



# DuPont

## Preliminary Management Plan



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January, 2004

Dear Sir / Madam:

The Ministry of Natural Resources, Ontario Parks is preparing a management plan for DuPont Provincial Park. As part of this work I am pleased to approve the **DuPont Provincial Park Preliminary Management Plan**.

I invite you to participate in planning for the park by reviewing the preliminary management plan and providing us your comments on it. An open house will be held following release of the plan. Open house dates and places will be advertised. Comments on the document or the planning process can be submitted to the Ontario Parks South Eastern Zone office address noted on the inside cover of this document.

The preliminary management plan proposes policies and direction for the protection, development and management of DuPont Provincial Park over the next 20 years. It recommends the preparation of plans for resource stewardship and the implementation of park policies to achieve park objectives. The plan is based on the policy for nature reserve class parks set out in *Ontario Provincial Parks: Planning and Management Policies (1992)*.

The Ontario Parks partnership with the Nature Conservancy of Canada (NCC) seeks to secure significant areas for new provincial nature reserves. In this case NCC secured the 616 ha property from DuPont Canada Inc. so that its distinctive landscape, flora and fauna could be protected. The agreement with the Nature Conservancy of Canada for this property calls for regulation of the property as a provincial nature reserve under the *Provincial Parks Act*.

An amendment to the Cornwall District Land Use Guidelines (1983) is required to recognize the DuPont property as a recommended provincial park. The planning process for DuPont Provincial Park provides public notice and consultation opportunities for this minor amendment to the guidelines.

The Ministry of Natural Resources is collecting comments and information during this planning process under authority of the *Provincial Parks Act* to assist decision making and the determination of public consultation needs.

The comments we receive may be included in documents that are made available for public review. Personal information, as defined by the *Freedom of Information and Protection of Privacy Act*, will remain confidential unless prior consent to disclose it is obtained. However, this information may be used to seek public input on other projects of the Ministry of Natural Resources.

Your participation in planning for this park is appreciated. All comments received will be considered during the preparation of the final DuPont Provincial Park Management Plan.

Yours truly



Adair Ireland-Smith  
Managing Director  
Ontario Parks

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## FOREWORD

### **MNRs Strategic Direction and Statement of Environmental Values**

The Ministry of Natural Resources (MNR) is responsible for managing Ontario's natural resources in accordance with the laws it administers. As the province's lead conservation agency, MNR is the steward of provincial parks, natural heritage areas, forests, fisheries, wildlife, mineral aggregates, fuel minerals and the Crown land and water that makes up 87% of Ontario.

In 1994, MNR completed its Statement of Environmental Values as required by the *Environmental Bill of Rights, 1993*. The statement indicates how the purposes of the *Environmental Bill of Right* are to be considered whenever MNR makes decisions that might significantly affect the environment.

In 2000, MNR released *Beyond 2000*, which identifies the ministry's vision of sustainable development and its mission of managing Ontario's natural resources in an ecologically sustainable manner. The supporting strategies of *Beyond 2000* are also considered in MNR land use and resource management planning.

During the development of this preliminary management plan, MNR has considered both of these documents. This preliminary management plan is intended to reflect the directions set out in them and to further the objectives of managing Ontario's resources on a sustainable basis.

## 1. INTRODUCTION

This preliminary management plan provides policy direction for the management of DuPont Provincial Park. It is based on the Terms of Reference, the Background Information document and input received from public consultation.

For ease of review, this preliminary plan is worded in the style of an approved management plan (such as, “Ontario Parks will...”). However, this document is a *proposed* plan and all aspects of it are subject to public review and comment.

Based on the public input received, Ontario Parks will prepare, approve and distribute the management plan for DuPont Provincial Park.

The policies in this plan will not abrogate or derogate from any Aboriginal or treaty rights recognized or affirmed by the *Constitution Act*.

## 2. LEGACY 2000

As part of the Ontario Parks Legacy 2000 partnership, Ontario Parks and the Nature Conservancy of Canada (NCC) collaborated to secure significant areas for new provincial nature reserves. To achieve this goal, innovative arrangements for area protection and management were developed. In this particular case, NCC acquired the 616 ha property from DuPont Canada Inc. in order to protect its distinctive landscape, flora and fauna. The agreement with the Nature Conservancy of Canada calls for regulation of the property as a provincial nature reserve under the *Provincial Parks Act*.

## 3. SITE DESCRIPTION

DuPont Provincial Park is located in the municipal Township of South Dundas, in the United Counties of Stormont, Dundas and Glengarry, next to the village of Morrisburg. It lies within the boundary of the Ministry of Natural Resources (MNR) Kemptville administrative district and is administered by the Park Superintendent at Voyageur Provincial Park near Hawkesbury, reporting to the Ontario Parks, South Eastern Zone office at Kingston. The park falls within Ecodistrict 6E-12.

The property has 1500 m of frontage on the St. Lawrence River and includes an island 250 m offshore. To the north a transportation corridor, comprised of Highway 401 and the Canadian National Railway, bounds the park. On the west side, an industrial park and a railway spur line are the adjacent land uses, whereas on the east side, there is a county road, private residential properties and a campground operated by the St. Lawrence Parks Commission. The park abuts three sides of the Rohmax Canada Inc. industrial property and is bisected by County Road 2.

DuPont Canada Inc. originally purchased the property for industrial purposes and prepared a site for a plant in the northeastern block (see Figure 1 Park Location) in the 1960s. These plans were never realized and the property was left undeveloped until its purchase by NCC.

The property is comprised of approximately 616 ha in three parcels, two north and one south of County Road 2. For convenience, the following terms are used in this document to describe these areas which are shown in Figure 1 Park Location:

