



Duncan Escarpment

Interim Management Statement

APPROVAL STATEMENT

I am pleased to approve this Interim Management Statement for Duncan Escarpment Provincial Nature Reserve. The park was regulated under the *Provincial Parks Act* in February of 1985 (O. Reg. 45/85) and is managed as a nature reserve class park.

This Interim Management Statement provides direction for the protection and management of Duncan Escarpment Provincial Nature Reserve until a comprehensive Management Plan is prepared. The park is managed under the jurisdiction of the Superintendent of Wasaga Beach Provincial Park.



Brian Pfimmer
Zone Manager
Central Zone, Ontario Parks

August 24, 2007

Date

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1.0 INTRODUCTION

Duncan Escarpment Provincial Nature Reserve is situated on the Niagara Escarpment, 16 km south of Thornbury, in the Town of the Blue Mountains (Figure 1). It is located in Ecodistrict 6E-4 and contains 161 ha of land regulated under the *Provincial Parks Act* (O. Reg. 45/85) (Figure 2). The park features a series of crevice caves that host a distinct, well developed and well preserved vegetative community. Prior to its regulation, the park was identified as a provincially significant Life Science Area of Natural and Scientific Interest (ANSI), mainly because of the excellent examples of crevice caves, talus slopes and associated forests. Duncan Escarpment Provincial Nature Reserve is located within the area designated by the Niagara Escarpment Plan (NEP, 2005).

Management of this park has been guided by an Interim Management Statement (IMS), which was approved in 1995. This updated IMS will provide direction for the custodial management of park resources. Any significant decisions regarding resource stewardship, development, operations, and permitted uses will require Ontario Parks to initiate additional planning processes, including public consultation.

Duncan Escarpment Provincial Nature Reserve is managed under the Wasaga Beach cluster of parks.

2.0 CLASSIFICATION

Through park classification, Ontario's Provincial Parks are organized into broad categories, each of which has particular purposes and characteristics.

Duncan Escarpment is a nature reserve class park. The purpose of nature reserve parks is to provide representation of and protection to Ontario's geological, ecological and species diversity. Where compatible with park values, low intensity day-use activities are encouraged.

The park is also classified by the NEP (2005) as a Nature Reserve within the Niagara Escarpment Parks and Open Space System (NEPOSS).

3.0 OBJECTIVES

Management of Duncan Escarpment Provincial Nature Reserve will be consistent with the four objectives for provincial parks, as described in the Provincial Parks and Conservation Reserves Act, 2006 (effective September 4, 2007):

1. To permanently protect representative ecosystems, biodiversity and provincially significant elements of Ontario's natural and cultural heritage and to manage these areas to ensure that ecological integrity is maintained.
2. To provide opportunities for ecologically sustainable outdoor recreation opportunities and encourage associated economic benefits.
3. To provide opportunities for residents of Ontario and visitors to increase their knowledge and appreciation of Ontario's natural and cultural heritage.
4. To facilitate scientific research and to provide points of reference to support monitoring of ecological change on the broader landscape.

