



ONTARIO
PARKS

MISSISSAGI DELTA
PROVINCIAL NATURE RESERVE
MANAGEMENT PLAN

1998



Ontario



**MISSISSAGI DELTA
PROVINCIAL NATURE RESERVE
MANAGEMENT PLAN
1998**

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The cover photograph on this plan was developed in cooperation with the Mississauga First Nation. Single copies of this publication can be obtained at the following address:

Park Superintendent, Mississagi Delta Provincial Nature Reserve
P.O. Box 190, Blind River, ON POR 1B0

Price: \$5.00

35844
(0.5k P.R., 980722)
ISBN 07778-6662-5

Cette publication est également disponible en français

APPROVAL STATEMENT

I am pleased to approve the Mississagi Delta Provincial Nature Reserve Management Plan. The park was regulated in 1985 under the Provincial Parks Act, O. Reg. 45/85, Schedule 152.

Mississagi Delta Provincial Nature Reserve is located at the mouth of the Mississagi River on Lake Huron's North Channel, seven kilometres west of Blind River. As a *nature reserve* class park, policies in this Management Plan will guide management for protection and appreciation of provincially significant geological and biological features and cultural heritage values. The park's main feature, the delta, is the best example of a delta type landform on the Canadian portion of the Great Lakes, referred to for its shape as a "bird's foot" delta. The river delta is a dynamic landform first appearing after glacial time some 10,000 years ago. The delta continues to change, river channels and islands are shaped by deposits and erosion from the Mississagi River and Lake Huron influences. The delta landform, offshore bedrock islands and mainland areas in the park support 13 vegetation communities with habitats for aquatics, lake, river shoreline and upland plant and wildlife species representative of the Thessalon Site District in Ontario.

The delta marks the mouth of the largest river flowing into Lake Huron and thus for all time has offered a strategic location for human use. There is evidence from pre-contact Aboriginal habitation to present day cultural features.

This Management Plan contains workable policies for park management and operations to protect significant heritage values and provides direction for day-use trails, viewing opportunities and interpretive sites with programs for residents and viewing opportunities and interpretive sites with programs for residents and visitors.

I am confident that the values and uses identified in this Management Plan can be sustained with Ontario Parks working in cooperation with the Mississauga First Nation and Thompson Township.

Norm Richards
Ontario Parks
Managing Director

Date

PARTNERSHIP APPROVAL STATEMENT

Conservation has always been integral to the survival of Indigenous People and the protection of indigenous resources and artifacts is crucial to their self-reliance. The Mississauga First Nation is pleased to participate in a joint management agreement with Thompson Township and the Province of Ontario.

Chief Larry Boyer, Mississauga First Nation

Thompson Township is proud to participate with the Mississauga First Nation and the Province of Ontario to develop, manage and operate the Mississagi Delta Provincial Nature Reserve.

Reeve Dorothy Funk, Thompson Township

This Park Management Plan for Mississagi Delta Provincial Nature Reserve represents an excellent example of shared stewardship of our natural resources. The Mississauga First Nation, Thompson Township and the Ministry of Natural Resources have worked together to write this Management Plan as the first step toward managing and operating this park.

George Ross, MNR, Sault Ste. Marie District Manager

MISSISSAGI DELTA PARK BOARD APPROVAL STATEMENT

We are pleased to approve this Park Management Plan for the Mississagi Delta Provincial Nature Reserve. This Management Plan was produced by the Mississagi Delta Park Board, which comprises two representatives from each of: the Mississauga First Nation, Thompson Township and the Ontario Ministry of Natural Resources.

The Mississagi Delta Park Board wishes to acknowledge the contributions of the following people: Larry Boyer, Doug Daybutch, Joyce Morningstar, Linda Chiblow, Lindy Chiblow, Annie Jackpine, Jim Cadda, Sr., Jack Scott, Dorothy Funk, Archie Desaulnier, Evelyn Therriault, Scott Dingwall, Scott Lee and Nancy Scott.

We are looking forward to participating in the ongoing planning, management and operations of the Mississagi Delta Provincial Nature Reserve.

Roger Daybutch, Mississauga First Nation Bill Boyer, Sr., Mississauga First Nation

Gerry Haaksman, Thompson Township Ed Gionette, Thompson Township

Bryon Hall, Ontario Ministry of Natural Resources Andy Penikett, Ontario Parks

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1.0 INTRODUCTION

The Mississagi Delta Provincial Nature Reserve was established in 1985 under O. Reg. 45/85, Schedule 152. Nature reserves are one class of park in the Ontario Provincial Parks system. This park is located 7 kilometres west of the Town of Blind River. This Nature Reserve Park encompasses 2,395 hectares and protects an extensive sand delta at the mouth of the Mississagi River, where it enters the North Channel of Lake Huron. The park also includes land on the mainland, in Cobden Township, as well as an offshore bedrock island chain known as the French Islands. The Trans-Canada Highway (Highway 17) is located just north of the park (Figure 1).

1.1 HERITAGE VALUES

Rich in geological, biological, archaeological and historical features, much of the park can be accessed only by watercraft. Studies of the natural and cultural features of the park have identified some provincially significant features. The exceptional delta environment at the mouth of the Mississagi River has been characterized from its configuration as a "bird's foot" delta. The Mississagi Delta is one of the best examples of this landform in the Canadian Great Lakes and within the Ontario Provincial Parks system. This feature is comprised of late Wisconsinan (10,000 years) and recent deltaic deposits associated with the Wenebagon spillway, and continues to evolve as it fills a bedrock basin. It is considered to be provincially significant.

Local bedrock outcrops of conglomerates and argillites are part of the Canadian Shield, Southern Province from the middle Pre-Cambrian time. Biological studies have identified 13 vegetative communities. Significant plants in the park include a western species, which is listed as rare in Canada. There are also several regionally significant plants, and some species in the sedge (Carex) meadow east of Wolstan Point which are considered provincially significant. Numerous pre-contact archeological and historical sites, including fur trade posts indicate previous human use of the delta.

Mississagi Bay is an important staging and breeding area for waterfowl, and the park's outer islands host gull (Larus) and cormorant (Phalacrocorax auritus) colonies, as well as a great blue heron heronry (Ardea herodias). Sandhill cranes (Grus canadensis) and caspian terns (Sterna caspia) frequently use the park, particularly Mississagi Bay, as a feeding area. A sturgeon population which occupies the lower Mississagi River and adjacent areas of the North Channel is one of the healthiest in the Lake Huron Basin. While the park environment offers excellent boating and angling opportunities, several high-quality sand beaches

occur here with swimming, picnicking and limited boat-in camping.

1.2 PLANNING BACKGROUND

The Mississagi Delta Provincial Nature Reserve was put into Regulation as a Provincial Park in January 1985. An Interim Management Statement was released for the Mississagi Delta by the Ministry of Natural Resources in July 1986. This document provided interim direction for the park management plan for ten years, until it was superseded by this Park Management Plan.

Existing development adjacent to the park's east boundary includes the Blind River Golf Course and the Cameco Uranium Refinery. Patented (private) land in the vicinity of the park includes Fox Island, Islands #6 and #18, the Canadian Pacific Railway (CPR), bridge and right-of-way, as well as two properties adjacent to the northwest boundary of the park. The only other private land includes two summer cottages on Island #5. One lot is patented; the other is on a Land Use Permit. A pending re-alignment of the Trans-Canada Highway at Maclver's Corners will not affect park values but require an amendment of the park boundary along the east side of the Mississagi River.