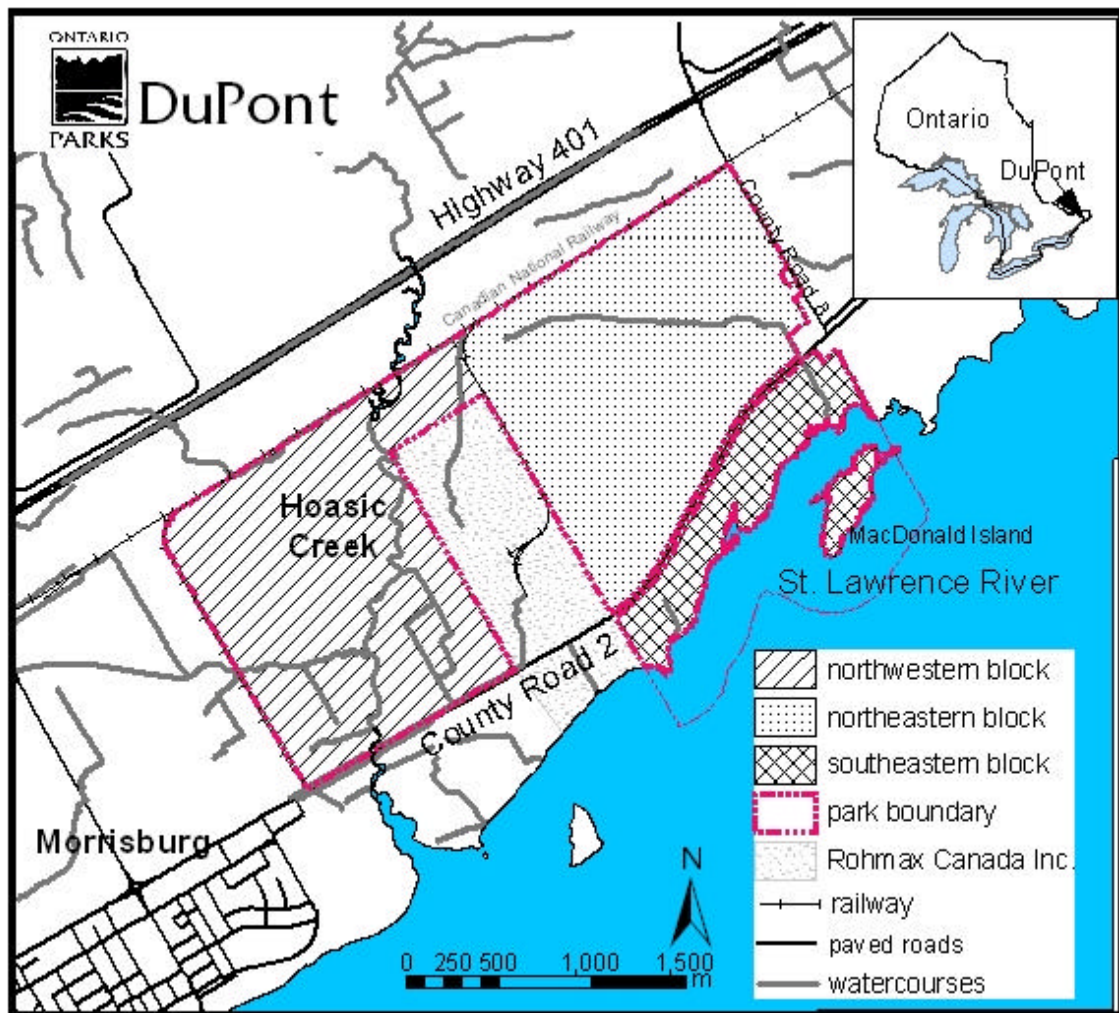
1. the northwestern block (approximately 232 ha), west of Rohmax Canada Inc. land;
2. the northeastern block (approximately 230 ha), generally east of Rohmax Canada Inc. land and
3. the southeastern block (approximately 154 ha), comprised of mainland area (65 ha) south of County Road 2 plus MacDonald Island (9.1 ha) and (89.4 ha) water area, measured 300 m from the water's edge along the St. Lawrence River. This water area includes part of the Riverside Marsh.

Park is the presence of outstanding natural features in an area where human activities have significantly altered the landscape. Beginning with the clearing of the flat, poorly drained soils for agriculture in the early 19<sup>th</sup> century, continuing with the flooding of the shoreline for the St. Lawrence Seaway in the 1950s and culminating with the development of industrial activities adjacent to the property in the 1960s, humans have left their mark in many ways.

In spite of these activities Hoasic Creek, which flows through the property, is one of the few remaining natural creeks in

A distinctive aspect of DuPont Provincial

**Figure 1 Park Location**



southeastern Ontario. It provides spawning and nursery habitat for a variety of fish species including the provincially uncommon Greater Redhorse. The 144 ha Riverside Marsh is recognized as an Area of Natural and Scientific Interest (ANSI) which overlaps the park boundary. It was created by flooding for the St. Lawrence Seaway.

The northwestern block encloses most of the 357 ha Hoasic Creek Hardwoods ANSI (see Figure 2 Land Designations) and supports a mature mixed forest representative of what used to be common in the township: Sugar Maple, American Beech and Eastern White Pine on the better drained soils and with Red Maple, Silver Maple, Black Ash and Red Ash in the forested swamps. This forest boasts one of the largest nesting sites for Great Blue Heron in southeastern Ontario with over 120 active nests. The site also supports 17 vegetation communities and more than 365 species of plants including the provincially uncommon Lake Cress and Lizard's Tail.

#### **4. SUMMARY OF SIGNIFICANT ISSUES**

##### **Hoasic Creek**

While Hoasic Creek is one of the least disturbed watercourses in southeastern Ontario, DuPont Provincial Park will provide protection only for the lower 2 km of its 19 km length. Water quality in Hoasic Creek is significantly degraded due to high levels of nutrients and bacteria which most likely originate upstream. Strategies for addressing this issue are provided in the resource stewardship policies for land and water (section 9.1, page 13) and fish and wildlife (section 9.3, page 15).

##### **Rohmax Canada Inc. Land**

DuPont Provincial Park abuts the 100 ha Rohmax Canada Inc. industrial property on three of its four sides. The plan addresses these apparently incompatible adjacent land uses. The plant occupies a small part of the property and much of the rest is indistinguishable from the adjacent park lands. In particular, the lands to the north of the plant play an important ecological role as they encompass a wetland and a small section of Hoasic Creek. These lands are addressed in two places within the management plan: the discussion relating to the boundary (section 7.0, page 9) and; the resource stewardship policies for vegetation (section 9.2, page 14).

##### **Motorized trail activity**

Motorized trail activities are not permitted within nature reserve class provincial parks. When the property was owned by DuPont Canada, the Riverside Snowmobile Club established a snowmobile trail. In summer, all-terrain vehicles (ATVs) and motorbikes occasionally use this trail or leave it for off-trail riding. A proposal to relocate the trail has been discussed with the snowmobile club however a route has yet to be finalized. This issue is addressed in the park policies for recreation management (section 10.1, page 16).

##### **Riverside Marsh**

The Riverside Marsh is essentially a cattail marsh with a limited diversity of vegetation. The impacts of various disturbances are unknown but it is possible they may be hindering the establishment of a more diverse ecosystem. Approaches for addressing this issue are discussed in the resource stewardship policies for land and water (section 9.1, page 13).

## **Heritage Appreciation**

Currently, DuPont Provincial Park provides very limited opportunities for heritage appreciation. There are no parking facilities or developed hiking trails and the thick vegetation and poor drainage discourages access. Opportunities for trail access are presented in the development policies for trails (section 11.1, page 17) and access (section 11.2, page 18).

## **Community Participation**

A key factor in establishing long-term support for a protected area is the involvement of the local community in decision-making and management processes. Strategies for involving the local community in park management are presented in the resource stewardship policies for land and water (section 9.1, page 13), in the development policies for trails (section 11.1, page 17) and in the section addressing the implementation of the plan (section 12.0, page 18)

## **Invasive Species**

Most of the park area has had significant impact from human activity including farming and the flooding of the shoreline by the St. Lawrence Seaway. Surrounding the park are areas where native species of plants and animals have been displaced by development (e.g. roads, urbanization) or by land management practices (e.g. farming, gravel pits). As a result, many invasive non-native species of plants and animals have become established (e.g. Common Carp, species of buckthorn, Purple Loosestrife) in the park. The Resource Stewardship Plan proposed in section 9.0 (page 13) will place particular emphasis on the management of invasive species whereas, the resource stewardship policies for vegetation (section

9.2, page 14) provide general guidelines in the interim.