Figure 1: Regional Context

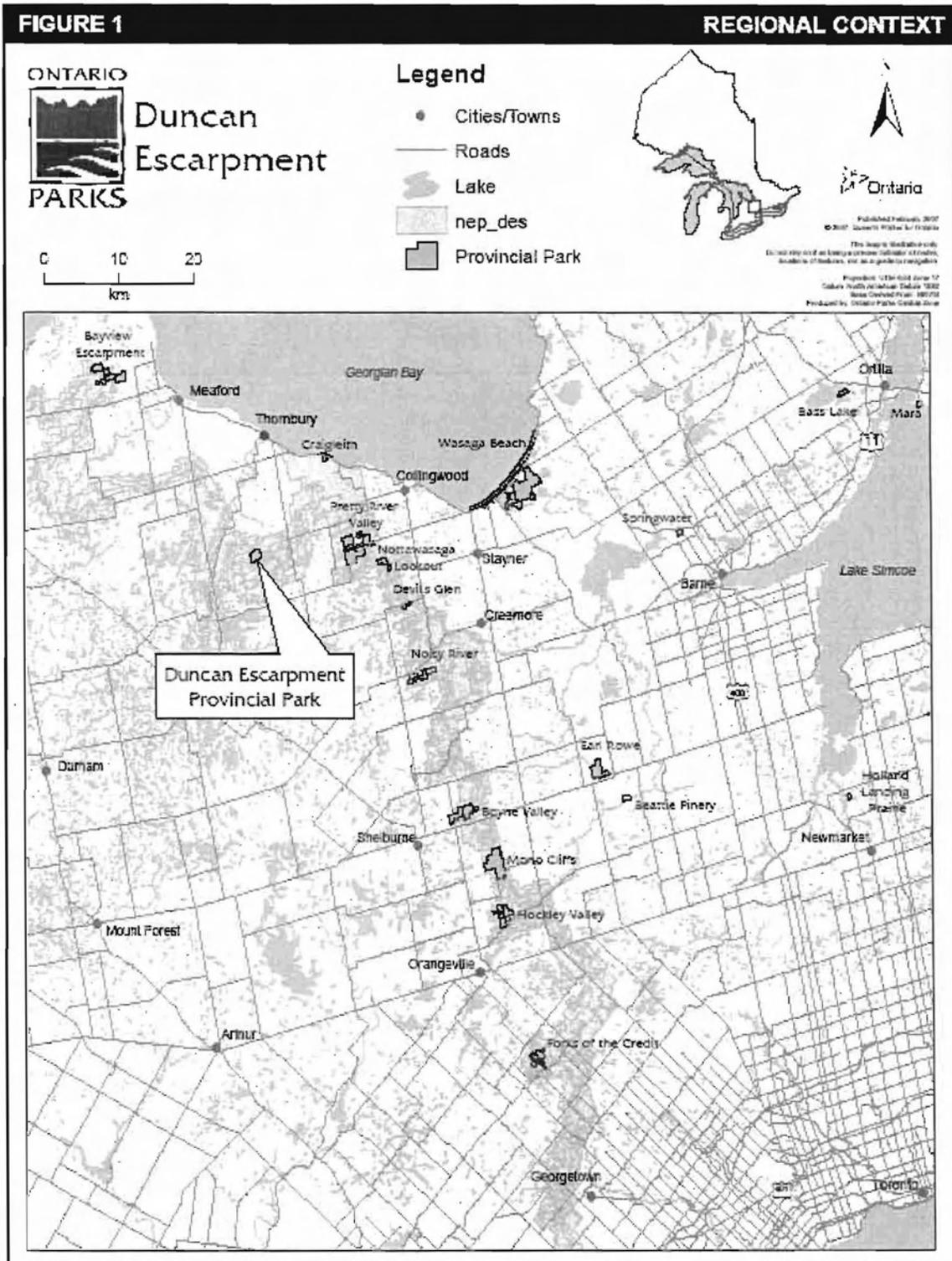
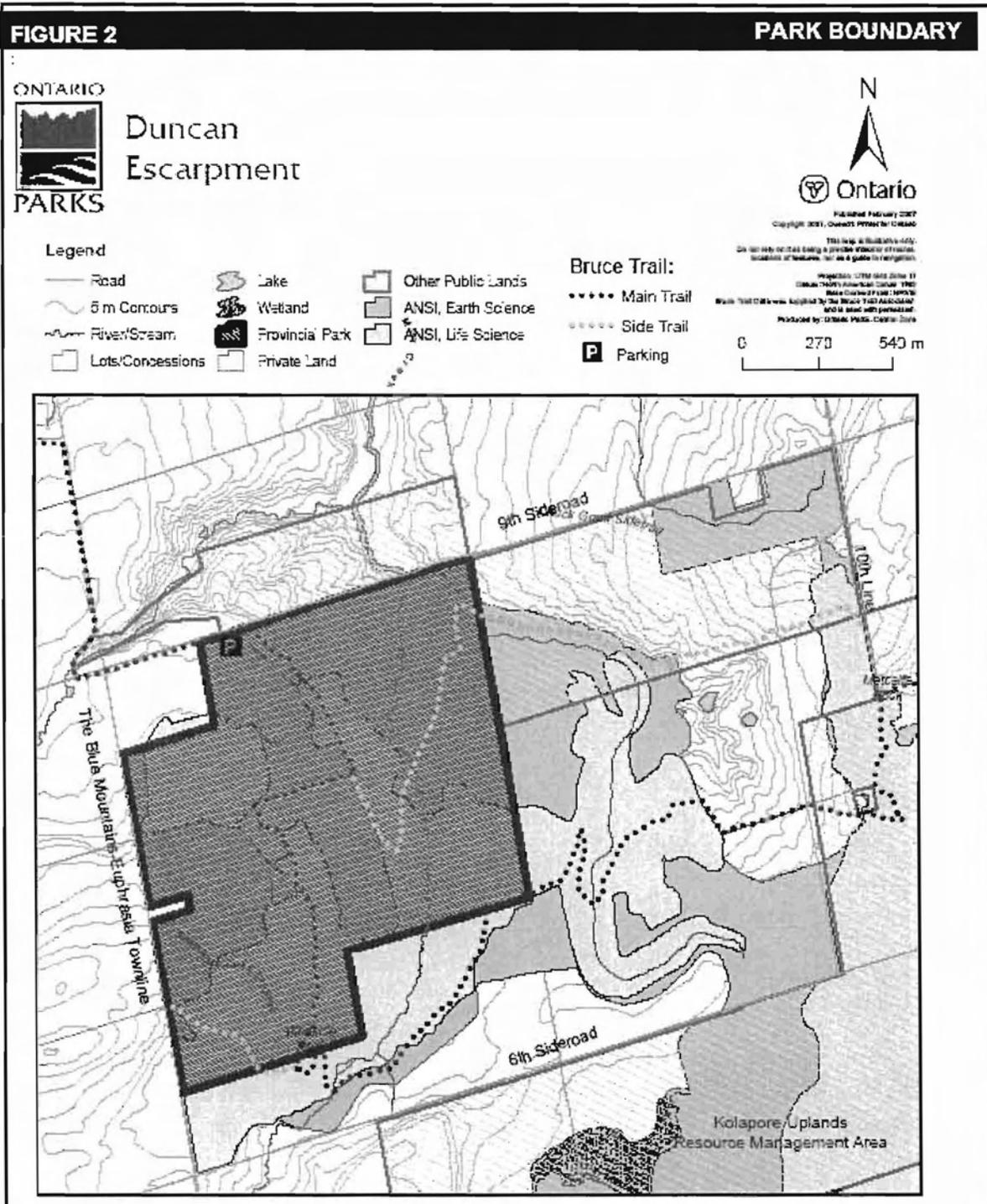


