phase one has now been completed. The washrooms, change rooms, and canteen have not, however, been completed as of this time.

An Interpretive Trails Study (*Petrie Islands Area Interpretative Trails Master Plan*) was carried out in 1999. This study recommended a series of low-impact interpretive trails along the mainland shoreline and throughout the western portion of the main island. Sections of the recommended trail network are now in place.

An up-to-date Master Plan for the Island complex as a whole would greatly facilitate the sustainable management and development of the Islands.

The acquisition of the remaining privately owned lots and residences on the Island, should the opportunity present itself, would further facilitate the sustainable management and development of the Islands as public greenspace.

## 9. CONSERVATION STRATEGY

The objective of the conservation strategy is to maintain, protect and enhance wildlife habitat and encourage biodiversity.

### **Ontario Regulation 174/06 – Development, Interference with Wetlands and Shorelines and Watercourses**

The Petrie Islands are within the Rideau watershed and are regulated by the Rideau Valley Conservation Authority in accordance with *Ontario Regulation 174/06 – Development, Interference with Wetlands and Shorelines and Watercourses Regulation* (Conservation Act R.S.O. 1990).

RVCA approval may be required for work in a regulated area near a river, stream, or wetland. The following development activities require review and written permission:

- the construction, reconstruction, erection or placing of a building or structure of any kind,
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- site grading,
- the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere,
- straightening, changing or diverting or interfering with the existing channel of any river, creek, stream or watercourse anywhere in the watershed,
- changing or interfering with a Provincially Significant Wetland (including other adjacent lands within 120 m of the wetland boundary)

### **Wetlands and the candidate ANSI (Maps 2 and 3)**

The 2003 Petrie Island Park EA recommended that a Wetland Management Plan should be created by the City to provide long-term management and land-use objectives for the wetland area.

The following recommendations apply to the management of the wetlands and the candidate ANSI area:



Petrie Island Wetlands

- maintain the health and integrity of wetlands and other ecologically sensitive areas (UNA 92 Report and Brunton's 1999 Natural Resources Inventory)
- protect and conserve endangered species and their habitat
- maintain natural forest canopy in order to suppress invasive plant development and maintain natural diversity

- protect wetlands and ecologically sensitive areas from excessive human intrusion from the picnic area and the recreational park in order to protect significant features and habitat quality
- maintain buffer zones between areas of ecological significance and areas of human activity
- allow access by passive, non-motorized (pedestrian) travel only
- discourage public access beyond the western extremity of the Holland Trail
- discourage the creation of informal pathways or mountain bike trails
- update wildlife inventories on a regular basis
- maintain trails in a grassed or otherwise natural condition
- use boardwalks and/or footbridges over wet trail areas, where practicable, to permit the natural flow of surface water and to mitigate erosion caused by trail use
- leave dead trees in place to provide nesting opportunities and food source for wildlife, except where removal or trimming is required in the interests of public safety
- retain mature vegetation as much as possible, with the exception of minor trimming adjacent to trails where required to facilitate the safe passage of users
- restrict the beaching of motorboats (including on the more remote shorelines beyond the existing public use areas) except where specifically authorized
- ensure that proposed new developments or site alterations (e.g. trails, observation platforms, etc.) are examined as early as possible in the planning stages to ensure that proposals do not have a negative impact on the environment
- ensure that, where applicable, proposed new developments or site alterations have the prior review and approval of the RVCA
- identify key wildlife habitats such as turtle and bird nesting sites and locations of significant plant species before undertaking any new developments or site alterations
- locate new developments or construction away from sensitive areas, respecting the environmental values of the site
- observe all applicable regulatory and approval requirements (municipal, provincial, and federal)

### **Al Tweddle Picnic Area and Stuemmer Park and beach**

Due to their proximity to the adjacent wetlands (within 120m), activities and developments within the Al Tweddle Picnic Area and Stuemmer Park and beach may be subject to RVCA review in accordance with *Ontario Regulation 174/0*.

The environmental assessment study for Petrie Island Park (subsequently named Stuemmer Park) recommended mitigation measures for the planning, construction and operation of facilities that may be included in that project. The City of Ottawa should be consulted for information on the environmental considerations applicable to this project and related developments.