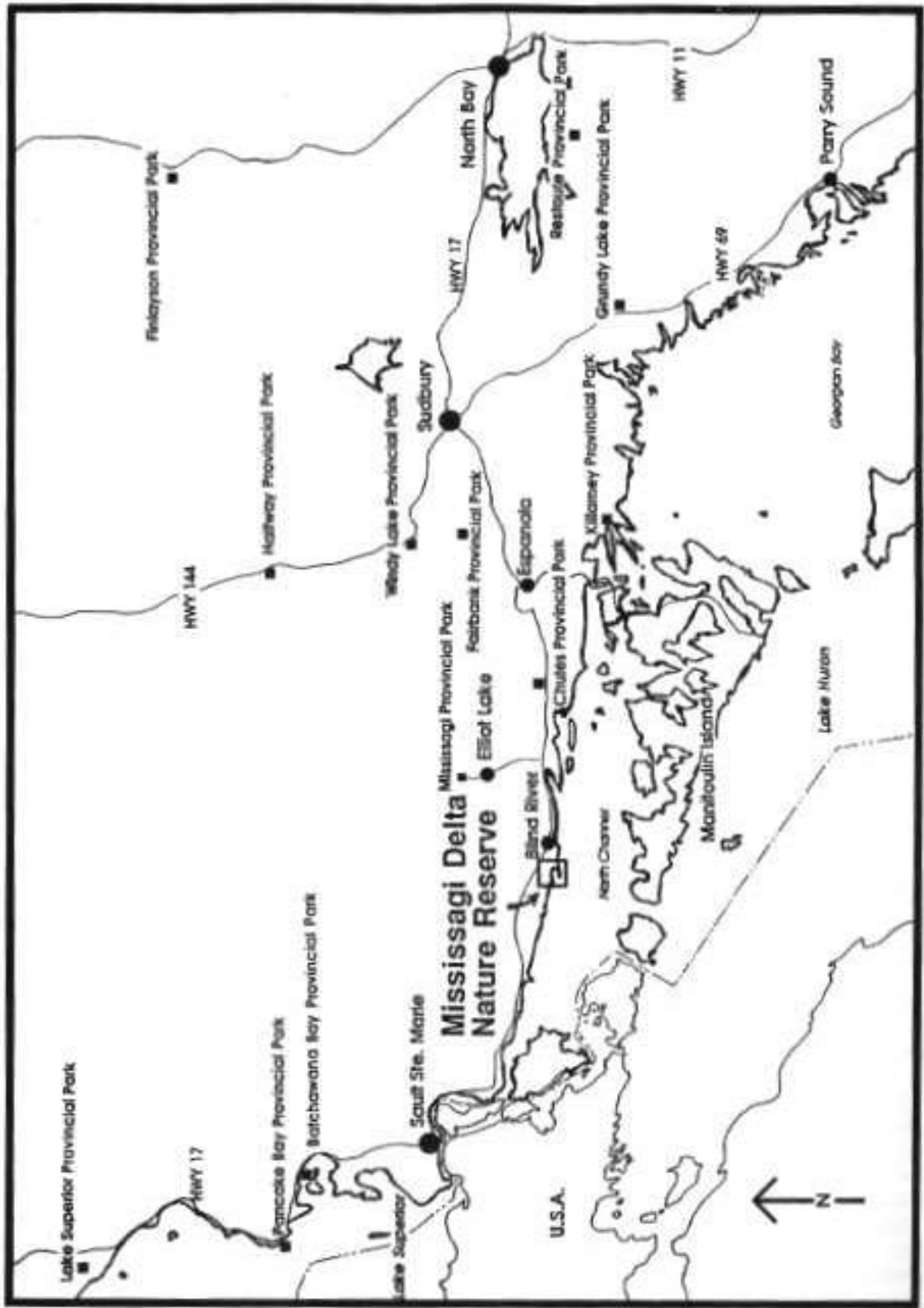
Current use of the park includes boating, angling, hiking, beach activities, swimming and blueberry picking, as well as some limited boat-in camping.

This park management planning process was initiated partially as a result of the signing of the Mississauga First Nation Northern Boundary Land Claim Agreement. The Agreement (Article 5, Section 5.1a) committed the Government of Ontario, the Mississauga First Nation and the Township of Thompson to form the Mississagi Delta Park Board, whose mandate is to provide advice and recommendations with regard to planning, management and operations of the Mississagi Delta Provincial Nature Reserve Park to the Minister of Natural Resources (refer to the above captioned Agreement in Section 9.1).

The park management plan shall reflect a commitment of the Mississagi Delta Park Board to (Article 5, Section 5b of the Mississauga First Nation Northern Boundary Land Claim Agreement):

- i) protect the natural values, heritage and integrity of the park;
- ii) protect sacred and cultural sites of the Mississauga First Nation within the park; and,

Figure 1 Regional Context



iii) provide job opportunities for Mississauga First Nation and local residents.

In addition, Thompson Township had initiated discussions in 1991 with Bud Wildman, then Minister of Natural Resources, so that the Township could assist in the promotion of the park. These negotiations resulted in the issuance of a Land Use Permit for 160 hectares of land adjacent to the park to possibly provide a site for structures and support services for the park. These developments would not be permitted within the park boundary due to restrictive policy governing nature reserve class parks. To oversee this project, Thompson Township formed a partnership with the Mississauga First Nation outside the mandate of the park planning process.

Park planning has identified a “zone of influence” adjacent to but outside the park in order to highlight the need to integrate park policies and use with adjacent land management. This extends beyond the current park boundary to identify compatible uses on some adjacent and private lands. While it is hoped that the stewardship of these areas is consistent with park objectives, it is acknowledged that these lands are excluded from the park and are not subject to park policies or proposals. Planning followed a series of six (6) stages:

Planning State	<u>Component & Time Frame</u>
1	Terms of Reference/Background Information 1994-95
2	Issues and Plan Alternatives Fall-Winter 1995 (Open house: December 1995 included Background Information)
3	Preliminary Park Management Plan Winter 1995-1996 (Open House: February 1996)
4	Recommended Park Management Plan, Winter 1998
5	Approved Park Management Plan Winter 1998
6	The plan will be reviewed as needed but every 10 years, as a minimum is mandatory. Amendments can occur as needs arise during the life of the plan.

The purpose of the last stage in the planning process, Plan Review and Amendment, is to keep the Management Plan

up-to-date and ensure that current issues are being addressed. This Management Plan will be reviewed, as needed, through its twenty (20) year life span to address issues of changing conditions. The minimum requirement is that a mandatory review must be undertaken after ten (10) years. These reviews will include opportunities for full public consultation.

2.0 SUMMARY OF SIGNIFICANT ISSUES

The following is a list of issues addressed in this Management Plan:

Access (refer to Section 5.3)

- Access needs to be managed to complement park objectives.
- Three access locations outside but adjacent to the park were assessed and found to offer different opportunities.
- Internal park access will occur between river islands using boats and/or footbridges. A canoe route follows the delta channels.

Aboriginal Interests (refer to Section 6.6)

- Treaty Rights will continue.
- Protection of Aboriginal and cultural sacred sites is a priority and location of all sites has not yet been determined.
- Traditional seasonal Aboriginal occupation needs to be integrated with park management.