## **Inappropriate Access and Dumping**

Because there was no presence on the property by the owners for a long period of time (DuPont purchased the property in the 1960s) inappropriate activities including garbage dumping and bush parties became established. There is now a need to foster a healthy stewardship of the property. This issue is addressed in the resource stewardship policies for land and water (section 9.1, page 13).

## **5. LAND USE GUIDELINES**

An amendment to the Cornwall District Land Use Guidelines (1983) is required to recognize the property as a recommended provincial park (in what is now Kemptonville District). The planning process for DuPont Provincial Park provides public notice and consultation opportunities for this minor amendment to the guidelines.

## **6. CLASSIFICATION**

Provincial parks in Ontario fall into one of six classes: *wilderness*, *nature reserve*, *historical*, *natural environment*, *waterway and recreation*. The DuPont property is classified as a nature reserve.

Nature reserves are areas selected to represent the distinctive natural communities and landforms of the province. They are protected for educational purposes, as gene pools for research and for their intrinsic values. Management of nature reserve class parks is focused on the achievement of the objectives of protection and heritage appreciation. Various recreational activities including camping, hunting and snowmobiling are not permitted and park

facilities are limited to basic services such as parking and trails.

DuPont Provincial Park supports a wide range of habitats and a great diversity of species in a relatively small area. Over time, protection will allow the re-establishment of an even more diverse ecosystem in a place that has been significantly altered by human activities. The designation of the property as a provincial nature reserve fulfils one of the objectives of the parks system plan for MNRs former Eastern Region to establish a park in what was then known as site district 6E-12. (Site districts are now called ecodistricts.)

## 7. GOAL

**The goal of DuPont Provincial Park is to protect the biological diversity, special beauty and educational value of the property as part of the heritage of Ontario.**

The park is governed by the *Provincial Parks Act* and the *Ontario Provincial Parks Planning and Management Policies (1992)*.

### 7.1 Objectives

The six park classes contribute in varying degrees to the four objectives of the provincial parks program: *protection, heritage appreciation, recreation and tourism*. As a provincial nature reserve, the primary focus of DuPont Provincial Park is to protect its significant life science features and to provide opportunities for heritage appreciation.

## Protection

- **To protect the outstanding natural heritage of the park and to allow it to evolve naturally over time**

Ontario Parks will work to achieve the protection objective through appropriate zoning and an ecosystem approach to park planning and management. The ecosystem approach extends interest beyond the park boundaries to include the ecological, social and economic elements that affect the quality of the natural environment within the park. The intensity of land uses in areas outside the park has the potential to significantly influence the quality of the natural environment within it.

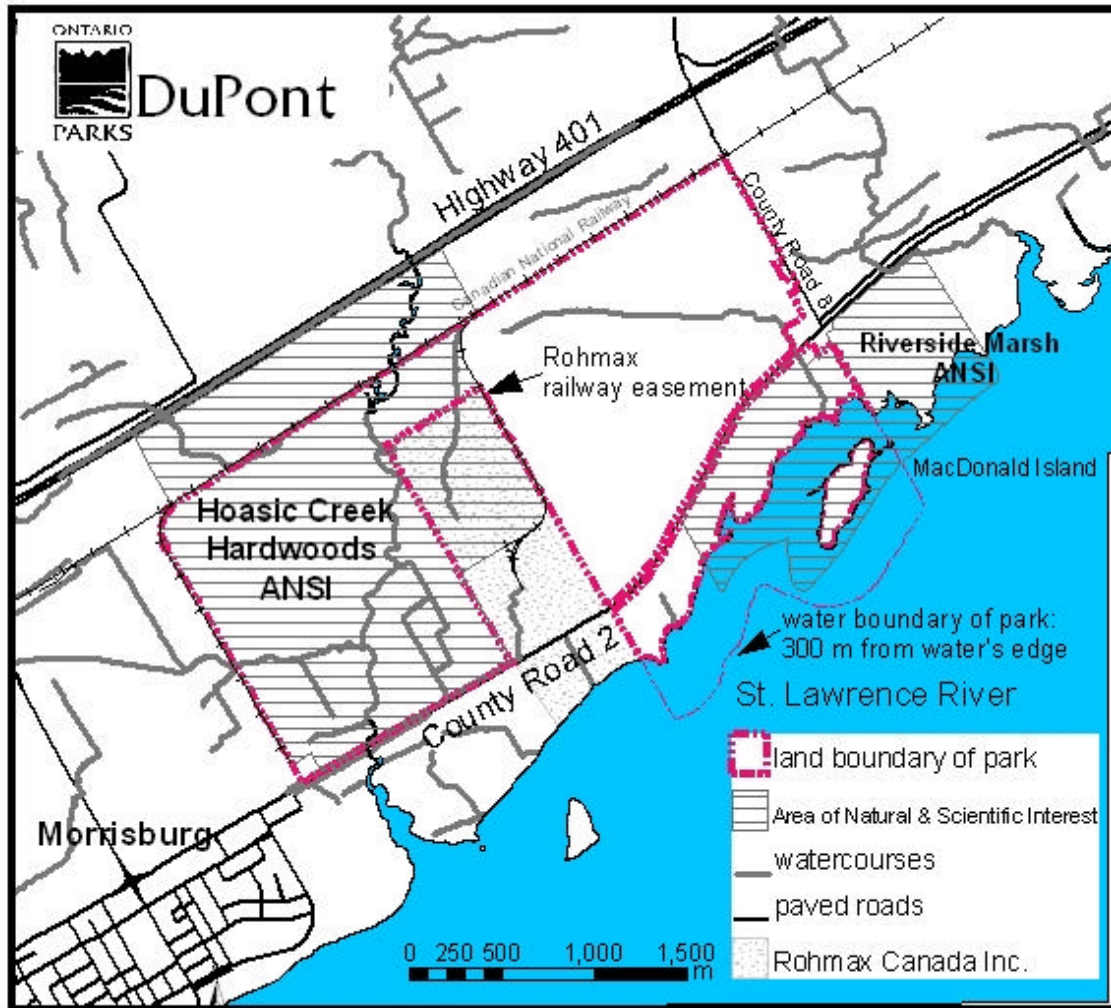


While natural succession will be the principal approach used in the management of DuPont Provincial Park, active ecological restoration of some sites may take place if it can be shown that significant ecological benefits can be achieved.

Within the park a high level of protection will be provided by limiting the type, range and intensity of recreational activities and by controlling access to the park. Only very basic visitor services will be provided and they will be developed in areas that are least sensitive to impact. Most of the park will be allowed to evolve naturally over time.

Achievement of the protection objective will be measured through ongoing monitoring and research on the health of the park's environment.

Figure 2 Land Designations



### Heritage Appreciation

- **To provide opportunities for the appreciation of the natural and cultural heritage of the park through the provision of appropriate educational and recreational activities**

Within the limits of the need to restrict access to certain areas at certain times to protect natural heritage values, the entire park is very suitable for heritage exploration and appreciation. A range of opportunities will be provided focussed mainly on unstructured individual exploration. Specific facilities and services for heritage

education are described in sections 10.0 (Park Operations Policies, page 16) and 11.0 (Development Policies, page 17).