The following recommendations apply to the management of the picnic area, park, and beach:

- manage these areas as integral components of the overall island complex, the majority of which should continue to be managed for conservation and preservation
- design and operate recreational, interpretive, and administrative facilities in such a way as to minimize impacts on wetlands and on terrestrial and aquatic habitat
- carefully manage recreational amenities and infrastructure such that the Island is not overwhelmed with human activity
- access to the Islands and facilities should focus on pedestrians and cyclists, with cars and car parking not dominating the Island
- structures and facilities to be excluded from significant natural habitat areas
- allow opportunities for daytime use only
- encourage uses that
  - conserve, interpret and restore elements of the natural and cultural heritage of the waterways
  - promote the conservation of the natural values of the lands
  - promote the scientific or educational study of the natural or cultural heritage characteristics of the area
  - do not adversely affect the natural environment and cultural heritage characteristics of the area or require or result in landform modifications
- when planning new development, minimize the need for removal of vegetation or disruption to undisturbed areas
- identify key wildlife habitats such as turtle and bird nesting sites and locations of significant plant species before undertaking any new developments or site alterations
- evaluate proposed new developments or site alteration (e.g. trails, observation platforms, etc.) as early as possible in the planning stages to determine whether the proposal will have a negative impact on the environment
- ensure that, where applicable, proposed new development or site alterations have the prior review and approval of the RVCA.
- maintain strict restrictions on vehicle movement outside of designated parking lots and roads
- implement a consistent policy on shoreline fishing, and retain the existing restrictions on shoreline fishing on the Turtle and Bill Holland Trails
- enforce the ban on dogs on the Islands at all times
- establish environmental protection protocols for seasonal high-use activities such as Canada Day, Fishing Derbies, sports tournaments, etc.

## **10. MAINTENANCE PROGRAM**

The City of Ottawa owns and has overall responsibility for the management and maintenance of the lands addressed by this stewardship plan. The City does much of the maintenance with its own resources, but also enters into arrangements with the private sector and with volunteer groups such as FOPI for the maintenance of selected aspects of the Islands (e.g. nature trails, picnic area).

The maintenance program should strive to ensure that the level of maintenance is determined by habitat or facility needs and by the environmental sensitivity of the area being maintained.

The following are recommended:

- Employ sustainable “green” landscape maintenance practices (e.g. mowing and trail maintenance) to protect and enhance wetlands and the natural areas
- Minimize the use of mechanized brush and trail clearance equipment on nature trails to reduce impact on natural habitat and turtle nests
- Implement an ongoing program for controlling invasive species (UNA 92 Report)
- Restrict service vehicles to designated roads and trails
- Minimize the use of motorized service vehicles (ATV) on and off-trail in the ecologically sensitive areas of the Islands
- Monitor and control excessive damage caused to the natural and human environment by wildlife, e.g. beavers, raccoons (turtle nest depredation and raiding of garbage containers), gulls, and geese.

As noted in the UNAEES, “urban natural areas do not benefit from increased landscaping other than plantings of native trees and shrubs in areas of enhancement. Maintenance of the natural understorey and ground vegetation in an undisturbed condition is important. The urge to tidy up or rake a natural area should be discouraged.”

## **11. RECREATION AND EDUCATION PROGRAM**

Aspects of the recreation and education program which support the stewardship plan include:

- Environmental education programs, field interpretation, on-site demonstration projects, and volunteer involvement
- Passive day-use recreational opportunities for the community such as birding, wildlife observation, hiking (limited), picnicking, swimming, snowshoeing, canoeing, and kayaking.

Much progress has already been made towards the implementation of recreational and educational programs, including the interpretive trails and brochures and interpretive centre developed and managed by FOPI, as well as programs and activities conducted by organizations such as PIOC and SPIRIT.

## **12. COMMUNICATIONS**

FOPI and PIAC, in cooperation with the City and other groups, can provide a catalyst in the effort to promote the environmental stewardship of the Islands to the public. Effective communications tools may include:

- Articles in local media
- City of Ottawa Press Releases
- Websites (City, FOPI, OSC, PIAC)
- Brochures, posters, and signs
- Promoting membership and support of environmental groups such as FOPI, OFNC, OSC
- Internal and external communications by PIAC and Community Associations
- Special events and activities (e.g. Turtle Day)

## **13. ENVIRONMENTAL MONITORING AND PROGRAM EVALUATION**

Ongoing monitoring and program evaluation are essential to the success of the environmental stewardship plan and supporting strategies. The City has overall responsibility for environmental monitoring and program evaluation, and an environmental monitoring program for Petrie Islands should be consistent with sustainability indicators that may be established by the City.