Archaeological Sites and Artifacts (refer to Section 5.2, 6.0 & 6.2)

- Cultural heritage sites and artifacts need to be protected and managed for sensitivity (e.g. graves, foundations, underwater artifacts.).
- Erosion prone sites will expose artifacts (e.g. University of Toronto, Laurentian University, Royal Ontario Museum, Hudson Bay Company Archives (Winnipeg), Jesuit Missionary Archives (Toronto), and the general public).
- There is a concern regarding the identification and location of heritage sites

Recreation Management

(refer to Section 6.4, 6.6 & 7.3)

- Existing sport fishing will continue.
- Motor boat use and low levels of associated tenting occur within the park but this is inconsistent with nature reserve class park policy.
- Hunting is not allowed in nature reserves, except for Status Indians permitted through Treaty Rights.
- Hunting is not permitted by Non-Aboriginal's within the park boundary; some duck hunting is presently taking place from the water in Mississagi Bay just west of the park, necessitating the posting of signs along the boundary on both land and water in this area.

Trails/Heritage Education

(refer to Sections 7.1, 7.2, 7.3 & 8.2)

- Location of trails (interconnecting, viewing areas.).
- Description of canoe route system within the park.
- Interpretation of natural and cultural heritage and areas/ location(s) and level of enhancement.
- Possibility of off-site interpretive developments in adjacent access zones.

Park Signs (refer to Section 8.3)

- On-site boundary identification, particularly shoreline area (e.g. North Channel waterfront).
- Marketing strategy to "identify" the park (e.g. park logo, highway signs, fact sheet.).
- Interpretive signs (e.g. trails, canoe routes, historic sites.).
- Safe boating signs at MacIver's Falls.
- Any proposed signs for trails, roads and/or parking should meet consistent standards.

Private Lands (refer to Section 6.7)

- Private land holdings surrounded by the park include the following:
 - A major portion (130 ha) of Fox Island; and,
 - Island #6 (8 ha), #18(4 ha) and a cottage lot on Is land #5 (4 ha).

In addition, significant cultural sites lie outside the park (e.g. Hudson's Bay Company Post, Kor rock structure...).

3.0 PARK BOUNDARY

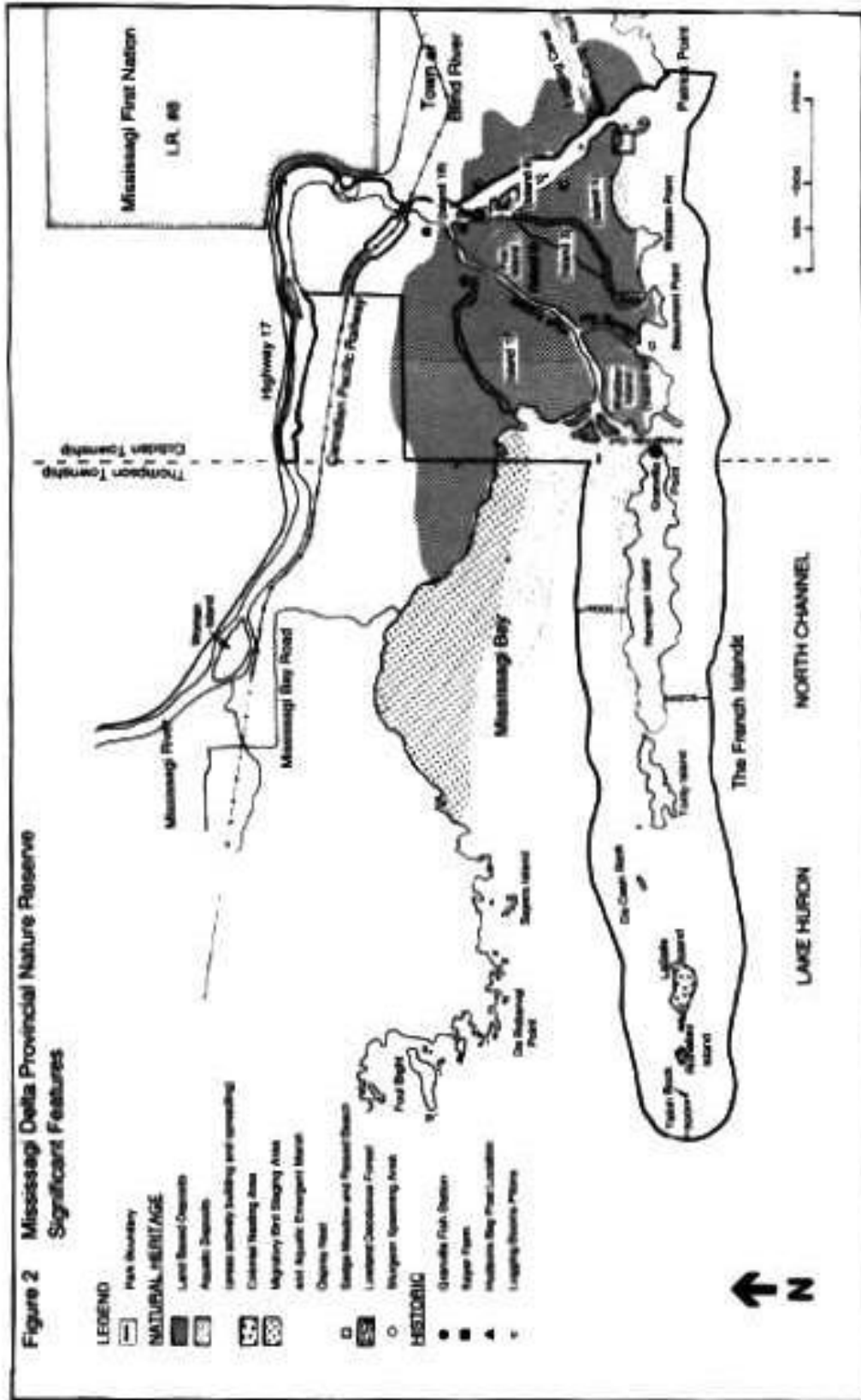
The boundary for the Nature Reserve was delineated on the basis of protection of provincially significant natural features (Figure 2). Most of the park, including the delta formation, is situated in Cobden Township. A chain of bedrock islands in the west, the French Islands, are in Thompson Township. The park encompasses a total area of 2,395 hectares (land and water). The Trans-Canada Highway is parallel to the northern park boundary, adjacent to the Mississagi River. The east boundary of the park is accessible by the Boom Camp Road leading from the Town of Blind River. In the west, the Dean Lake Road leads to Mississagi Bay approaching the western boundary.

The delta itself (12 sq. km. in area) is divided into a total number of islands by several active river channels. There are also flooded remnant channels, such as the one on Fox Island dividing private land from parkland. This evidence indicates that the delta continues to evolve. Besides incorporating four deitaic sand islands and three mainland islands, the park also includes bedrock-controlled mainland in Cobden Township.

Private land within the park is not affected by park policy.

4.0 PROVINCIAL PARKS POLICY

Ontario Provincial Parks Policy is the basis for a world renowned parks system. Provincial Parks in Ontario represent the ecological regions and geological history of the Province and cultural features are managed for their intrinsic value and to provide recreation opportunities for residents and visitors.



4.1 PARK CLASSIFICATION

Mississagi Delta is classified as a *nature reserve* and is defined in Parks Policy as:

“Areas selected to represent the distinctive natural habitats and landforms of the Province. Protected for educational purposes and as gene pools for research to benefit present and future generations.”

Nature reserves afford the highest degree of protection for natural and cultural features within the Provincial Parks System. The Mississagi Delta Provincial Nature Reserve Park focuses on protecting the geological and biological features and processes of the delta landform, located at the mouth of the Mississagi River, where it enters Lake Huron’s North Channel (Figure 2). In addition, some historic features occur in the park.