### Recreation

- **To provide opportunities for recreational day use that are compatible with the nature reserve classification of the park and with the maintenance of its ecological integrity**

Walking, cross-country skiing and snowshoeing on a limited trail network are potential terrestrial activities. Activities on the water include boating and fishing in the

St. Lawrence River portion of the park.

## **Tourism**

- **To provide appropriate opportunities for Ontario residents and visitors to discover and experience the park's environment**

The park will offer opportunities for self-directed nature appreciation. Standard promotional strategies including road signs, identification on maps and park guides will publicize these opportunities. The park will offer opportunities that are complementary to those of existing tourism attractions such as Upper Canada Village and the St. Lawrence Parks Commission.

## **8. BOUNDARY**

Figure 2 shows the land boundary of DuPont Provincial Park. Physical features such as roads and railway lines generally define the boundary. The park also includes the waters of the St. Lawrence River to a limit of 300 m from the water's edge.

The former Ontario Hydro (now separated into Hydro One Networks Inc. and Ontario Power Generation Inc.) has an easement on the property along the St. Lawrence River that allows the company to flood to the 249' level (75.49 m). This is approximately 6' (1.8 m) above the level of the existing shoreline. The easement covers the part of the property that was flooded by the creation of the St. Lawrence Seaway.

Along County Road 8 there are eight private residences that share the eastern boundary of the park. Some residents have maintained a mowed buffer on park property between the regenerating fields of the park and their properties.

In order to access the plant, Rohmax Canada Inc. holds an easement for the railway spur line crossing park property. (See Figure 2 Land Designations.) The 50 ha portion of the Rohmax Canada Inc. property to the west of the spur line forms part of the Hoasic Creek Hardwoods ANSI. It abuts the park on three sides. A conservation easement is a possible means of ensuring that this portion of the Rohmax Canada Inc. property is managed in a way that is compatible with DuPont Provincial Park.

An 80 ha area north of the northwestern block, between Highway 401 and the CNR line, also forms part of the Hoasic Creek Hardwoods ANSI. (See Figure 2 Land Designations.) Domtar Inc. owns this property. If Domtar Inc. is supportive, an ecological assessment of this property should be undertaken to assess its potential to contribute to the ecological integrity of the park.

A railway spur line that serves an industrial park forms the western boundary of the park. Future development of the industrial park has the potential to have a negative impact on the natural values of the park.

County Road 2 bisects the park and separates the park's southeastern block (see Figure 1 Park Location) including the Riverside Marsh and shoreline area along the St. Lawrence River from the northeastern block. The St. Lawrence Parks Commission owns the eastern part of the Riverside Marsh as part of the Riverside-Cedar Campground.

## **9. ZONING**

Lands and waters within DuPont Provincial Park are zoned in accordance with the park's

significant features and the level of protection required. The zones for DuPont Provincial Park are based on the *Ontario Provincial Parks: Planning and Management Policies*. Zoning defines the degree of development permitted, and the visitor use and management practices that may be permitted. Provincial nature reserve class parks allow three types of zones: *nature reserve, access and historical* of which *nature reserve* and *access* are used at DuPont Provincial Park.

The following sections describe each zone including the resource uses, recreational uses and types of development permitted. All resource uses, recreational uses and facility development will be subject to standard legislation and policies governing provincial parks as well as the policies set out elsewhere in this plan.

In this plan, "species at risk" means species listed on MNRs list entitled *Vulnerable, Threatened, Endangered, Extirpated or Extinct Species of Ontario*, which includes:

- species named by regulation under the *Endangered Species Act*, and
- *Canadian Species at Risk* listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Species at risk listings are as of 2003 and are subject to change.

Ontario Parks will prepare a resource stewardship plan to guide vegetation, wildlife habitat management and restoration. Along with the policies in section 9.0 (Resource Stewardship, page 13), specific principles to be applied in preparing the resource stewardship plan will include the following.

The aim of this management and restoration will be to:

- in nature reserve zones, perpetuate the natural heritage values which the zone has been established to protect,
  - in access zones, protect significant natural heritage values that are present.
- 
- "Management and restoration" will generally mean maintaining natural environments in, or restoring them to, their original condition as nearly as possible, at which point those environments will be left to evolve naturally and without human interference, except as specifically prescribed in this plan. In some cases, continuing active management to maintain a particular habitat condition or stage of natural succession that does not represent original conditions (for example, an old field) may be justified if it contributes to the park's overall biodiversity.
  - "Original condition" means natural conditions before European settlement. It embodies not only natural succession and an absence of post-settlement human interference, but also the original quality, integrity, and diversity of the environment.
  - Natural processes will be used except where other approaches are specifically prescribed by this plan.
  - Priority will be given to restoration techniques that are judged to be most likely to succeed and to have the most substantial positive impact relative to cost.
  - Visitor education will be fundamental to successful implementation.

## 9.1 Nature Reserve Zone

The park has three nature reserve zones: the northwestern nature reserve zone (232 ha), the northeastern nature reserve zone (229 ha) and the southeastern nature reserve zone (154 ha). (See Figure 3 Park Zoning.) Together they make up more than 99% of the park's area. Most of the park is designated as *nature reserve* to protect its provincially significant life science features. Development in these zones will be limited to trails, necessary signs, strategically located interpretation panels and temporary facilities for research and management.

Not all of the nature reserve zones, in their present condition, offer a diversity of vegetation communities or distinctive features. The less diverse areas provide a buffer for the significant natural features and in time will reach a more natural state. Some intervention may be appropriate in order to enhance the regeneration of vegetation in these areas.

The nature reserve zones protect a variety of significant features, in particular: the mature forest, Hoasic Creek and the heronry in the northwestern nature reserve zone; and Riverside Marsh and MacDonald Island in the southeastern nature reserve zone.

Several provincially significant species of animals and plants have been observed in DuPont Provincial Park. The Red-shouldered Hawk is designated as a species of special concern by COSEWIC. Greater Redhorse, Lake-Cress and Lizard's Tail are designated as S3 or uncommon in Ontario. DuPont Provincial Park will support the perpetuation of these species by protecting their habitat.

## Vegetation

There are seventeen distinct vegetation communities within DuPont Provincial Park.

The mature forest is concentrated in the northwestern nature reserve zone. It consists of a wide variety of species: Eastern White Pine, Sugar Maple and Eastern Hemlock on the drier upland parts and ash and Red Maple and Silver Maple in seasonally flooded areas. To the south, along County Road 2 the vegetation is a mixture of shrubs and pioneer species of Trembling Aspen and White Birch.

In the northeastern nature reserve zone most of the land is covered with a second growth forest of Balsam Poplar and White Birch interspersed with White Cedar swamps and several stands of mature Eastern White Pine. There are also remnants of fields that are slowly being colonized by species of hawthorn and willow.

In the southeastern nature reserve zone the vegetation consists of hawthorn and willow thickets with open grasslands. Cattle grazing has inhibited vegetation diversity in this area. The Riverside Marsh is a Reed Grass and Canary Grass marshland with limited vegetation diversity. MacDonald Island, which was created by the flooding of the St. Lawrence River for the seaway, is a mixture of marshland and a forest of second growth species of poplar, White Birch and White Elm.