Organizations such as FOPI, OSC, Ottawa Riverkeeper, OFNC, and Ottawa Duck Club provide invaluable assistance to the City in environmental monitoring. The public can also participate in some environmental monitoring activities.

Environmental monitoring and program evaluation indicators may include:

- Wildlife inventories and surveys
- Feedback from the public during special events, tours, and visits
- Trends in the number of contraventions to relevant laws, bylaws, or regulations
- Changes in vegetation cover in picnic area and along nature trails
- Trail use and visitor counts (FOPI, City of Ottawa)
- Riparian zone monitoring
  - Shoreline clean-up (TD Friends of the Environment)
- Monitoring of Species and habitat diversity e.g.
  - Wood duck boxes (Ottawa Duck Club)
  - Turtle nesting surveys (FOPI, OSC)
- Invasive species monitoring
- Riverwatch (Ottawa Riverkeeper, FOPI)

#### **14. PRIORITIES, RESOURCES AND PLANS**

This plan builds upon a strong framework of municipal environmental management practices, volunteer engagement, and existing natural resource inventories and studies.

By bringing together these various elements together in one coherent plan, the stewardship plan will facilitate the coordinated efforts of the several concerned groups, organizations and jurisdictions that have an interest in the sustainable development and management of the Islands.

There is, however, a finite limit to the available fiscal, staffing and volunteer resources.

The implementation of this stewardship plan requires establishing priorities, identifying available resources, and assigning responsibilities. The planning process could include:

- An annual review, involving the City, PIAC, FOPI and other partners, of priority items that need to be accomplished based on a 5-year forecast
- The identification of resource requirements and responsibilities for priorities
- A forecast of available resources, including funding: the City, Public/Private Partnerships (3P), volunteer groups, donations, grant and subsidies, special interest group contributions, etc.
- The determination of lead agencies and partners for action items
- The preparation of an annual action plan based on priorities, available resources and agreed responsibilities.

**Annex A:**

**1 UNA 92: Petrie Islands and mainland**

**DESCRIPTION:**

- complex of alluvial islands, riparian deciduous swamp forests and mainland deciduous and mixed upland forests along Ottawa River, Cumberland.

**SITE DETAILS**

**a) Size:**

288.2 ha.

**b) Ownership:**

- City of Ottawa, Province of Ontario and private

**EVALUATION SUMMARY**

<b>Area Evaluation Summary</b>					
<b>Urban Natural Area 92: Petrie Islands and Mainland</b>					
<b>Criteria</b>	<b>Rating Assigned</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Connectivity</b>					X
<b>Regeneration</b>				X	
<b>Disturbance</b>			X		
<b>Size and Shape</b>					X
<b>Habitat Maturity</b>				X	
<b>Natural Communities</b>					X
<b>Representative Flora</b>					X
<b>Significant Flora and Fauna</b>					X
<b>Wildlife Habitat</b>					X
<b>Overall Rating for Site</b>	<b>High</b>				

**ECOLOGICAL FUNCTIONS :**

**a) Connectivity:**

- on Ottawa River; adjacent to UNA 188 (Petrie West); UNA 93 (Taylor Creek Valley) adjacent to south.

**b) Interior habitat:**

ca 160 ha [mostly wetland habitat]

**c) Disturbance and condition:**

- Exceptionally high native flora Co-efficient of Conservation rating (4.61), with 63 high-rated Coefficient of Conservation species;
- minor recreational impact informal trail along abandoned roadway on East Island and along informal pathways off causeway access road to public park;
- lowland flooding (water level raised 1.5 m) since 1960 by construction of Carillon Dam;
- flood-bourn litter and residential garbage along high-water mark throughout.

**d) Adjacent land use:**

- residential area adjacent to natural area to southwest;
- major recreational park adjacent to natural area in former sand extraction site at east end of island;
- agricultural development to southwest.