4.2 GOAL

In keeping with Provincial Parks Policy, the goal is:

To protect natural and cultural heritage features and processes and provide for heritage appreciation opportunities in and adjacent to the park.

In a provincial context, the park serves to protect significant and representative geological and biological features of Site Districts SE-i. Due to the protection mandate for nature reserve parks and the sensitivity of heritage values, park development will be very limited. Park-related facilities that are consistent with the management of park access may be constructed in access zones, located outside but adjacent to the park.

4.3 OBJECTIVES

The Ontario Provincial Parks System has four objectives: protection, recreation, tourism and heritage. As for all nature reserve class parks, *protection* and *heritage appreciation* objectives will guide park use and management. Recreation and resulting tourism opportunities are secondary to these objectives.

Protection Objective

To protect provincially significant, special and representative features of the delta landscape and its environments.

The Nature Reserve’s diversity of significant natural and cultural features include the “bird’s foot” delta formation

and processes which support 13 plant communities with some provincially rare plants and a variety of breeding and migrating birds including heron, cormorant, tern and nesting gulls.

Heritage Appreciation Objective

To provide opportunities for appreciation and exploration of the delta landform, plant and animal ecology and the natural process and functions that sustain them as well as the Aboriginal and historic cultural heritage.

Use and development in the park will be restricted to trails, signs and low-intensity recreational activities. Natural and cultural heritage features will be interpreted to the public through means that are compatible with the protection objective. Tourism benefits will be realized through appropriate development and programming related to heritage appreciation.

5.0 ZONING

Zoning allocates parklands to their most appropriate use, based on their significance for protection and potential for recreation. There are six types of zones within provincial parks: wilderness, natural environment, nature reserve, historical, access and development. A *nature reserve* class park permits historical, access and nature reserve zones.

The restrictions inherent in nature reserve park policy specify that no facilities of the scope and scale that would require a development zone would be permitted within this class of park. A nature reserve park is comprised mainly of nature reserve zones, which afford the highest degree of site protection in the Ontario Provincial Park system. Given the extent of existing access adjacent to the park and the potential for complimentary access development within the “zone of influence” around the park access development and control is proposed to occur outside the park.

5.1 NATURE RESERVE ZONES

There are distinct physical attributes or landscapes within the Nature Reserve, which lend themselves to different management strategies. As such, four nature reserve zones are identified, which encompass 2,661 hectares. Development is limited to trails, interpretive and day-use structures and temporary facilities for research and management. Signs related to backcountry travel are permitted.

The following is a description of each nature reserve zone:

NR-1 River Mouth Delta (1,302 ha)

Since the melting of the glaciers some 10,000 years ago, the mouth of the Mississagi River has formed a delta on Lake Huron. This delta's classic multi-channeled shape comprises flat islands separated by shifting channels. Fast river currents enter the deeper waters on the North Channel and slow down. Sands, gravel and reworked till being transported in the river currents settle out as they enter the deeper lake waters. Each spring with snow melt run off, the delta channels fill causing stream bank erosion. Some years islands in the delta flood. This process sustains lowland deciduous forest vegetation communities. Some plant species that occur in the park are at the northern limit of their range. On Islands #6 and #18, virgin's bower (*Clematis virginiana*), wild leek (*Allium tricoccum*), large toothwort (*Dentaria maxima*) and green ash *Fraxinus pennsylvanica* can be found. This zone will be managed for the protection of natural and historical values and for low-intensity, low-impact recreational activities with canoeing and motor boating in the channels and day-use hiking on the islands and mainland.

NR-2 Hennepin and Tonty Forested Bedrock Islands (840 ha)

The bedrock-controlled wooded islands have constraining high rock ridges to the upstream delta. Southern exposure to Lake Huron renders the islands to lake wave action, including currents that run along the shore. On the islands the dominant vegetation types include pine and oak, intolerant mixed forest, with some open upland rock outcrop barrens. The lake currents forming beaches with excellent opportunities for picnicking, swimming and day-use activities. There are hiking opportunities on the rock ridges. The islands will be managed for protection of natural and historical values and for low-intensity, low-impact recreational activities.

NR-3 Bedrock Islands (281 ha)

La Salle, Richelieu and Talon Rock Islands are low bare bedrock islands, which comprise the outer end of the park's easterly archipelago. The low islands are fully exposed to Lake Huron weather and storms. Vegetation types are stunted upland intolerant mixed and deciduous forests, with some upland barrens (rock outcrops). Colonial nesting sites for great blue heron, double-crested cormorants and ring-billed gulls (*Larus delawarensis*) occur here.

NR-4 Pine Ridge (238 ha)

This northern section of the Nature Reserve is distinct rock ridge upland separate from the lowland deltaic sandy area to the south. This part of the park includes the single large river channel of the Mississagi River before it is divided into the lowland channels of the delta. Vegetative types include upland conifers and mixed forest dominated by red pine (*Pinus resinosa*), white pine (*Pinus strobus*), sugar maple (*Acer saccharum*), eastern hemlock (*Tsuga canadensis*), red oak (*Quercus rubra*), balsam fir (*Abies balsamea*) and eastern white cedar (*Thuja occidentalis*). This zone will be managed for trail and off-trail hiking and viewing of the river channel and upland forests.

5.2 HISTORICAL ZONES

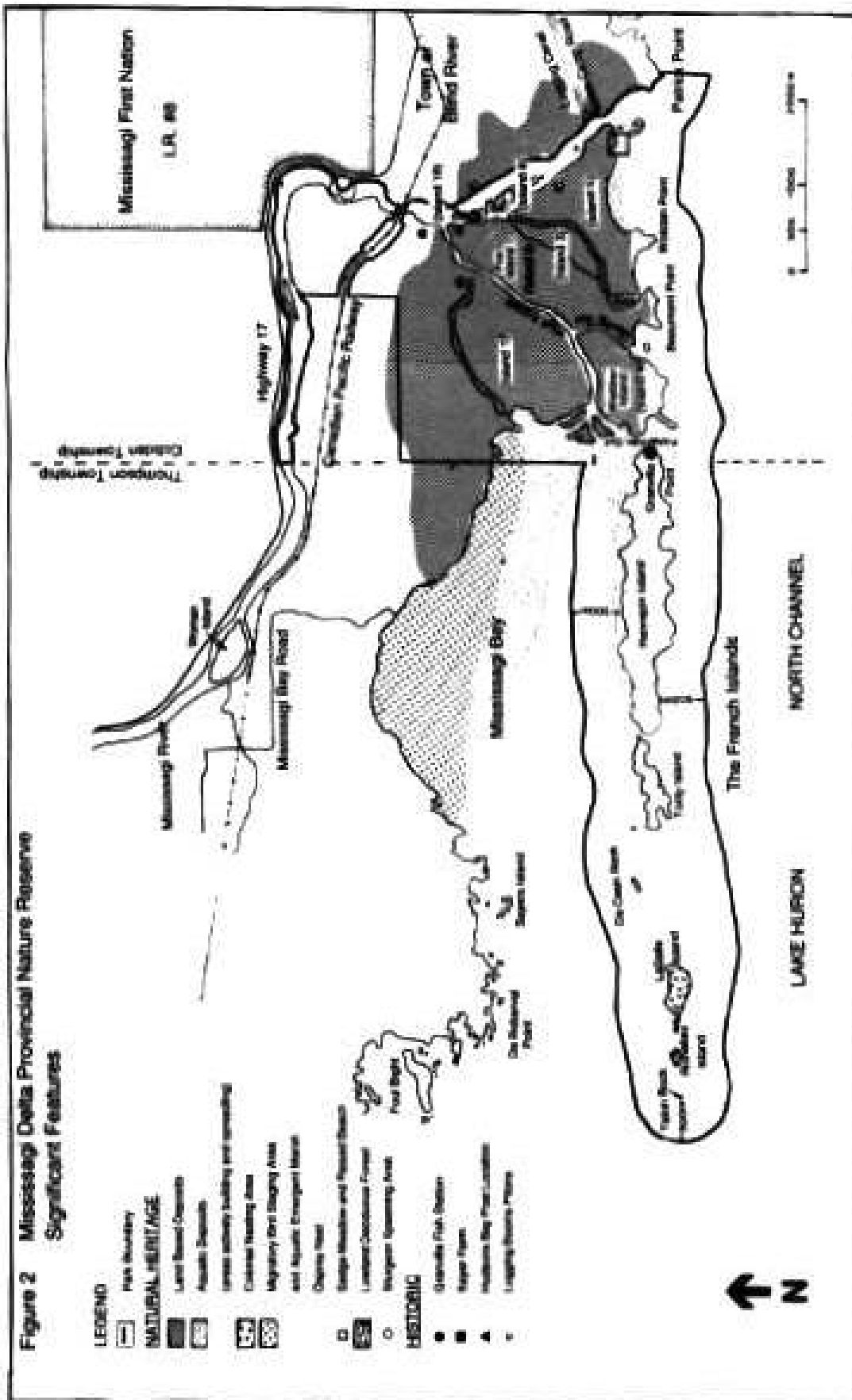
Cultural heritage features require management distinct from areas representing natural heritage features and processes. In general, historical zones support the minimal development required for visitor exploration and appreciation and for scientific research.