## Birds

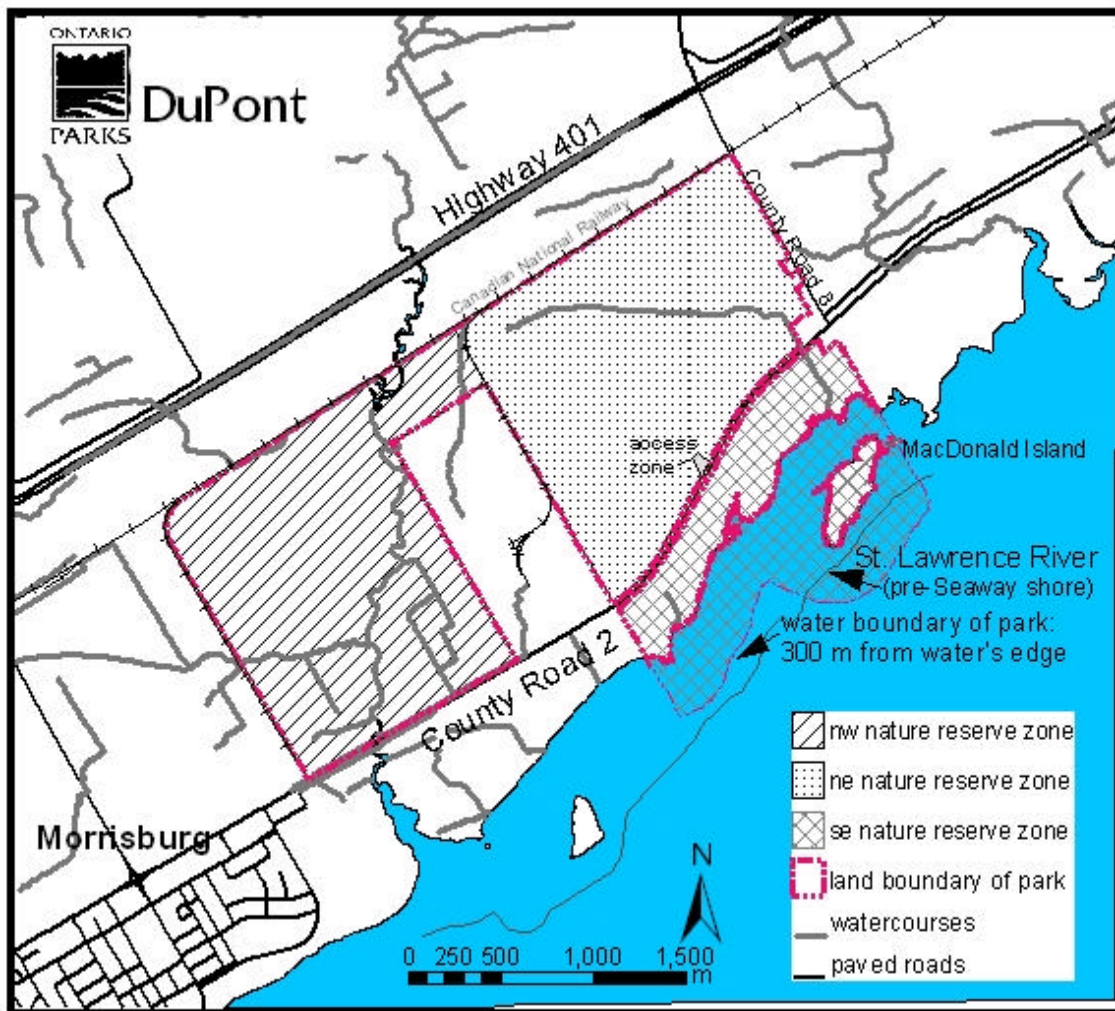
The park supports a good diversity of forest birds especially in the mature Eastern White Pine, Sugar Maple, Eastern Hemlock forest in the northwestern nature reserve zone. Particularly notable are species such as the Pine Warbler and Pileated Woodpecker that

require mature forest habitat. The younger forest surrounding the mature forest acts as a buffer so that most of the mature forest attracts birds that depend on the forest interior for successful breeding. The presence of the large nesting colony of Great Blue Herons indicates that the forested wetlands in the northwestern nature reserve zone are relatively free from human disturbance during the breeding season. The shoreline along the St. Lawrence River provides habitat for variety of species including Double-crested Cormorant, Least Bittern, American Bittern, Common Tern, and Killdeer. A large population of Canada Goose is present in this area.

### Mammals

The park supports a number of mammal species including White-tailed Deer, Coyote, Beaver, Muskrat, Raccoon, Porcupine and Grey Squirrel. The mature coniferous forest (Eastern Hemlock, Eastern White Pine and Eastern White Cedar) in the northwestern nature reserve zone supports a deer-wintering area.

**Figure 3 Park Zoning**



## **Amphibians and Reptiles**

Despite the impacts of past cultivation and the local heron population, the park supports a population of amphibians and reptiles including such species as Common Gartersnake, Eastern Newt, Eastern Red-backed Salamander, Chorus Frog, Leopard Frog, Wood Frog, Snapping Turtle, Painted Turtle and Map Turtle. The substantial area of forested wetlands and the many isolated small areas with poor drainage provide significant habitat.

## **Butterflies**

The diverse habitat within the park supports a wide range of butterfly and moth species. In particular the patchy forest and meadow areas, along the County Road 2 corridor and in the northeastern nature reserve zone, support butterfly species such as Monarch, Red Admiral and Clouded Sulphur. Over time, as succession occurs and the areas of open field and meadow diminish, the populations could drop.

## **Fish**

Hoasic Creek is a warm-water fish stream. The habitat consists of slow moving water with deep pools and short sections of shallow riffle habitat. Boulders, deep pools, large woody debris, algae and sparse aquatic vegetation provide cover in the creek. In some areas, overhanging Manitoba Maple and alders, which assist in lowering the water temperature, cover the entire width of the creek.

The high water marks observed along the bank indicate that the water level greatly increases during the spring runoff. Common Carp take advantage of this period to migrate to wider, slower moving sections of the creek. The increase in water depth may

also allow Northern Pike and Muskellunge to use the creek as a migratory route to the wetlands in the headwaters. The creek's increased depth and velocity during the spring runoff may also create Walleye spawning habitat near the highway bridge. The rocky streambed provides spawning habitat for Smallmouth Bass.

In the Riverside Marsh on the St. Lawrence River the gravel riverbed provides spawning habitat for Smallmouth Bass. In addition, the cattail and willow marshes may provide spawning habitat for Northern Pike and Muskellunge. Common Carp spawn in the shallow areas between MacDonald Island and the marsh.

## **9.2 Access Zone**

The access zone serves as a staging area and a location for self-directed use of the park. There is one access zone (0.5 ha) which will serve as a staging area for proposed trail activities in the northeastern nature reserve zone along County Road 2. This is the site of a gravel road into the park.

## **10. RESOURCE STEWARDSHIP**

DuPont Provincial Park will be managed in accordance with this management plan and the *Ontario Provincial Parks Planning and Management Policies*. Resource stewardship initiatives may be accomplished through partnerships. A resource stewardship plan will be prepared to provide detailed prescriptions for the proper stewardship and management of park values.