Figure 2: Park Boundary



4.0 MANAGEMENT CONTEXT

Park management will follow direction from the:

- *Ontario Provincial Parks Planning and Management Policies* and updates;
- *Provincial Parks and Conservation Reserves Act, 2006 (PPCRA)* and regulations (effective September 4, 2007).

Ontario Parks will also act in accordance with the Niagara Escarpment Plan (NEC, 2005) and the Niagara Escarpment Planning and Development Act (NEPDA, Chapter N.2, R.S.O. 1990) when making planning decisions affecting the park. Part 3 of that plan includes objectives and policies for a Niagara Escarpment Parks and Open Space System (NEPOSS) as a framework for the establishment and coordination of a system of publicly owned lands on the escarpment as well as the Bruce Trail (NEC, 2005). Lands are managed by various public bodies including Ontario Parks, the Ontario Ministry of Natural Resources (MNR), Conservation Authorities, Parks Canada Agency and others. NEPOSS protects the significant natural and cultural features along the escarpment, and provides opportunities for recreation and public access. The PPCRA requires that a Park Management Plan be developed for all Provincial Parks. The NEP also requires that management plans be developed for all parks which fall within the NEPOSS.

The NEPOSS sets out a series of objectives for parks and public lands that fall within its jurisdiction. Management of the Duncan Escarpment Provincial Nature Reserve will contribute to several of these, including:

- To protect unique ecological and historical areas;
- To complete a public system of major parks and open space through additional land acquisition and park and open space planning;
- To maintain and enhance the natural environment of the Niagara Escarpment;
- To provide a common understanding and appreciation of the Niagara Escarpment; and
- To show leadership in supporting and promoting the principles of the Niagara Escarpment's World Biosphere Reserve designation through sustainable park planning, ecological management, community involvement, environmental monitoring, research and education.

In 1990, the United Nations Educational, Scientific and Cultural Organization (UNESCO) designated the Niagara Escarpment as a World Biosphere Reserve in recognition of its natural heritage significance, and to recognize and endorse the Niagara Escarpment Plan. The Niagara Escarpment Plan was Canada's first large-scale environmental land use plan. The purpose of the plan "is to provide for the maintenance of the Niagara Escarpment and land in its vicinity substantially as a continuous natural environment, and to ensure only such development occurs as is compatible with that natural environment" (NEC, 2005).

When addressing custodial management to protect park features and values and ensure public health and safety, Ontario Parks will ensure that policy and environmental assessment requirements are implemented.

The Park Superintendent will implement the policies, procedures and legislation that are derived from the above direction and written into the IMS for Duncan Escarpment Provincial Nature Reserve.

4.1 Environmental Assessment

As part of the MNR, Ontario Parks is a public sector agency subject to the provincial *Environmental Assessment Act* and the *Canadian Environmental Assessment Act*. Management of this park will be carried out in accordance with legislation, policies and the MNR *Class Environmental Assessment for Provincial Parks and Conservation Reserves*.

5.0 ABORIGINAL RIGHTS

Nothing in this interim management statement shall be construed so as to abrogate or derogate from the protection provided for the existing Aboriginal or treaty rights of the Aboriginal people of Canada as recognized and affirmed in Section 35 of the *Constitution Act, 1982*.

The park is not subject to any aboriginal land claims.

6.0 BOUNDARY

The boundary of Duncan Escarpment Provincial Nature Reserve is described in *Ontario Regulation 45/85*. Duncan Escarpment Provincial Nature Reserve is located in the southwestern portion of the Town of the Blue Mountains in Grey County. The park occupies part of Lots 7, 8 and 9, Concession 12 in the former Collingwood Township (Figure 2).

7.0 PARK FEATURES AND VALUES

Duncan Escarpment Provincial Nature Reserve protects provincially significant landform features and ecological features associated with the Niagara Escarpment.