**e) Invasive plants:**

- Fifteen (15) species with moderate to severe impact to date:

Upland habitats:

- Glossy Buckthorn (*Rhamnus frangula*) (4)
- Black Buckthorn (*Rhamnus cathartica*) (3)
- Tartarian Honeysuckle (*Lonicera tatarica*) (2)
- Manitoba Maple (*Acer negundo*) (3)
- Garlic-mustard (*Alliaria petiolaris*) (4)
- Lily-of-the-Valley (*Convallaria majalis*) (2)
- Moneywort (*Lysimachia nummularia*) (2)
- Japanese Knotweed (*Fallopia japonica*) (2)
- Jerusalem-artichoke (*Helianthus tuberosus*) (2)

Aquatic habitats:

- Crack Willow (*Salix γrubens*) (3)
- Eurasian water-milfoil (*Myriophyllum spicatum*) (4)
- Purple Loosestrife (*Lythrum salicaria*) (4)
- Flowering Rush (*Butomus umbellatus*) (3)
- Canary-grass (*Phalaris arundinacea*) (5)
- Frog's-bit (*Hydrocharis morsus-ranae*) (4)

**NATIVE BIODIVERSITY:**

**a) Habitats (type and dominants):**

- young to submature Green Ash deciduous swamp forest (throughout islands and wet pockets on mainland);

- submature United Maple, Silver Maple, Red Maple deciduous swamp forest (dominant forest vegetation on alluvial islands);
- submature to mature Hackberry deciduous swamp forest over dense Ostrich fern (small areas of all islands);
- deciduous thicket swamp (sheltered bays of most islands);
- Canary-grass marsh (abundant in newly flooded wetland);
- Cat-tail marsh (locally abundant, most natural marsh vegetation);
- shallow water aquatic associates (diverse aquatic communities in most shallow bays);
- young to submature upland forest (Green Ash, White Birch, Red Maple) – common in lower slopes and backshore;
- mature upland mixed forest (Eastern Hemlock, Sugar Maple) – small area of original Ottawa shore forest in Queenswood Forest;
- sand barren (graminoid and scrub) – dune-like area on West Island.

**b) Representative flora/ fauna:**

- Exceptionally high level of native biodiversity (313 native plant species observed);
- faunal representation of both common urban breeding birds, herptiles and mammals;
- see *Appendix* for list of native flora observed.

**c) Significant features and species:**

- Provincially Significant Wetland area;
- candidate Provincially Significant Area of Natural and Scientific Interest (ANSI);
- one of highest totals (63) of high rated CC plant species in the City of Ottawa;

Vegetation and flora:

- eighteen (18) Regionally Rare species and 26 Regionally Uncommon plant species in aquatic and upland habitat, including three Provincially Rare species :

*Carex typhina*

*Panicum philadelphicum* ssp. *gattingeri*

*Persicaria arifolia*;

- Provincially Rare Hackberry savannah habitat, possible unique in Ontario.

Fauna:

- relatively large population of Provincially Significant Map Turtles and Blanding's Turtles in wetlands and adjacent swamp forest (respectively);
- Provincially Significant Least Bittern and Black Tern at least former breeding species in open marsh habitat;
- breeding habitat for Regionally Significant raptor Cooper's Hawk in Queenswood Forest.

**ECOLOGICAL COMMENTS:**

**a) Management:**

- maintenance of natural forest canopy required to suppress invasive plant development, maintain natural diversity and to encourage continued site recovery from Carillon Dam flooding impact;

- control of growing pedestrian traffic from adjacent recreational park required to protect significant features and habitat quality.

**b) Recommendations:**

Research:

- none.

Passive recreation opportunities:

- exceptional potential (and need) for low impact, interpreted pedestrian pathway to service users of adjacent recreational facilities as well as provide interpretive access for destination visitors (addressing evolution and dynamics of alluvial islands; rare natural environment features; Ottawa River ecological functions and human interactions).

**SITE INVESTIGATION DETAILS:**

Date(s) and conditions: Condition Only check on 15 August 2005; sunny and clear; hot (28°C).

Investigator(s): Daniel F. Brunton

**OTHER COMMENTS:** (field conditions, photographs taken, etc.)

- provincially important natural area containing some of the best remaining representatives of Ottawa Valley shore and nearshore habitats as well as an exceptional array of rare features.