### **10.1 Land and Water**

The Riverside Marsh has the potential to become a more biologically diverse environment through improvements in water flow and the creation of habitat.

Regarding management of Hoasic Creek, Ontario Parks will work in partnership with stakeholders to develop a cooperative approach based on the entire watershed. It will emphasize improving water quality and fish habitat and maintaining water flow. Projects aimed at achieving these objectives may occur within the park.

This approach may include working in partnership with a number of agencies and individuals including:

- The Township of South Dundas to ensure that future development of land surrounding the park will be compatible with the park's objectives.
- The St. Lawrence Seaway Authority, the St. Lawrence Parks Commission and possibly Ducks Unlimited to enhance the natural qualities of the Riverside Marsh.
- Land owners, naturalists clubs, Resource Stewardship S.D. & G. (the stewardship council for Stormont, Dundas & Glengarry Counties), and others to help protect the wetlands in the headwaters of Hoasic Creek

This approach will be cooperative and participatory, and does not imply provincial control over private property rights.

There are a number of sites within the park where past human activities have negatively affected natural features. These include the site prepared for industrial development in the northeastern nature reserve zone, drainage ditches, and gravel and sand pits. Ecological restoration of these sites may take place if it can be shown that significant ecological benefits can be achieved.

Cleanup will occur at sites within the park where old building materials and garbage have been dumped. Appropriate signs will be placed at traditional points of access to these locations and the access will be closed.

Where necessary, survey points will be re-established to identify the park boundary in order to maintain park interests and ensure good relations with neighbouring property owners.

The Township of South Dundas will soon be developing a new official plan. The development of land outside the park has the potential to have a negative impact on the natural values of the park. Much of the park qualifies as natural heritage features and areas as defined by the Provincial Policy Statement under the *Planning Act*. Planning authorities are required to have regard to the provincial policy that natural heritage features and areas are to be protected from incompatible development on adjacent lands. MNR will recommend to the Ministry of Municipal Affairs and Housing that the Township of South Dundas be asked to ensure that its official plan appropriately identifies the park's lands and waters, so that new development near the park is assessed with regard to any potential impacts on the park's natural heritage values in accordance with provincial policy.

## 10.2 Vegetation

No commercial harvesting of timber will be permitted in the park.

Except when there is a threat to public safety, dead trees will be left standing, and if cut or when they fall on their own, they will be left where they fall. Only mechanical means such as mowing will be used to manage vegetation on the easement along the railway spur line into the Rohmax Canada Inc. plant.

Rare and significant species may be periodically monitored to ensure their continued health. Specific enhancement or re-introduction programs may be developed where appropriate. Alien or non-native plant

species will not be intentionally introduced and will be controlled if they are shown to be negatively affecting the health of native species. Insect or disease control will occur only where there is a threat to the park's natural features.

There have been impacts on park vegetation caused by the wandering of grazing cattle on to park lands south of County Road 2. If grazing is to continue on the adjacent property, Ontario Parks will make arrangements with the cattle owners to ensure proper control of the cattle.

### **10.3 Fish and Wildlife**

Sport hunting and commercial trapping will not be permitted within the park and to help protect rare species, fishing will be discouraged in Hoasic Creek. The control of a particular species may be undertaken for public safety, protection of property, and perpetuation of natural values. Sport fishing will be allowed in the waters of the St. Lawrence River that fall within the park boundary, and it will be managed in accordance with MNR regulations for those waters.

Reintroduction of native species may occur if it does not threaten the integrity of the park's ecosystems. Rare and significant wildlife species may be monitored periodically to ensure their continued health within the park. Protection and recovery plans will be implemented as necessary for the perpetuation of such species.

Fish and wildlife management will focus on achieving a healthy and diverse natural environment. Natural succession will be the primary means of achieving this objective.

Ontario Parks will monitor the effects of deer browse on vegetation to determine

whether management action is required. If action is necessary it will be addressed in a resource stewardship plan.

A 300 m protective buffer area around the heronry will be established. Within this buffer no permanent visitor facilities will be permitted. (See section 10.1 Recreation Management, page 16.) Monitoring of the heronry will be undertaken as required to ensure its continued health.

### **10.4 Cultural Heritage Values**

The park vicinity is rural in character and was settled by the United Empire Loyalists in the late 1700s. Agrarian activity has dominated this landscape for the past two centuries. Evidence of this past use includes drainage ditches, laneways and fences. An abandoned cemetery is located just north of County Road 2 in the northeastern nature reserve zone. There are no grave markers or other features to indicate this although it appears on survey plans for the area. The site was also influenced by human activity with the construction of the St. Lawrence Seaway during the 1950s which completely altered the natural shoreline, creating the Riverside Marsh and MacDonald Island.

There has been no cultural resource inventory or assessment conducted on the property and there have not been any provincially significant cultural features identified. There is no documented evidence of past aboriginal activity.

An archaeological assessment of the park will be completed as resources permit. The zoning plan for the park may be modified if, following archaeological assessment, it is determined that any concentrations of cultural heritage sites require management different from that provided in current zoning.

Management strategies for any archaeological sites found in the future may range from allowing the site to evolve without human interference, to research, excavation, and rehabilitation. Protection and management will be undertaken in consultation with the Ministry of Culture and with appropriate First Nations as required.

## **11.PARK OPERATIONS POLICIES**

### **11.1 Recreation Management**

The policies of Ontario Parks establish what recreational activities and facilities are appropriate in provincial nature reserve class parks. ATV use, snowmobiling, horseback riding and mountain biking are some of the activities that are not permitted in this class of park. The Riverside Snowmobile Club has for many years operated a trail through the middle of the DuPont property. ATVs and motorcycles also use this trail in summer. In the northwestern nature reserve zone the trail comes within 65 m of the heronry. This route will be closed and moved to a new location. The County Road 2 corridor is considered a likely option although others will be considered. Ontario Parks will work with the snowmobile club to establish an appropriate location for a bridge over Hoasic Creek. The existing bridge will be removed.

Hiking, snowshoeing and cross-country skiing will be permitted. Campfires will not be permitted in the park.

Water based activities such as canoeing, kayaking and sport fishing will be allowed on the St. Lawrence River. At the present time access to the St. Lawrence River and the Riverside Marsh is provided in the southeast corner of the park using the old

County Road 8 road surface and an abandoned farm access road. While motorized access will be eliminated the access route will remain for pedestrian use. Restrictions on river access may be put in place during breeding or spawning periods.

Appropriate signs will be placed at the periphery of the park to indicate its status. Fencing or barriers will be used to control access at appropriate locations.

### **11.2 Heritage Education**

Heritage education in provincial parks is intended to develop visitors' awareness and appreciation of Ontario's natural and cultural heritage, fostering a commitment to protecting that heritage for all generations. Heritage education opportunities are meant to be educational and recreational, formal and informal, and accessible to all. There are three components of heritage education in parks: information, interpretation, and outdoor recreation. The level of service each park provides depends on its significance and visitation. At DuPont Provincial Park heritage education will be at the self-use level, and may include an interpretive trail.