The park protects a representative portion of the Niagara Escarpment, which is one of the most significant geological formations in Ontario. The formation of the escarpment dates back approximately 450 million years; today it supports a variety of ecological communities, including rare plant species. The escarpment also functions as an ecological corridor and is one of the last remaining contiguous natural areas in Southern Ontario.

Duncan Escarpment Provincial Nature Reserve protects what are considered to be the best examples of lushly-vegetated open crevices and crevice caves along the Niagara Escarpment. The rich crevice floor community, extending across the site is outstanding. There is also moderate representation of open cliffs, and an undisturbed escarpment rim community on outlier blocks (Jalava, 1996).

7.1 Life Sciences

Duncan Escarpment Provincial Nature Reserve is located within Ecodistrict 6E-4, which encompasses a portion of the Niagara Escarpment. The park comprises most of the Duncan Crevice Caves provincially significant Life Science ANSI, and a large portion of the Mitchell Creek Valleys regionally significant Life Science ANSI. It includes areas of escarpment plain forests, open cliffs, moist crevice caves, dry-mesic mixed talus forests, ravine habitats and some small riparian habitats along intermittent streams.

A cliff face located within the park was included in The Niagara Escarpment Ancient Tree Atlas Project (Kelly & Larson, 2004) and was found to have several Eastern White Cedar trees aged between 445-563 years along the escarpment edge. The park also includes the headwaters of some small tributaries and is a minor groundwater discharge area (Jalava, 1996).

The distinctive fern, moss, liverwort and lichen vegetation of escarpment crevice caves is particularly well developed at this location. An inventory completed for the ANSI in 1994 listed 23 vegetation community types – a high level of diversity for an area of this size (Jalava, 1996).

7.2 Earth Sciences

The Niagara Escarpment is a prominent geological feature that was formed by erosional processes on flatlying bedrock units. It was greatly impacted by the Laurentide ice sheets of the last ice age. The cuesta form of the escarpment was created by the removal of relatively soft shales from beneath a more resistant dolomitic caprock.

The Duncan Crevice Caves natural area occurs on the west side of a minor re-entrant valley into the escarpment, and includes the Kolapore Uplands provincially significant Earth Science ANSI. The park contains deep crevices, cliff exposures, talus, rim and bedrock plain features representative of the Niagara Escarpment landscape. Beyond the escarpment rim, deeper till and hummocky moraine deposits mantle the caprock of Amabel dolostone (Kor, 1992). The crevices occur along the entire east- to north-facing section of the cliffs, at the cliff base, and also in depressions between outlier blocks and the upper talus. The deepest crevices are up to 30 m deep, with average depth being approximately 10 m. Some of the huge outlier blocks are cantilevered backwards, resting against the main cliffs, forming crevice caves. Most are pitched forward, allowing sunlight and precipitation to enter, resulting in lush crevice bottom vegetation (Kor, 1992).

7.3 Cultural Features

There are no published reports on the cultural heritage of Duncan Escarpment Provincial Nature Reserve. Future planning will use the provincial framework, *The Topical Organization of Ontario History* as well as updates and discussions with other agencies, First Nations, and interest groups to identify cultural heritage values and features within the park. This information may be used to develop management guidelines to conserve and protect representative archaeological and historical values and features, as well as provide direction for further research.

8.0 STEWARDSHIP POLICIES

An adaptive management approach will be applied to resource management activities within Duncan Escarpment Provincial Nature Reserve. Adaptive management enables modification of management practices and policies based on the outcome of operational programs and monitoring.

8.1 Industrial / Commercial Uses

The following uses are not permitted in Duncan Escarpment Provincial Nature Reserve:

- commercial forestry;
- commercial tourism;
- commercial fishing or baitfish harvesting;
- prospecting, staking mining claims, developing mineral interests, working mines;
- extraction of sand, gravel, topsoil or peat;
- commercial hydroelectric power development;
- trapping;
- fuel wood cutting;
- timber salvage and sunken log retrieval; and/or
- commercial harvesting of non-timber forest products (e.g. wild rice, Canada yew, etc.).

Aboriginals exercising treaty rights are permitted to continue commercial fur harvesting in all parks, subject to applicable legislation and regulation.

8.2 Land Management

8.2.1 Access and Crossings

Access to the park is via the Bruce Trail and side trails. Access points to the trail are located on the 9th Sideroad and on the Town of the Blue Mountains-Euphrasia (Grey Highlands) Townline. The Bruce Trail Main Trail and The Chuck Grant and Townline Access Side Trails traverse the park, providing public access and a variety of wildlife and landscape viewing, exploring, and hiking opportunities throughout the year. There is a small parking area located on the 9th Sideroad (Figure 2).

Approximately 3.5 km of the Bruce Trail, including 1.2 km of side trail, goes through the park. These trails will be managed in cooperation with the Bruce Trail Association. The trails are accessible via the townline road, the 9th sideroad parking area, or from hiking along the trail from the 10th line (Figure 2). The only established parking area is located off the 9th sideroad.