Development and use in an historical zone will be limited to: trails and necessary signs, as well as interpretive, educational, research and management facilities; means of travel appropriate to the historical resource; and historical restorations or reconstruction's where appropriate. Any restorations or reconstructions and interpretation must conform to the Heritage Education Plan and high standards for historical authenticity. This will be complementary to, and not interfere with the historical resource.

One historical zone has been designated in the Mississagi Delta Provincial Nature Reserve.

H River Mouth Habitation Zone (15 ha)

This zone includes a sequence of historical habitations that were located here to take advantage of the diverse resources of the Mississagi River as it flows into Lake Huron. The historic site of the Sayer Farm with remnant foundations, abandoned fields and hugh lilac bushes are still quite evident. A Hudson Bay Company (HBC) cemetery is also present here. The adjacent HBC Post site is on private land (circa 1860s) but complements the zone. Other archeological and traditional Aboriginal occupation sites worthy of protection are also located within this zone (Figure 3).



5.3 ADJACENT ACCESS ZONES

Three potential access zones in the vicinity of the park have been identified. However, these access locations are all situated outside the park boundary and this Park Management Plan can exert little influence over their selection, phasing and development. It is likely that their development will be determined by availability of funding through other sources than the Provincial Government.

Access zones can serve as staging areas, as a means of both providing and regulating use. Generally, development in access zones is limited to roads, visitor control structures, boat launch facilities, basic day-use and possibly a camping area. There may also be limited facilities for orientation, interpretation, education, research and park management. In addition, there could also be shuttles and outfitting for backcountry users. Park managers will continue to work with entrepreneurial interests in the following potential access locations (Figure 3).

A-1 West Access Zone

Access on the west side of the Nature Reserve may be developed at the existing end of the Dean Lake Road in Thompson Township. Access from this side of the Nature Reserve may bring use into the largest wetland and waterfowl area of the park on Mississagi Bay. Of the three access locations discussed in this Management Plan, this is the only one where potential visitors would not have to cross river or delta channels to get to the Nature Reserve. Day-use trails from this location would take visitors through numerous representative vegetation associations with limited views of the delta channel and islands on this side of the park.

Access development (e.g. campground, picnic area, outdoor education centre) may occur in an existing 160 hectare Land Use Permit (LUP). A portion of the Dean Lake Road in Thompson Township requires upgrading. The existing bridge, on the Dean Lake Road, crossing the Mississagi River may require upgrading. There is an existing boat launch and public campground on Mississagi Bay adjacent to the Dean Lake Road. There are remnants of logging camps and an historic farming settlement on the Dean Lake Road.

A-2 North Access Zone

This zone may be developed upstream of the delta formation on the Mississagi River's east shore. Day visitors entering from this location will see the Mississagi

River before waters enter the slower delta channels and islands. The greatest diversity of river, delta channel and island features with lowland and upland vegetation association can be viewed from this location. This access zone is less than 2 kilometres from the Trans-Canada Highway, on an existing gravel road, which would require upgrading. This will include extending the road far enough south to reach the proposed access area and the construction of a bridge across Dyke Creek (approximate 25 metre span), south of the CPR line. The private railway crossing may be a conflict with public use. Lands in this location are owned by Cameco (see note at end of East Access A-3).

There are no existing facilities to complement the park. Compatible infrastructure for park visitors may be provided in this location (e.g. shuttle service for day visitors, boat launch, picnic area, interpretive centre, campground...).

A-3 East Access Zone

There is an eastern access downstream from the North Access Zone (A-2), located at the end of Boom Camp Road; 6 kilometres from Blind River. Visitors will have to cross via watercraft to the island to get to the proposed trails from this location. Trails in this area would provide visitor access to the greatest diversity of natural features in the North Channel portion of the park. Delta channels and islands are quite visible here as well as the influence of lake currents on the delta island shores and channels.

Boom Camp Road, an all-weather gravel road to this location and a low intensity day-use access (e.g. parking, boat launch, pit privies and garbage containers) is managed by the Town of Blind River. The Town leases the private land from Cameco. For safety reasons, Cameco has preferred that use of this site be minimized. A bridge replacement on the Boom Camp Road may soon be necessary. (**Note:** Cameco is not willing to authorize any further improvements on the land within the "buffer zone" south of the uranium refinery). This area includes the existing access point (A-3). However, Cameco has given approval for a possible access point in the northwest corner of its land, just south of the CPR line (A-2).

5.4 STATEMENT OF ENVIRONMENTAL VALUES UNDER THE ENVIRONMENTAL BILL OF RIGHTS

The Ministry of Natural Resources (M7NR) is responsible

for managing Ontario's natural resources in accordance with the statutes, which it administers. As the province's

natural heritage areas, forests, fisheries, wildlife, mineral aggregates, fuel minerals and Crown lands and water which make up 87% of Ontario.

The Ministry of Natural Resources is committed to ecological sustainability, as endorsed by the World Commission on the Environment and Development.

In 1994, the Ministry of Natural Resources finalized its Statement of Environmental Values (SEV) under the Environmental Bill of Rights (EBR). The Statement of Environmental Values is a document which describes how the EBR is to be considered whenever decisions that might significantly affect the purpose of the EBR.

The Ministry's SEV is based on sustaining the Province's ecosystems. The Ministry has taken this approach to its SEV because sustainable development is compatible with the purposes of the EBR.

6.0 HERITAGE PROTECTION

Nature reserve class parks are managed for the achievement of objectives for protection and heritage appreciation. Policies for resources and recreation management and facilities are guided by these objectives which serve to maintain the natural values that the park represents. Provincial parks, in general, do not permit activities such as logging, mining and aggregate extraction (Section 4.3).