**REFERENCES:**

**Brownell, V. and C. S. Blaney. 1997.** *Summary Natural Area reports for Natural Areas east of the Rideau River.* [NESS 47] Planning and Development Approvals Department Report 28-08a, Regional Municipality of Ottawa-Carleton, Ottawa.

**Brunton, D. F. 1995.** *Life Science Areas of Natural and Scientific Interest in Site District 6E-12: A Review and Assessment of Significant Natural Areas.* [Unpublished draft report] Ontario Ministry of Natural Resources, Kemptville.

**Brunton, D. F. 1999.** *Natural environment inventory and interpretive concepts assessment of the Petrie Islands study area.* [Unpublished report for City of Cumberland], Daniel Brunton Consulting Services, Ottawa.

## ANNEX B: BIBLIOGRAPHY

City of Ottawa 2020 Official Plan

[http://ottawa.ca/city\\_hall/ottawa2020/official\\_plan/vol\\_1/index\\_en.html](http://ottawa.ca/city_hall/ottawa2020/official_plan/vol_1/index_en.html)

City of Ottawa Environmental Strategy 2020

[http://www.ottawa.ca/city\\_services/planningzoning/2020/enviro/toc\\_en.shtml](http://www.ottawa.ca/city_services/planningzoning/2020/enviro/toc_en.shtml)

City of Ottawa Greenspace Master Plan

[http://www.ottawa.ca/residents/planning/master\\_plans/gmp/index\\_en.html](http://www.ottawa.ca/residents/planning/master_plans/gmp/index_en.html)

City of Ottawa Environment

[http://www.ottawa.ca/residents/environment/index\\_en.html](http://www.ottawa.ca/residents/environment/index_en.html)

City of Ottawa Urban Natural Areas Environmental Evaluation Study UNAEES

[http://www.ottawa.ca/residents/environment/city\\_hall/getgreen/greenspace/evaluation\\_study\\_en.html](http://www.ottawa.ca/residents/environment/city_hall/getgreen/greenspace/evaluation_study_en.html)

City of Ottawa, Urban Natural Areas Environmental Evaluation Study, Final Report  
(Muncaster & Brunton, March 2005)

City of Ottawa UNAEES Addendum – 2005 Fieldwork Results (Muncaster & Brunton,  
March 2006)

[http://www.ottawa.ca/residents/environment/city\\_hall/getgreen/greenspace/addendum\\_en.html](http://www.ottawa.ca/residents/environment/city_hall/getgreen/greenspace/addendum_en.html)

City of Ottawa Evaluation UNA 92: Petrie Islands and mainland, Daniel F. Brunton  
(2005)

City of Ottawa Ottawa's Natural Lands

[http://www.ottawa.ca/residents/planning/master\\_plans/gmp/lands/natural\\_en.html](http://www.ottawa.ca/residents/planning/master_plans/gmp/lands/natural_en.html)

MNR *Stewardship Strategy for Ontario* 2006

[http://www.ontariostewardship.org/ontarioStewardship/dynamicImages/2710\\_Stewardship\\_Strategy\\_for\\_Ontario.pdf](http://www.ontariostewardship.org/ontarioStewardship/dynamicImages/2710_Stewardship_Strategy_for_Ontario.pdf)

MNR Natural Heritage Information Centre - Natural Areas Report: PETRIE ISLAND  
Area ID 7262 [http://nhic.mnr.gov.on.ca/areas/areas\\_report.cfm?areaid=7262](http://nhic.mnr.gov.on.ca/areas/areas_report.cfm?areaid=7262)

MNR Natural Heritage Information Centre - Natural Areas Report: PETRIE ISLAND  
WETLAND Area ID 1514 [http://nhic.mnr.gov.on.ca/areas/areas\\_report.cfm?areaid=1514](http://nhic.mnr.gov.on.ca/areas/areas_report.cfm?areaid=1514)

MNR Natural Heritage Information Centre - Natural Areas Report: PETRIE ISLAND  
WETLAND Area ID 8365 [http://nhic.mnr.gov.on.ca/areas/areas\\_report.cfm?areaid=8365](http://nhic.mnr.gov.on.ca/areas/areas_report.cfm?areaid=8365)

The Natural Values And Ecological Significance Of The Petrie Islands Prepared by Christine Hanrahan with Stephen Darbyshire on behalf of the Conservation Committee of the Ottawa Field-Naturalists' Club November 1998

<http://www.fallingbrook.com/petrieisland/documents/Hanrahan98.html>

Hanrahan, Christine and Stephen Darbyshire. 1999. The Petrie Islands: naturally special. *Trail & Landscape*, 33(2): 59-73.