The Bruce Trail also connects the park to the Kolapore Uplands Resource Management Area, which consists of large tracts of public land containing extensive hiking and ski trails, and other recreational opportunities.

There are no utility corridors located within the boundary of the park. When no feasible alternatives exist, any future utility corridors (e.g., gas pipelines, transmission lines, communications towers, etc.) proposed to go through the park, will be reviewed on a case-by-case basis.

There are no roads in the park and new road development will not be permitted.

8.2.2 Parking

Duncan Escarpment Provincial Nature Reserve has a small parking area maintained by Ontario Parks located on the 9th Sideroad, Town of the Blue Mountains (Figure 2). There is room to park several cars in this lot.

8.2.3 Land Use

There are no land use permits issued or known unauthorized occupations within Duncan Escarpment Provincial Nature Reserve. No new land use permits or licences of occupation will be granted.

The lands located adjacent to the park to the south and west are privately owned and are rural residential or agricultural in nature. Large areas of public land are situated to the east of the park.

No land disposition for the private use of individuals or corporations will be permitted.

8.2.4 Adjacent Land Management

Surrounding lands are a mosaic of public and private ownership, with a large tract of land to the east of the park being public land known as the Kolapore Uplands Resource Management Area under the Niagara Escarpment Parks and Open Space System (NEPOSS). NEPOSS Resource Management Zones are intended to provide resource related benefits such as forest products, fish and wildlife and flood control, as well as recreation opportunities and the protection of important natural and cultural resources.

The Kolapore Uplands supports a large trail network and is managed by a number of agencies including Grey County, MNR and the Grey Sauble Conservation Authority in conjunction with user groups. The area also contains the provincially significant Kolapore Headwaters wetland, two provincially significant Life Science Areas of Natural and Scientific Interest – Kolapore Escarpment and Kolapore Swamp, and one provincially significant Earth Science ANSI – Kolapore Uplands. Rare species of flora and fauna are found throughout the property.

Numerous trails including the Bruce Trail as well as cross-country skiing and snowmobile trails are found throughout the Uplands. Hunting and fishing is permitted on those lands managed by MNR Midhurst District. However no camping is permitted on MNR lands.

The Niagara Escarpment Plan has seven land use designations, each with specific objectives and permitted uses. Duncan Escarpment Provincial Nature Reserve is surrounded by land which is classified under three of these designations: Escarpment Natural Area, Escarpment Protection Area and Escarpment Rural Area. The park itself is designated Escarpment Natural Area and Escarpment Protection Area (see Figure 3).

Escarpment Natural Areas contain features which are in a relatively natural state. Associated stream valleys, wetlands and forests which are relatively undisturbed are included within this designation. These contain important plant and animal habitats, geological features, cultural heritage features, and are the

FIGURE 3 NIAGARA ESCARPMENT PLAN LAND USE DESIGNATIONS



Duncan
Escarpment



February February 2007
Copyright 2007, Ontario Parks/Parcs Ontario

This map is available only to the public for informational purposes. It is not intended for navigation.

Proportion of the land area is shown in this map. The actual area is shown in the map. The actual area is shown in the map. The actual area is shown in the map.