Nature reserve park policy addresses aspects of heritage management, which are, directed by protection, as well as visitors health and safety issues. Activities such as hunting and trapping (except Status Indians through Treaty Rights) are therefore not permitted in this class of park. Visitor health and safety will be a priority and the Mississauga First Nation and MNR will enter into a Wildlife Agreement to address this safety issue. While it is recommended that existing day-use be permitted to continue, management will be directed at protecting and perpetuating the park's natural values. Policies outlining permitted uses in nature reserves are specified in Appendix I.

Other situations can be addressed by operations and development policies (e.g. access, private lands, boating, trails). Based on park features and issues, the following heritage management policies will apply.

6.1 GEOLOGICAL AND BIOLOGICAL HERITAGE FEATURES

The park is rich in geological, biological and cultural

lead conservation agency, the Ministry of Natural Resources is the steward of provincial parks and other

features, which warrant protection. The "bird's foot" delta formation is one of the best examples of this geological feature in Ontario, and the park encompasses this evolving, dynamic river mouth environment. Deltaic deposits and channels will not be altered by humans. Alterations that occur will be through natural process. Aggregates and bedrock will not be extracted.

The natural processes of forest and wetland succession will continue. Commercial logging is not permitted. Insect and disease affects on vegetation in the park will not be treated unless rare plants are affected. The potential treatments and effects will be studied with possible action to protect rare plants or successional sequences.

Applied research into geological and biological features will be permitted through the application procedure and policy for research in Provincial Parks.

6.2 CULTURAL HERITAGE FEATURES

The following policies address protection of the park's cultural heritage sites, including significant cultural, historical and archeological features and sites both in the park and on adjacent private lands. Three approaches for protection of heritage sites on private lands are discussed in Section 6.7. It is likely that there are many sites that have not yet been discovered and documented. The possibilities for cultural heritage education will be outlined in a Heritage Education Plan for the park and related lands. However, due to site sensitivity, any potential historic site reconstruction will not be undertaken in adjacent areas at locations outside the park. A study will be undertaken to determine an appropriate approach including facility development for consolidation, research, safekeeping and conservation of historic artifacts from their present holdings. As funding permits, it is proposed that archeological work be undertaken to determine the cultural assets of the park and related areas. If sites are found to be threatened then attempts will be made to secure and/or salvage sensitive sites. This includes sites threatened by the erosion and slumping of river banks. Sensitive historic sites (e.g. graveyards, building foundations, underwater artifacts...) will be salvaged or protected as appropriate through active enforcement, signs and public education (e.g. leaflets). Such sites may be featured as a main motive or may be an integral component in a heritage visitor centre.

Under the Ontario Heritage Act (1989), it is illegal to do archeological work without a license, and salvage or removal of artifacts is strictly prohibited.

6.3 FOREST FIRE MANAGEMENT

Forest fire management and protection will be implemented in accordance with the Fire Management Strategy for the Ontario Ministry of Natural Resources. Fire ecology research will identify the role of fire in vegetation succession in the park. More precise controls or the use of fire for management purposes may be approved through a more detailed local fire plan, consistent with the findings of fire ecology research and related policies in this Park Management Plan. In Ontario, every forest fire receives a response, which is governed by the following: (a) predicted fire behaviour; (b) potential impacts and risk to persons and property values; and, (c) estimated cost of the response.

6.4 WILDLIFE MANAGEMENT

The management of wildlife will follow nature reserve policies. Trapping and hunting by individuals, other than Status Indians, are not permitted within the park. "No Hunting" signs will be posted along the park boundary, particularly in the vicinity of Mississagi Bay. For discussion on Aboriginal use of wildlife, refer to Section 6.6.

6.5 FISHERIES MANAGEMENT

A variety of fish species occur in the park for part or all of any given year. Fisheries will be studied to determine seasonal movements and habitat in the park.

Regulations for angling in the park reflect those stated in Aboriginal Treaty Rights and the Provincial Recreational Angling Regulation Guide.

The existing commercial fishery will continue in the park, within a small portion of the North Channel of Lake Huron (Figure 3). This is in accordance with Provincial Parks Policy (PM 1.00, 1989) which states that "*commercial fishing will be permitted to continue on lakes not wholly contained within a provincial park*"

Sport angling will continue in the park. Park waters are presently fished, for sturgeon running upstream to spawn, by commercial tourism and local use. Management strategies will be directed at protecting sustainable sturgeon populations and habitat.

6.6 ABORIGINAL INTERESTS

Treaty Rights for hunting, trapping and angling by the Mississauga First Nation people will continue. Spiritual and traditional use of the park by the First Nation people will continue. It is expected that Aboriginal hunting permitted through Treaty Rights will respect the safety of park visitors. Regarding the issue of hunting safety (as well as controlling the magnitude of camping use), the Mississauga First Nation and M7NR will enter into a Wildlife Agreement. This may be drawn up by the Board Council Resolution. Aboriginal by-laws will regulate Aboriginal hunting and angling in the park.

6.7 PRIVATE LANDS

While private lands are excluded from the park, and area not within the jurisdiction of park policy, it is hoped that stewardship of these lands will be consistent with nature reserve class park policies. Significant natural and cultural features occur on adjacent land to the park.

Possibilities for protection of significant natural and cultural heritage features will be explored. In keeping with Provincial Parks Policy (1989), the cottage LUP on Island #5 will be phased out by 2010.

Three alternatives for protection of park related values on private land will be pursued: (a) acquire entire private holdings; (b) acquire only significant sites or features; (c) established cooperative protection with the landowner (e.g. easement with consent, Conservation Land Tax Agreement...).

7.0 OPERATIONS POLICIES

7.1 HERITAGE EDUCATION

Approaches to inform the public about geological, ecological and cultural heritage features will be assessed through heritage education planning (e.g. information, interpretation...). At present a fact sheet provides basic information on the park. Park trails, interpretive material and approaches will be addressed in a Heritage Education Plan.

7.2 RESEARCH

Opportunities will be explored for research into cultural (e.g. archeological, historical, existing uses) and natural features (e.g. landforms, vegetation, wildlife, fisheries...) within the park. Potential park research could include archeological surveys of erodible channel and island

shores and studies of the significance of sturgeon habitat and colonial nesting (e.g. should nesting habitat be managed?). These and other opportunities will be explored by Ontario Parks with appropriate partners (e.g. Aboriginal interests, ROM, universities, colleges, local natural and cultural heritage groups). Ontario Parks research policies will be evaluated within the context of the Ontario Parks Research and Information Strategy and will comply with provisions of directive PM 2.45, Research Activities in Provincial Parks.

7.3 RECREATION MANAGEMENT

Recreation management will deal with existing boating, camping and future trail use.

Boating

Canoeing and non-mechanized boat travel will continue. Mechanized travel is not generally permitted in nature reserves however; motor boating that occurs along delta channels originates on the North Channel and Mississagi Bay from Lake Huron. Activities present prior to park establishment, angling, boat-in camping, waterfowl, viewing, day-use beach activities, swimming and blueberry picking will continue to be permitted. There is no evidence that motor boats cause detrimental effects to delta values. Motor boat use will be permitted to continue in the park as an existing, non-conforming use. However, should motor boat use be deemed to be detrimental to park values in the future (e.g. excessive speed or noise, wake wash and erosion of channel banks) this will be reviewed with the public and managed accordingly.