Daniel F. Brunton: Natural Environment Inventory and Interpretive Concepts, Petrie Island Study Area, December 1999 (summary available at

<http://www.fallingbrook.com/petrieisland/documents/Brunton1999summary.pdf> )

Petrie Island Turtle Nesting Survey Report – 2006, Ontario Ministry of Natural Resources, September 2006

<http://www.fallingbrook.com/petrieisland/documents/PetrieTurtleNestingSurveyReport2006.pdf>

Petrie Island Master Plan Background and Issue Paper Cumberland Planning Department (July 1998)

<http://www.fallingbrook.com/petrieisland/documents/MasterPlan1998.html>

Petrie Islands Area Interpretive Trails Master Plan, City of Cumberland Planning Department (October 2000)

<http://www.fallingbrook.com/petrieisland/documents/CumberlandTrailPlan2000.htm>

OFNC Conservation Committee's Response to Petrie Islands Assessment

<http://www.ofnc.ca/conservation/petrie/petrieresponse.php>

prepared in response to the Natural Environment Inventory and Interpretive Concepts Assessment of the Petrie Islands Study Area December 1999

Response to the Proposed Petrie Islands Park by the Ottawa Field Naturalists' Club Conservation Committee 10 July, 2002 <http://www.ofnc.ca/conservation/petrie/petrie-beach-plan.php>

Petrie Island in Modern Times

<http://www.fallingbrook.com/petrieisland/history/moderntimes2.htm>

Petrie Island Woods Resource Inventory, Ottawa Field-Naturalists' Club, September 1977 (an unpublished report by A. Dugal of The Ottawa Field-Naturalists' Club)

<http://www.fallingbrook.com/petrieisland/documents/Dugal77-Petrie%20Island%20Woods.html>

Stokes (1996) - A study of the wetland classification of the island,

<http://www.fallingbrook.com/petrieisland/documents/Stokes96-Wetland%20Mapping.html>

RVCA Butternut Canker Report, Petrie Island, 2007

[http://www.fallingbrook.com/petrieisland/documents/butternut\\_report\\_2007.htm](http://www.fallingbrook.com/petrieisland/documents/butternut_report_2007.htm)

Ottawa Duck Club - [Report on egg hatchings on Petrie 2002](#)

Butternut (Endangered species) and Butternut Canker

<http://www.fgca.net/conservation/sar/butternut.aspx>

Ontario Ministry of Municipal Affairs and Provincial Policy Statement (2005)

<http://www.mah.gov.on.ca/Page1485.aspx>

Ontario Regulation 174/06 - Development, Interference with Wetlands and Alterations to Shorelines and Watercourses <http://www.rideauvalley.on.ca/plan-reg/regulations.html>

Region Of Ottawa-Carleton, File/ Réf. 42-98-0014 (6 October 2000): Status Update On Petrie Island

[http://www.ottawa.ca/calendar/ottawa/archives/rmoc/Planning\\_And\\_Environment/24Oct00/report4.pdf](http://www.ottawa.ca/calendar/ottawa/archives/rmoc/Planning_And_Environment/24Oct00/report4.pdf)

Petrie Island Park Environmental Assessment Update Report to Planning and Development Committee / Health, Recreation and Social Services Committee and Council 01 October 2002 <http://www.ottawa.ca/calendar/ottawa/citycouncil/occ/2002/11-13/hrss/ACS2002-DEV-APR-0213.htm>

City of Ottawa Planning and Environmental Assessment Study for the Petrie Island Park Project Notice of Study Completion

[http://ottawa.ca/city\\_services/major\\_projects/petrie\\_isl/completion\\_en.shtml](http://ottawa.ca/city_services/major_projects/petrie_isl/completion_en.shtml)

City of Ottawa Petrie Island Park Planning and Environmental Assessment Study, Baird Delcan, May 2003