The objectives of heritage education at DuPont Provincial Park will be to:

- describe the park, its natural features, and management objectives;
- interpret the history of land use within the park highlighting the resiliency of nature and the positive impacts of natural succession;
- increase awareness of the objectives and benefits of nature reserve class provincial parks and
- provide a way for park visitors and stakeholders to communicate with Ontario Parks.

Collaboration with local partners may also provide suitable means to inform park visitors, in keeping with these objectives.

### 11.3 Research

Research by qualified individuals that contributes to knowledge of natural and cultural history and to environmental and recreational management will be encouraged.

All research projects will require the written authorization of the park superintendent, and must be consistent with provincial parks research policies and all applicable legislation. Research activities will also conform with *Research And Information Strategy, Ontario Parks, South Eastern Zone (2001 and as updated)* and with *Ontario Parks, A Research and Information Strategy*, (1997 and any future updates), as it relates to current science, research, and information needs, as well as Ontario Parks priorities. Sites altered by research activities will be rehabilitated as closely as possible to their previous conditions.

The following general fields of research are particularly appropriate to DuPont Provincial Park and will be encouraged:

- landforms, vegetation, fish, wildlife and archaeology of the park;
- evolution of the park's landscapes in relation to natural processes and human activity;
- ecological restoration and management in the park;
- the status of species at risk and other significant species and habitats; and
- optimal relationships between heritage protection and recreational enjoyment within the park.

Guided by research policies and strategies developed for provincial parks by main office and the zone office and the policies in this section of the plan, Ontario Parks will evaluate and decide upon each application to conduct research using the following criteria:

- the subject of the research relative to the above priorities, and whether the proposed research complements existing research work and data,
- whether the park is a particularly suitable environment for the research versus whether the research could be conducted equally well elsewhere,
- the methodology to be followed and the sensitivity of the resources to be investigated,
- for research on the island, the researcher's skills and preparedness for safe boating without support from Ontario Parks,
- the researcher's qualifications and experience, and past record, if any, in this park or other provincial parks.

## 12. DEVELOPMENT POLICIES

All development undertaken by Ontario Parks, or by others on its behalf, will be carried out in accordance with approved site and development plans that meet development standards for provincial parks. The location, design, and materials of all facilities will as much as possible reflect the designation of the park as a nature reserve. Durable, low maintenance, and energy efficient designs and materials will be used wherever possible.

### 12.1 Trails

In the northeastern nature reserve zone, all or parts of the existing trail may be integrated into a modest network of hiking, snowshoeing and cross-country ski trails.

This proposed network of trails will depend on local interest and the availability of funding. This trail network will be designed to highlight the natural features of the park and to minimize its environmental impact. Proposed locations and standards of development will be made available for public review and comment before the trails are built.

## 12.2 Access

The park's main designated entry will be the access zone (see Figure 3 Park Zoning) via a small parking lot and trailhead which will be developed on the north side of County Road 2 in conjunction with the proposed trail network at this location.

## 12.3 Interpretive Facilities

Interpretive facilities will be modest. Interpretive panels or an interpretive guide will be the primary tools for educating park visitors.

## 13. IMPLEMENTATION OF THE PLAN

Ontario Parks will implement the DuPont Provincial Park Management Plan in accordance with provincial parks policies and the agreement with the Nature Conservancy of Canada.

The amendment to the Cornwall District Land Use Guidelines (1983), recognizing the property as a recommended provincial park (in what is now Kemptonville District), takes effect upon approval of this park management plan.

Implementation of the management plan will occur in an ecologically sustainable manner. All requirements of the *Environmental Assessment Act*, *Environmental Bill of Rights*, *Provincial Parks Act* and other pertinent legislation will be met.

Ontario Parks will give priority to completing the following initiatives, as funds and priorities permit. Except where indicated otherwise in this plan, or as required under the *Environmental Assessment Act*, no further public consultation will be required for these initiatives to proceed.

Ontario Parks will pursue the establishment of a local stewardship group to support the management of the park. These and other partners will be encouraged to participate in management and research projects.

Ontario Parks will collaborate with the Riverside Snowmobile Club to relocate the snowmobile trail to a suitable location. A route along the County Road 2 corridor is one likely option although others will be considered.

Implementation priorities include:

- resource stewardship plan including principles and practices for ecological monitoring
- archaeological assessment of the park
- installation of fencing, barriers, gates and signs as required
- proper disposal of garbage that has been dumped in the park
- closing and relocation of the snowmobile trail
- layout and design of the proposed network of trails in the northeastern nature reserve zone
- development of suitable interpretive materials
- assessment of management strategies for the northern half of the Rohmax Canada Inc. property in collaboration with the owner
- development of a small parking area on the north side of County Road 2 in the access zone to serve as the designated entry to the park and to the proposed trail network



## 14. PUBLIC CONSULTATION

DuPont Provincial Park is the result of the combined efforts of the Nature Conservancy of Canada (NCC) and Ontario Parks working through the Legacy 2000 program. When the property was acquired by NCC local awareness of its natural values and the need for its protection was limited. Increasing this awareness became one of the objectives of the public consultation process.

There are four phases in the planning and public consultation process:

- Phase 1 Invitation to Participate
- Phase 2 Background Information
- Phase 3 Preliminary Management Plan
- Phase 4 Approved Park Management Plan

In Phase 1, the public was invited to participate in management planning for DuPont Provincial Park in October 2001, through mailing to individuals and groups then known to be interested, advertisements in area newspapers, and placement on the Environmental Registry under the *Environmental Bill of Rights, 1993*.

In Phase 2, about 70 copies of the January 2002 *Background Information* document were distributed through:

- mailing and e-mailing to the individuals and groups then on the public consultation list,
- an open house in Morrisburg in February, 2002, when about 50 people were able to meet the planning team and provide their input,
- mailing and e-mailing in response to individual inquiries.

Included with the document was a questionnaire. Respondents were invited to submit comments in addition to, or in place of, the questionnaire if they wished. Respondents were asked to bring their questionnaires and / or comments to the Morrisburg open house, or return them to Ontario Parks by April 5, 2002. Following

is a summary of the comments received during Phase 2 of the planning process.

### 14.1 Summary of Public Response to Background Information report

A total of twelve responses was received of which ten were completed or partially completed questionnaires. The other two responses were letters that addressed specific concerns related to the establishment of the park.

Five respondents were members of, or represented the interests of, a specific interest group or agency.

Eleven of the respondents were residents of the local area (Iroquois, Morrisburg, Williamsburg) while the other respondent represented an agency based in Kemptonville.

The questionnaire identified three management issues (Hoasic Creek, trails and access and community participation) and requested comments on these specific issues. A fourth point identified general aspects of the Background Information document for which Ontario Parks was requesting input.

#### Hoasic Creek (Section 1.2, page 1 of Background Information report)

While Hoasic Creek is one of the least disturbed watercourses in southeastern Ontario, DuPont Provincial Park will only provide protection for the lower 2 km of its 19 km length. Water quality in Hoasic Creek is degraded likely due to high levels nutrients and bacteria from upstream sources. Possible solutions will involve discussions and cooperation with landowners upstream.