Camping

There is no formal campground in the Mississagi Delta Provincial Nature Reserve. However, there are a number of remote campsites in use during the open water seasons. Traditional campsites for Aboriginal spiritual/ceremonial uses may continue. An agreement for Aboriginal spiritual/ceremonial uses will be negotiated with the Mississauga First Nation. The Mississagi Delta Park Board will review recreational camping with the intention of redirecting such activity to the periphery of the park through visitor education programs and/or the provision of alternate camping opportunities.

Trails

There is no management of existing trails or canoeing in the park. A Trail Plan will be prepared identifying preferred features to connect with interpretive and hiking/canoeing routes.

8.0 DEVELOPMENT POLICIES

Development will proceed following the policies in this Management Plan. Development will require prior approval of site plans in accordance with the requirements of the Environmental Assessment Act.

8.1 PARTNERSHIPS/ENTREPRENEURIAL OPPORTUNITIES & OFF-SITE FACILITIES

The Park Superintendent will work with partners to assist in park operations and development (Figure 4).

Certain park-related, off-site facilities (e.g. day-use facilities, privies, picnic area, boat launch, shuttle service, small campground, heritage education centre...) and development of sites through entrepreneurial initiatives will be encouraged, provided they are consistent with park values.

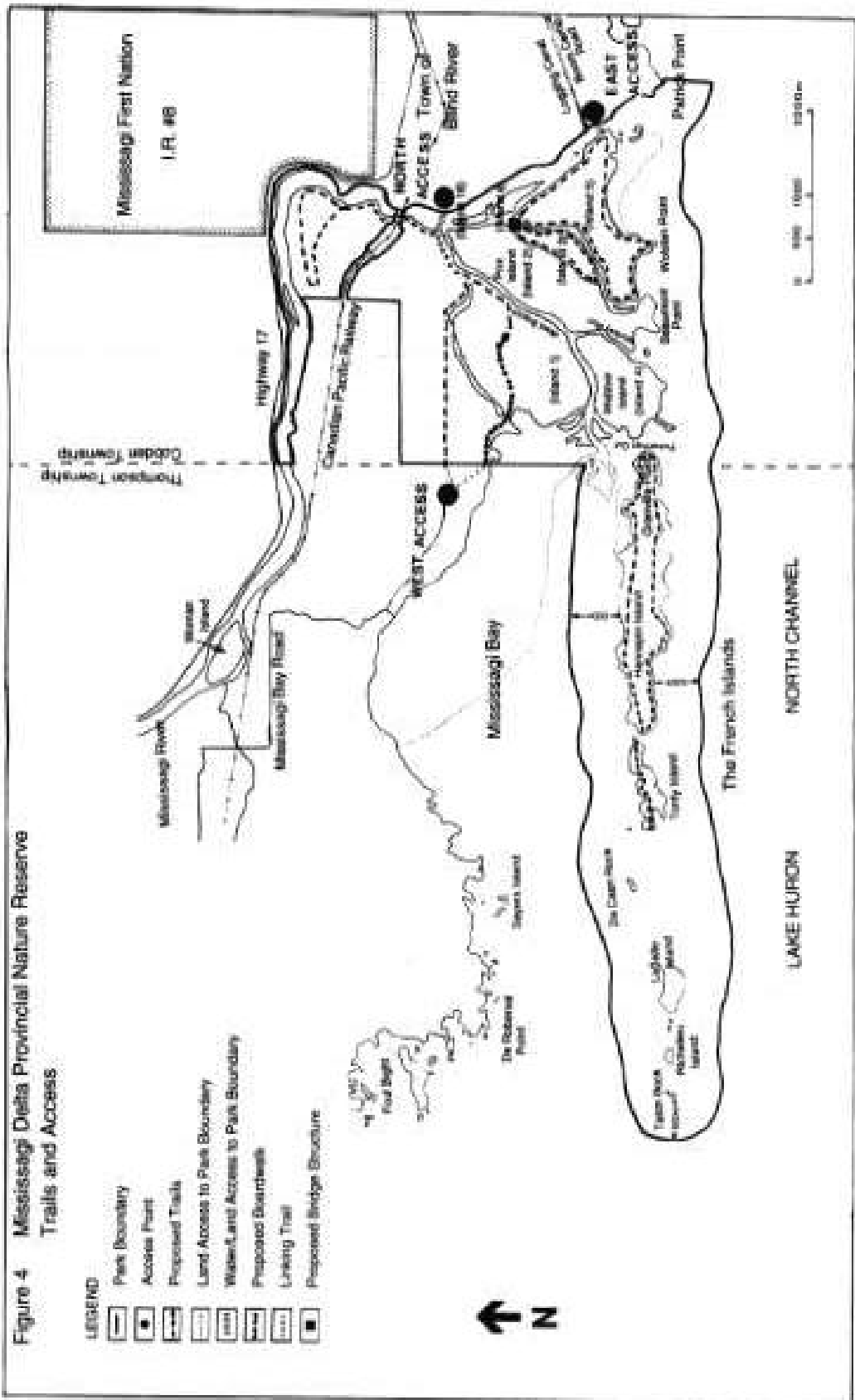
8.2 TRAILS

A system of trails will be developed following a park Trail Plan to provide opportunities for appreciation of the park's natural and cultural values. The Trail Plan will follow standards from site planning to set appropriate development within the park. In addition to trail use, off-trail day-use ridge hiking will be encouraged on Hennepin and Tonty Islands (NR-2) and in the Pine Ridge area (NR-4).

8.3 PARK SIGN PLAN

A Sign Plan will be developed for the park. This will include: the Trans-Canada Highway, park boundary, information, interpretation, trail identification and safety signs.

Once the park is operational, identification and interpretive signs will be posted at the rest stop just west of the Nature Reserve on the Trans-Canada Highway as well as at area Tourist Information Centres. Signs may be posted to give Highway traveler's notice of park access. The park boundary will be posted with signs. Sign locations will be determined in the Park Sign Plan and the signs will identify the special rules that apply in nature reserves (e.g. no camping, no hunting). In cooperation with the Ministry of Transportation (MTO), the Mississagi rapids will be posted to encourage safe use. Park trail signing will be identified in the Heritage Education and Trail Plans.



9.0 IMPLEMENTATION STRATEGY

The implementation of some aspects of this Park Management Plan may be contingent upon funding and likely occur sequentially in various phases. Implementation will require more detailed heritage education and site planning (e.g. access zone facilities and services, trail layout and design specifications), resource management needs (e.g. cultural resources surveys, fisheries...) and operations and development standards. These will take direction from agreements with the Mississauga First Nation and proponents for access. These agreements will be prepared by the Mississagi Delta Park Board and will address how and when particular aspects of the Park Management Plan will be implemented. They will be guided by goal, objectives and policies in this Management Plan.

9.1 ROLE OF THE MISSISSAGI DELTA PARK BOARD

The mandate of the Mississagi Delta Park Board is to “provide advice and recommendations with regard to the planning management and operations of the park to the Minister of Natural Resources.” The Board’s involvement in park management planning as stated in the Mississauga Northern Boundary Land Claim Agreement (Article 5, Section S.1a) reflects their commitment to:

- i) protect the natural values, heritage and integrity of the park;
- ii) protect Mississauga sacred and cultural sites within the park; and,
- iii) provide job opportunities for Mississauga First Nation and local residents.

A variety of funding sources will be investigated and utilized as fully as possible to implement park development and operations. Partnership with other organizations (e.g. universities, environmental groups) will be encouraged to the extent that they support the goal and objectives of the park.