Legend

Road

5 m Contours

River/Stream

Loss/Concessions

Lake

Wetland

Provincial Park

Private Land

Other Public Lands

Escarpment Natural Area

Escarpment Protection Area

Escarpment Rural Area

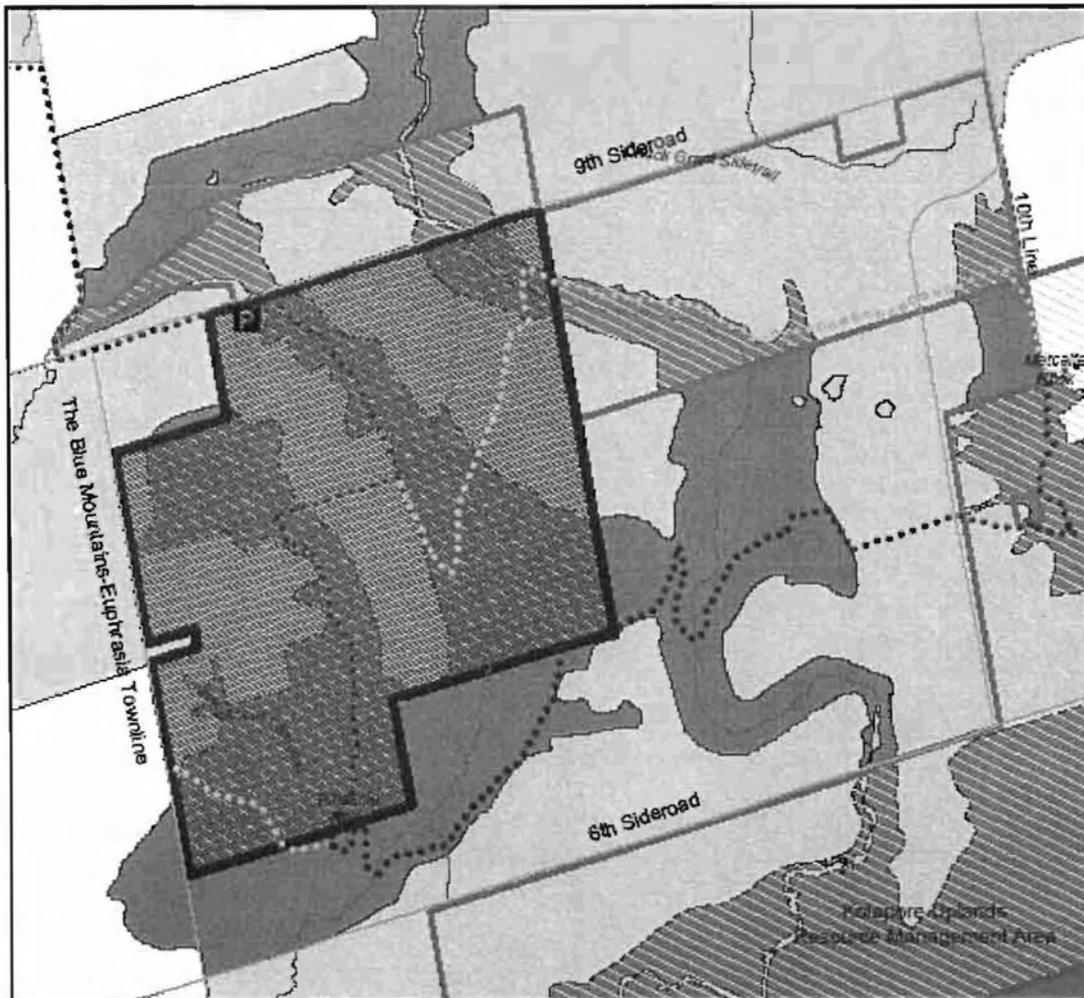
Bruce Trail:

Main Trail

Side Trail

Parking

0 270 540 m



most significant natural and scenic areas on the escarpment. This designation receives the highest protection and allows only for compatible land uses (NEC, 2005).

Escarpment Protection Areas are important because of their visual prominence and their environmental significance. They are often more visually prominent than Escarpment Natural Areas. Included in this designation are escarpment features significantly modified by land use activities such as agriculture or residential development, land to buffer lands for prominent Escarpment Natural Areas, and natural areas of regional significance. (NEC, 2005).

Escarpment Rural Areas are an essential component of the escarpment corridor, including portions of the escarpment and lands in its vicinity. They provide a buffer to the more ecologically sensitive areas of the escarpment and allow for the continuation of agriculture and related uses (NEC, 2005).

8.2.5 Land Acquisition

Ontario Parks will support the acquisition of property for the purposes of addition to the park, if the acquisition(s) will enhance the values of the park. Acquisition or securement will be subject to funding and willingness of the owners to sell or lease their properties or enter into a conservation easement.

8.3 Water Management

Sustaining high quality water resources is fundamental to the protection of park and adjacent land features and values. The Ontario Ministry of the Environment enforces applicable legislation and regulations pertaining to water quality.

There are some small intermittent streams that traverse the park. There are no dams, water control structures, or diversions within the park boundaries.

The policies in Section 2.6 of The Niagara Escarpment Plan (NEC, 2005) ensure new development affecting streams, watercourses, lakes, wetlands, and groundwater systems will have minimum individual and cumulative effects on water quality and quantity, and on the escarpment environment.

8.4 Non-Native and Invasive Species

Where possible, actions will be taken to eliminate or reduce the threat of invasive and non-native plant and animal species which may be affecting the ecological integrity of naturally occurring populations. Where non-native species are already established and threaten natural or cultural values, a program of control may be undertaken if feasible and practical. Non-native species are species not native to Ontario or are species native to Ontario but not to the park. Non-native species will not be deliberately introduced. Invasive species are species that are likely to spread and negatively affect native ecosystems.

8.5 Forest Fire Management

Fire management in Ontario is based upon a division of the province by management objectives, land use, fire load, and forest ecology. Duncan Escarpment Provincial Nature Reserve is located within the Southern Ontario Fire Management Zone. In accordance with existing provincial park policy and the *Forest Fire Management Strategy for Ontario*, forest fire management will be carried out in Duncan Escarpment Provincial Nature Reserve as it is on surrounding lands. Natural and human caused fires will be suppressed. In the Southern Ontario Zone, municipalities have the primary responsibility for fire protection and management activities, under the *Fire Protection and Prevention Act* (FPPA) and through municipal by-laws. The MNR may be called for assistance if required.

8.6 Vegetation

Insects and diseases may be managed where the aesthetic, cultural, and/or natural features and values of the vegetation at Duncan Escarpment are threatened. Control will follow guidelines established by the Ontario Ministry of the Environment and the MNR. Whenever possible, biological controls will be used instead of chemicals. Any prescribed fire management may be permitted by prescription and in a controlled setting.