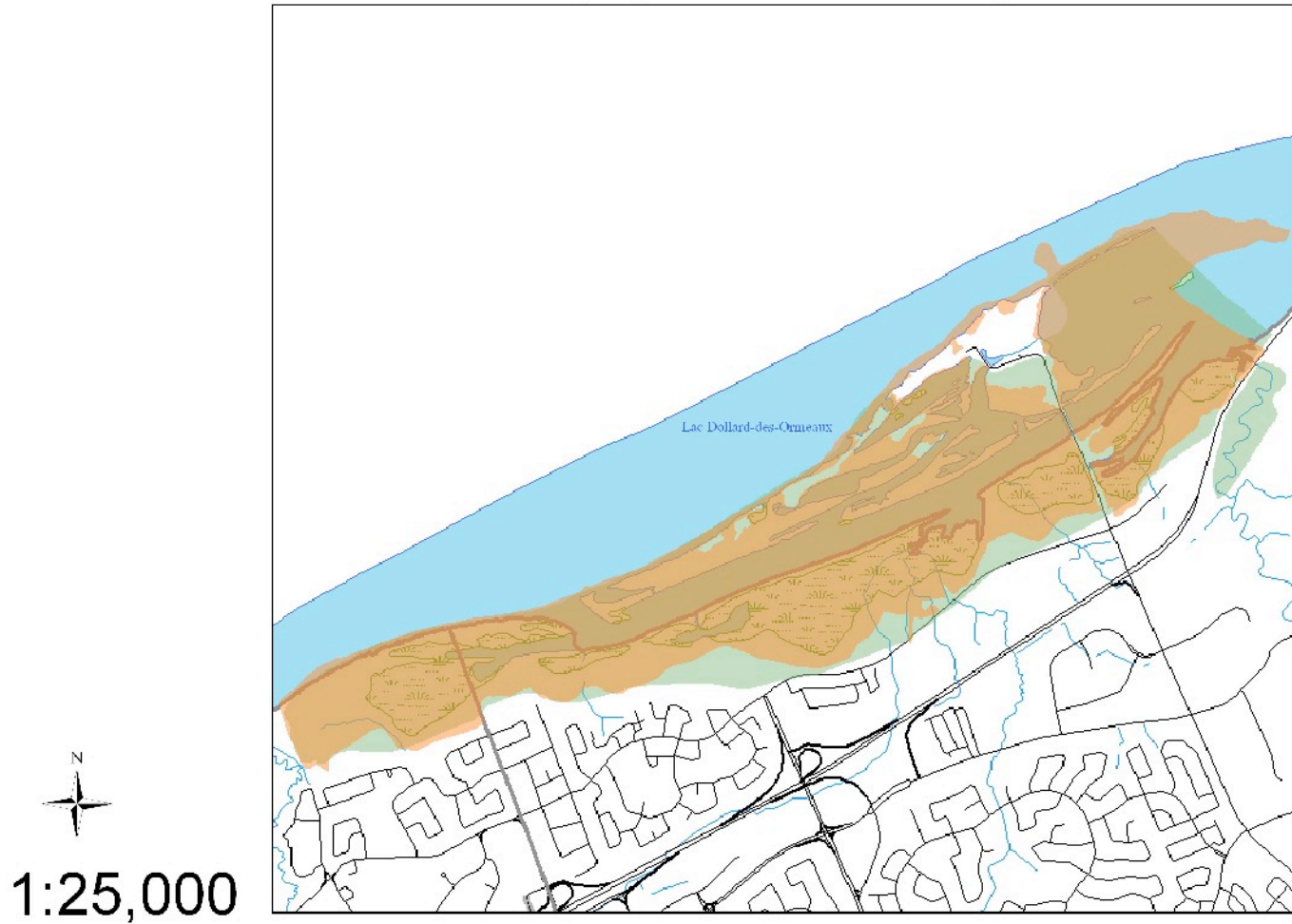
Federal Environmental Assessment Index 39367 Infill, Ottawa River, Petrie Island Park

[http://www.ceaa.gc.ca/051/report\\_e.cfm?FeaiNo=39367](http://www.ceaa.gc.ca/051/report_e.cfm?FeaiNo=39367)

A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System – 2005 <http://www.ottawariver.org/pdf/0-ORHDC.pdf>



Petrie Island Provincially Significant Wetland - In Orange



Petrie Island Provincially Significant Candidate ANSI - In Green