The Mississagi Delta Park Board will oversee three phases in the Implementation Strategy for the Mississagi Delta Provincial Nature Reserve Management Plan as outlined in the following sections:

Phase I

Completion of this phase will provide agreements for MNR! Ontario Parks, the Mississauga First Nation and adjoining land use interests for managing trail and waterway use activities in Mississagi Delta Provincial Nature Reserve.

Priorities

- Survey and sign park boundary;
- Assist in the formation and implementation of comprehensive agreements for park operations and development (e.g. Mississauga First Nation Wildlife Agreement, Access Agreements, Heritage Education Agreement);
- Develop a Resource Management Plan which will address issues (e.g. delta landform, vegetation, fish & wildlife, cultural heritage & recreation management);
- Prepare and implement a Heritage Education Plan (includes natural & cultural heritage);
- Prepare a agreement(s) with partners to assist with park management, development and operation; and,
- Prepare and implement site and development plans, as well as operating plans for access zones according to Access Agreements.

Access Agreements will outline specific needs of individual access zones: park sign plan for Highway 17, facility plans, park trail(s) site plans including related structures and services (e.g. trailhead information kiosks, access to park boat dockage for water access locations, trail boardwalks in wetland sites, three observation towers, two trail bridges; nature reserve brochure(s)...), day -use and restricted camping permit and fee administration and collection at access locations with provision to re-invest funds back into park operations.

This phase will include preparation and implementation of the site plan for a dedication plaque acknowledging the work of the Mississagi Delta Park Board.

Phase 2

Completion of this phase will expand the trail system for additional hiking and cross-country skiing opportunities.

Priorities

- Review and update, as required, the agreements/plans for park operations and development (e.g. Mississauga First Nation Hunting Agreement, Access Agreements, Heritage Education Plan, Sign Plan);
- Formulate and implement site and development plans to reflect the above amendments to operation and development agreement(s) for additional hiking trail, wetland viewing boardwalk and platform(s) and cross-country ski trails; and,
- Formulate and implement resource management plans to identify ongoing park and adjoining land related research.

Phase 3

Completion of this phase will provide for securement of long-term protection of park related values within the “zone of influence”.

Priorities

- Ongoing landowner contact within the “zone of influence”;
- Study, develop and implement an ecosystem approach to adjacent land management to sustain park related values’ ecological integrity; and,
- Long term delta environmental protection through easements or purchases of significant lands as funds permit, and as owners are willing.

10.0 SUMMARY OF PUBLIC CONSULTATION

Public participation was first initiated in the Mississauga Northern Boundary Land Claim Agreement in 1991. Signed in 1994, this Agreement formally announced the preparation of a Park Management Plan and outlined the composition of a Mississagi Delta Park Board to oversee planning. The Mississagi Delta Park Board first met in the summer of 1994 to discuss plan proposals. The content of all planning documents was developed with the assistance of the Mississagi Delta Park Board, and received their

approval prior to publication.

The park management planning process officially began in May 1994. As part of the public consultation process, two open meetings were held. The first outlined the Background Information and Issues and Plan Alternatives. The meeting was hosted at the Mississauga First Nation Community Centre on December 7th, 1995, and was attended by 68 people. The second meeting, a presentation of the management plan, was at the Thompson Township Hall on February 22nd, 1996, and was attended by 25 people.

In general, public input was very positive toward the creation and development of the Mississagi Delta Provincial Nature Reserve Park. In addition, almost all proposals for park policy and development were also favourably received. The most common concern was raised over the protection mandate for the natural and cultural resources of a nature reserve.

The continuation of traditional camping, motor boating, commercial fishing and Aboriginal hunting were viewed by some as “departures” from nature reserve policy. Concerns regarding sturgeon habitat, fish stocks, as well as cormorant “control” were also common. It was mentioned, by a few respondents, that perhaps too many trails may adversely impact the delta environment. There were also concerns regarding the protection of historical artifacts, as well as the need for enforcement to protect the park’s natural and historical integrity.

Other frequently mentioned comments cited access concerns, particularly in the selection of access alternative(s). Some felt that appropriate park signs should be given a high priority. Another concern was funding for the park, and who would oversee park operations in both the immediate and distant future.

10.1 PLAN REVIEW AND AMENDMENT

This Management Plan will be reviewed throughout its 20 year life span to address issues or changing circumstances. If a review has not been undertaken by the 10th year, after the Management Plan’s publication, then a mandatory review is held. All park plan reviews will incorporate further opportunities for full public consultation.

11.0 REFERENCES

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APPENDIX

Resource Management Policies & Activities and Facilities in Nature Reserve Parks

From: Ontario Provincial Parks Planning and Management Policies, Ministry of Natural Resources, 1992.

RESOURCE MANAGEMENT POLICIES-PROVINCIAL NATURE RESERVES

RESOURCE MANAGEMENT POLICIES NATURE RESERVE PARKS	PARK ZONES		
	A	NR	HI
LANDS AND WATERS			
Mineral Exploration and Extraction			
Aggregate Extraction			
Commercial Hydro Development			
Water Control Structures (new)	M	M	M
Land Disposition - private camps - commercial outpost camps, lodges			
FLORA			
Vegetation Management	M	M	M
Commercial Logging			
Insect/Disease Suppression: native	M	M	M
non-native	Y	Y	Y
Fire Suppression: natural	Y	M	M
human-caused	Y	Y	Y
Prescribed Burning		Y	Y
FAUNA			
Commercial Trapping	Status	Indians	Only
Wildlife Population Management		M	M
Bait Fishing			
Fish Stocking: native species			
non-native species			
Fish Habitat Management	M	M	M
RECREATION MANAGEMENT			
Commercial Tourist Operations: new			
existing			
Restrictions on vehicles, aircraft, motor boats: private	M	Y	Y
commercial	M	Y	Y
Can and Bottle Restrictions	M	M	M
Party Size and restrictions and access quotas	M	M	M

Legend

Y Normally encourage in this zone

M May be encouraged in this zone

Blank Not compatible with this zone, if now existing, a non-conforming use to be phased out

RECREATION ACTIVITIES AND FACILITIES-PROVINCIAL NATURE RESERVES

ACTIVITIES AND FACILITIES NATURE RESERVE PARKS	ZONES		
	NR	HI	A
All Terrain Vehicle (A.T.V.) Travel			M
Aircraft Landing (water) - commercial tourism - private			
Boating (powered) - commercial - private			
Campgrounds - car - boat-in/walk-in - group - back-country			
Canoeing/Kayaking	M	M	M
Demonstration Areas (e.g. Logging exhibits...)			
Hiking	M	M	Y
Historical Appreciation- self-guided	M	M	M
Horseback Riding- trail			
Mountain Hiking- designated trails			
Nature Appreciation- self-guided	M	M	Y
Orienteering	M	M	Y
Outfitting Service			
Outpost Camp (commercial)			
Painting/Photography	Y	Y	Y
Picnic Grounds			M
Playgrounds			
Recreation Programs (organized)			
Resorts/Lodges			
Restaurants- food & beverage			
Rock Climbing			
Sailing and Sailboarding			
Scuba and Skin Diving			
Skiing (cross-country)/Snowshoeing	M	M	M
Snowmobiling	M	M	Y
Spelunking (cave exploration)			
Sport Fishing	Y	Y	Y
Sport Hunting			
Swimming- facility based			

Legend

Y Normally encouraged in this zone

M May be encouraged in this zone in certain parks where deemed appropriate

Blank Not compatible with this zone; if now existing, a non-conforming use to be phased out