8.7 Wildlife

Hunting and commercial fur harvesting are not permitted in Duncan Escarpment Provincial Nature Reserve. Duncan Escarpment Provincial Nature Reserve is located in Wildlife Management Unit (WMU) 81B. Removal and/or harassment of non-game animals is not permitted in provincial parks (Provincial Parks and Conservation Reserves Act, 2006, effective September 4, 2007).

Occasionally, animals may pose a threat to public safety, or to park facilities. Wildlife management may be undertaken on an as required basis in order to protect health and safety of park visitors and park staff, or to protect park facilities. The removal of nuisance animals will be undertaken by, or under the supervision of the Park Superintendent.

8.8 Fisheries

Some small tributaries of Mill Creek are located within the park boundaries.

Fisheries management will be undertaken with consideration for the maintenance and enhancement of native, self-sustaining fish populations. Non-native fish species will not be deliberately introduced into the waters of Duncan Escarpment Provincial Nature Reserve.

Sport fishing is permitted within Duncan Escarpment Provincial Nature Reserve. Any sport fishing activity is governed by the legislation and regulations in the *Fish and Wildlife Conservation Act (1997)*, as well as the *Federal Fisheries Act (1985)*. The *Recreational Fishing Regulations Summary* contains details regarding general regulations and exceptions to these regulations for the area of Duncan Escarpment Provincial Nature Reserve. The park is located within Fisheries Management Zone 16.

Duncan Escarpment Provincial Nature Reserve is located within a baitfish harvest area (MH-0039). The harvester requires Ontario Parks' permission to access bait resources within the park. Baitfish harvesting is a non-conforming use in the park. No new operations will be permitted.

8.9 Cultural Resources

An assessment of the cultural resources specific to Duncan Escarpment Provincial Nature Reserve has not been completed, however upon completion, management of any cultural features and values within this park will be directed toward protection and heritage appreciation.

8.10 Research

Scientific research by qualified individuals contributing to the knowledge of natural and cultural history and to environmental management will be encouraged. All research will be conducted by, or authorized by, Ontario Parks. Research projects will be administered through park policy directive and will require a research permit. Research must also meet all requirements under applicable provincial and federal legislation. Approved research and monitoring activities must be consistent with *Ontario Parks' Research and Information Strategy (1997)*. Research which addresses the objectives of the Central Zone Research Strategy (Korol, 2004) will be especially encouraged. Temporary facilities in support of approved research and monitoring activities may be considered. The collection of fossils, rocks, minerals, archaeological/cultural artefacts, plants, seeds and bioprospecting may be permitted by research permit and/or scientific collector permit.

Approved research activities and facilities will be compatible with protection values and/or recreational uses in the park, and will be subject to development and management policies associated with the park's classification unless special permission is given. Sites altered by research activities will be rehabilitated as closely to their previous condition as possible.

9.0 OPERATIONS POLICIES

9.1 Recreation Management

9.1.1 Motorized Recreation

Motorized and non-motorized vehicles are not permitted in the park, including the section of the Bruce Trail within the park boundaries. This includes, but is not limited to, motor vehicles, trailers, snowmobiles, all terrain vehicles, bicycles, and other off-road vehicles. The NEP (2005) also does not permit motorized vehicle trails or the use of motorized vehicles in the Escarpment Natural Area.

The use of motorized vehicles may occasionally be used for park maintenance or monitoring under the authority of the Park Superintendent.

Aircraft landings are not permitted in the park.

9.1.2 Non-Motorized Recreation

The Duncan Escarpment Provincial Nature Reserve offers excellent hiking, and landscape and wildlife viewing opportunities. The interior of the park can be accessed via the Bruce Trail footpath, which is managed in cooperation with the Bruce Trail Association and the local Blue Mountains Bruce Trail Club. In the winter, snowshoeing and cross-country skiing activities occur along the Bruce Trail. These activities are encouraged in nature reserves class parks.

There is some concern with respect to the location of one side trail which descends an area of talus slopes and crevices and may be causing damage to vegetation. In conjunction with the Bruce Trail Association, any negative impacts of the trail will be monitored and the trail will be re-routed if necessary.

Unauthorized hiking trails and other non-mechanized trails that are documented at the time of the approval of the IMS will be reviewed. The Park Superintendent may close existing unauthorized trails if it is determined that they threaten park features and values, create user conflicts or raise safety and/or liability issues.

If there is an identified need, the development of new trails may be considered in future planning. Any proposed development within Duncan Escarpment Provincial Nature Reserve is subject to the Class Environmental Assessment for Provincial Parks and Conservation Reserves.

There has been evidence of rock climbing/bouldering activities occurring in the park, which can cause significant damage to vegetation. Rock climbing and bouldering are prohibited within the park, and will be monitored.

Under the policies outlined for nature reserve class parks, camping is not permitted

Mountain biking, horseback riding and open fires are not permitted in nature reserve class parks.