#### Comments

- ♦ Clean up stream within the park before approaching landowners

- ◆ Develop a hatchery to improve fish populations
- ◆ Upstream landowners will likely cooperate if they are made aware of the problem and potential solutions.
- ◆ Propose that an all season study of the creek be done
- ◆ Cleanup (of the creek) should take place in summer when the creek dries up

### **Trails and Access (Section 1.2, page 2 of Background Information report)**

Motorized trail activities are not permitted within nature reserve class provincial parks. At the present time a snowmobile trail crosses the reserve. In summer ATVs and motorbikes occasionally use this trail or leave it for off-trail riding. One possibility may be for Ontario Parks to close the trail to motorized traffic and to integrate the existing trail into a future network of interpretive hiking and ski trails.

### **Comments**

Snowmobile trail should remain because:

- ◆ Snowmobiles do not disturb herons because herons are not there in winter
- ◆ Bridges were built and paid for by the snowmobile club
- ◆ Snowmobiles do not cause compaction and erosion whereas hikers do
- ◆ Snowmobilers contribute tourism dollars to the local economy
- ◆ Groomed snowmobile trails provide the means for cross country skiers and hikers to access the park
- ◆ Snowmobilers have a proven record of protecting the area
- ◆ Link ski trail in the park to the Upper Canada Ski Trails
- ◆ Trails should be closed to motorized vehicles by gates and signs
- ◆ Access to the park (for non-motorized activities) could be provided from the southwest corner in Morrisburg where a trail already exists

- ◆ The existing snowmobile trail could be moved to the northern perimeter of the property
- ◆ Some allowance for a motorized connection between Riverside and Morrisburg should be made.

### **Community Participation (Section 1.2, page 2 of Background Information report)**

A key factor in establishing long-term support for a protected area is the involvement of the local community in the decision-making and management processes. Ontario Parks intends to establish a local stewardship group as a means of achieving this objective.

### **Comments**

- ◆ Five respondents indicated an interest in being kept informed of progress in establishing a stewardship group.
- ◆ Lease trail to snowmobile club and use revenues for park projects
- ◆ Snowmobilers can act as a “neighbourhood watch” in the park
- ◆ Develop a fitness/recreation centre near the mouth of Hoasic Creek in partnership with other organisations
- ◆ A representative from the Stormont-Dundas-Glengarry Stewardship Council proposed that Ontario Parks work in partnership with the council on park related projects such as clean-ups in the park and working with local landowners to improve water quality in Hoasic Creek.

### **General Comments**

The following comments were provided in writing or were gathered in discussions at the public consultation.

- ◆ Rohmax Canada Inc., whose industrial property abuts the park on three sides, asked to meet with Ontario Parks to

discuss how the interests of Ontario Parks and Rohmax Canada Inc. can best be met and, to be kept informed of any proposed municipal designation or zoning changes for DuPont Provincial Park.

- ◆ A respondent suggested that consideration should be given to changing the name of the park from “DuPont” to a “non-commercial” name such as Hoasic Creek or Blue Heron Provincial Park.
- ◆ A resident on county Road 8 recommended that a mowed buffer zone be maintained behind homes on County Road 8 to prevent grass fires from destroying dwellings and rodents “encroaching” on existing homes
- ◆ One respondent expressed the opinion that the park was not needed and could not be afforded by the residents of South Dundas. The park eliminated deer and waterfowl hunting and replaced industrial land with the potential for higher tax revenues with parkland with a lower assessment. They also mentioned that the overpopulation of geese and deer causes serious problems for local residents.
- ◆ Representatives of the Nation Valley Snowmobile Association expressed their support to move the snowmobile trail from within the eastern side of the park to the County Road 2 corridor. They wish however, to continue to use the existing trail on the west side because relocation would require the construction of a new bridge over Hoasic Creek, which is both a major expense and requires time-consuming approvals. The club would be willing to lease an easement on the west side and install gates to control off-season access.
- ◆ A participant at the open house expressed concerns about deer overpopulation if deer hunting was not

allowed within the park, more specifically the increased risk of collisions with motor vehicles in the County Road 2 corridor

- ◆ Concerns were raised at the open house about how the park will benefit the community when the St. Lawrence Parks Commission has similar facilities that are better funded nearby.
- ◆ A participant was interested in knowing how native traditional uses such as the gathering of plants for medicinal purposes would be addressed.
- ◆ A municipal councillor from South Dundas indicated that the challenge is to get people informed so that they recognize the value of the park, and then work together.
- ◆ Another participant suggested that evaluation of nature reserve wetlands would be helpful
- ◆ A representative from the Eastern Ontario Model Forest stated that they have always considered the site valuable, and has heard from many members of the forestry community that the Hoasic Creek Hardwoods is a special area to be managed carefully.

## **14.2 Future Public Consultation**

The opportunity to review this preliminary management plan is the third phase of the planning and public consultation process. An open house will be held as part of this stage of planning.

The final phase of park planning is the opportunity to inspect the approved park management plan.

## 15. References

1. Brunton, D. and J. Atkinson. (1989). **An Inventory of the Terrestrial and Aquatic Natural Environment of the SuperDev Corporation Property, Morrisburg, Dundas County, Ontario.**
2. Ministry of Natural Resources. (2001) **Assessment of the DuPont Nature Reserve Heronry.** Ontario Parks, South Eastern Zone.
3. Ministry of Natural Resources. (2001). **DuPont Provincial Park Background Information.** Ontario Parks, South Eastern Zone.
4. Ministry of Natural Resources. (2001) **DuPont Provincial Park Life Science Checklist.** Ontario Parks, South Eastern Zone.
5. Ministry of Natural Resources. (2000) **DuPont Provincial Park Recreation Inventory Report.** Ontario Parks, South Eastern Zone.
6. Ministry of Natural Resources. (1999) **DuPont Provincial Nature Reserve Interim Management Statement.** Ontario Parks, South Eastern Zone.
7. Ministry of Natural Resources. (1994) **Ontario Provincial Park Management Planning Manual.** Ontario Parks.
8. Ministry of Natural Resources. (1992). **Area of Natural and Scientific Interest - Life Science Checksheet. Hoasic Creek Hardwoods Candidate ANSL.** Parks and Natural Areas Policy Branch.
9. Ministry of Natural Resources. (1992 Update.). **Ontario Provincial Parks: Planning and Management Policies.**
10. Ministry of Natural Resources. (1992 Draft.). **Life Science Areas of Natural & Scientific Interest in Site District 6-12: A Review and Assessment of Significant Natural Areas in Site District 6-12.** Parks & Recreational Areas Section, Kemptville.
11. **Custodianship Agreement between the Nature Conservancy of Canada and Ontario Parks.** June 3, 1998.
12. **Official Plan of the Township of Williamsburg.** Cornwall: United Counties of Stormont, Dundas and Glengarry. 1985.
13. **Official Plan of the Village of Morrisburg.** Cornwall: United Counties of Stormont, Dundas and Glengarry. 1985.

Maps and Photos

National Topographic Series 1:50,000 scale

031B/14 (Morrisburg)

031G/03 (Winchester)

Ontario Base Maps 1:10,000 scale

Sheets: 10 18 4850 49700

10 18 4850 49750

10 18 4900 49700

1991 Aerial Photograph: 1: 10,000 scale (99-4461 / 53-105)

1988 Aerial Photograph: 1: 30,000 scale (B-88-30 / 321-17-130)