9.1.3 Emerging Recreation Uses

Adventure racing is not permitted. Geocaching may be permitted at the discretion of the Park Superintendent.

There are emerging recreation uses for which there is no or limited policy to deal with their management. The Park Superintendent will use legislation, park policy and guidelines that are available in the interim, and will work with the Midhurst MNR District Office to manage these emerging uses.

9.2 Heritage Education

Basic literature and supporting information may be developed to describe Duncan Escarpment Provincial Nature Reserve in the context of Ontario's provincial parks and protected areas. Boundary limits, significant heritage features and permitted uses of the nature reserve park may be included in park literature.

Prospective visitors to Duncan Escarpment Provincial Nature Reserve may be informed about the sensitivity and significance of this park through park literature and the Ontario Parks' website.

10.0 DEVELOPMENT

Development within the park is limited to the Bruce Trail, associated side trails, and a small parking lot. A gate located off the 9th Sideroad at the east corner of the park, restricts vehicle access to the park. There is limited signage marking the park boundary and trails.

Decisions regarding new development will comply with *A Class Environmental Assessment for Provincial Parks and Conservation Reserves*. Development will be carried out in accordance with approved site plans, utilizing appropriate standards and in conformity with relevant legislation and policy, including the NEP and NEPDA.

Unnecessary undirected light pollution will not be allowed in any future development. Outdoor lighting will be limited to basic safety requirements and will be shielded when possible. This commitment recognizes the natural values provided by a pristine night sky.

11.0 INTERIM MANAGEMENT STATEMENT AMENDMENT AND REVIEW

The park IMS can be reviewed or amended to address changing issues or conditions. At ten year intervals, this IMS will be assessed for the need for a review or amendment. A review may involve a reassessment of all or part of the plan, including classification and all resource management, operations and development policies. An amendment can be considered to address specific issues or needs. Any person may initiate an amendment process by submitting a proposed amendment, with an explanation of its purpose, to Ontario Parks, which will determine whether, and under what conditions, the amendment process should proceed.

12.0 REFERENCES

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APPENDIX 1 ~ BACKGROUND INFORMATION

Name	Duncan Escarpment Provincial Nature Reserve
Classification	Nature Reserve
Ecoregion/Ecodistrict	6E / 6E-4
OMNR Administrative Region/District	Southern / Midhurst
Ontario Parks	Central Zone – Wasaga Beach P.P. Cluster
Total Area (ha)	161
Regulation date & Number	February 1985 (O. Reg. 45/85)

REPRESENTATION

EARTH SCIENCE

Duncan Escarpment Provincial Nature Reserve occurs on the west side of a minor re-entrant valley, and contains deep crevices, as well as cliff exposures, talus, rim and bedrock plain features representative of the Niagara Escarpment landscape in this area. Back from the escarpment rim, deeper till and hummocky moraine deposits mantle the caprock of Amabel dolostone (Kor, 1992). The crevices occur along the entire east- to north- facing section of the cliffs, at the cliff base, and also in depressions between outlier blocks and the upper talus. The deepest crevices are up to 30 m deep, with average depth being about 10 m. Some of the huge outlier blocks are cantilevered backwards, to rest against the main cliffs, forming crevice caves (Kor, 1992). Most are pitched forward, allowing sunlight and precipitation to enter, resulting in lush crevice bottom vegetation.

LIFE SCIENCE

Duncan Escarpment Provincial Nature Reserve is located within Ecodistrict 6E-4, which encompasses a portion of the Niagara Escarpment. It includes most of the Duncan Crevice Caves Life Science Area of Natural and Scientific Interest (ANSI), and a large portion of the Mitchell Creek Valleys Life Science ANSI. The park includes areas of escarpment plain forests, open cliffs, moist crevice caves, dry-mesic mixed talus forests, ravine habitats and some small riparian habitats along intermittent streams. The distinctive fern, moss, liverwort and lichen vegetation of escarpment crevice caves is particularly well developed at this location. The crevice caves are a very well developed, and are considered the best example on the escarpment. An inventory completed for the Duncan Crevice Caves ANSI in 1994 listed 23 vegetation community types – a high level of diversity for an area of this size (Jalava, 1996).

CULTURAL RESOURCES

There has been no inventory of the cultural values that may exist within Duncan Escarpment Provincial Nature Reserve.

RECREATION & TOURISM

The park's landform features provide a variety of recreation opportunities including hiking, backpacking, nature appreciation, landscape and wildlife viewing, exploring, picnicking, skiing, and snowshoeing.

The Bruce Trail traverses Duncan Escarpment Provincial Nature Reserve, which provides access to the park. The trail also connects the park to the adjacent Kolapore Uplands Resource Management Area.

INVENTORIES

Survey Level	Earth Science	Life Science	Cultural	Recreational
Reconnaissance	Harvey, 1976	Lindsay, 1976	Required	
Detailed	Kor, 1992	Required	Required	Required