

Nova Scotia Provincial Parks

Management Plan McNabs and Lawlor Islands

Executive Summary Background Habitats: Interpretive Resources Regional Context Legislative & Policy Framework Park Management Plan Managing for Ecological Inregrity Park Development Concept Plan Area Concept Plan(RDZ) Conclusion Appendicies

Information Series Pks 2005- 1 August 2005





PARK MANAGEMENT PLAN MCNABS AND LAWLOR ISLANDS PROVINCIAL PARK HALIFAX HARBOUR, NOVA SCOTIA

Information Series PKS 2005-1

Nova Scotia Department of Natural Resources August, 2005

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MINISTER'S MESSAGE

The Province of Nova Scotia is committed to protecting important elements of its natural environment and cultural heritage. As Minister of Natural Resources, I am responsible for ensuring that our provincial parks, and the heritage values they contain, are managed in perpetuity for the benefit of present and future generations. In this context, I am proud to present the McNabs and Lawlor Islands Provincial Park Management Plan.

Moulded by glaciers, reshaped by unrelenting coastal processes, and with a human presence dating at least 1,500 years before present, McNabs and Lawlor Islands Provincial Park contains provincially and regionally significant natural and cultural heritage values and provides important recreational opportunities. Situated in the heart of Nova Scotia's largest metropolitan area, these islands also provide important opportunities for outdoor education and have the potential to contribute significantly to the quality of life of residents within the Halifax-Dartmouth metropolitan area as well as other Nova Scotians and out-of-province visitors.

The Province began to assemble the land base for McNabs and Lawlor Islands Provincial Park in the 1970s in response to residents' concerns about the need to protect these outstanding islands from inappropriate development and use. The Provincial Parks Act and this park management plan will help to ensure that the islands' heritage values will be protected so residents and visitors alike may continue to enjoy their intrinsic values.

Managing this important provincial park is a challenge requiring the support and active participation of many groups and individuals. I am therefore pleased to formally approve this management plan for McNabs and Lawlor Islands Provincial Park – a plan to guide the actions of the Province of Nova Scotia and a plan that identifies ways in which we can work individually and collectively to protect this important part of Nova Scotia for current and future generations.

The Honourable Richard Hurlburt Minister Nova Scotia Department of Natural Resources

August, 2005

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ACKNOWLEDGMENTS

The McNabs and Lawlor Islands Provincial Park Management Plan establishes a vision and longrange direction for McNabs and Lawlor Islands Provincial Park which will help ensure that the islands' outstanding natural and cultural heritage values, and the outdoor recreational and educational opportunities they support, will be enjoyed by present and future generations. This plan is the result of the combined efforts of many people. These include members of the McNabs and Lawlor Islands Provincial Park Advisory Committee, Department of Natural Resources staff, members of community-based organizations, and local residents. For their commitment, dedication, and foresight, we are deeply indebted.

The following individuals and groups warrant special recognition for their contributions to the development of this plan:

- members of the McNabs and Lawlor Islands Provincial Park Advisory Committee
 - Bob Horne, Eastern Passage Ratepayers Association
 - Paul Macnab, Halifax Regional Municipality citizen appointee
 - Dr. Patricia Manuel, member-at-large
 - Cathy McCarthy, Friends of McNabs Island Society
 - Jay Meeuwig (July 2000 June 2001) and Peter Austin-Smith, Jr. (March 2002 present), Canadian Parks and Wilderness Society Nova Scotia
 - Colin Stewart, (July, 2000 March 2004) and Suzanne Borkowski (December 2003 present) Halifax Field Naturalists
 - Royce Walker, member-at-large
 - Dr. Martin Willison, member-at-large
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 - July 2002)
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• other staff of the Nova Scotia Department of Natural Resources who offered valuable advice and ideas

Members of the Advisory Committee were deeply saddened by the untimely death of Colin Stewart in March, 2004. Colin was passionate about the need to conserve natural areas and worked tirelessly at the local, provincial and national levels to that end. An original member of the McNabs and Lawlor Islands Provincial Park Advisory Committee, Colin's efforts to protect McNabs and Lawlor islands spanned nearly two decades. His wealth of knowledge, energy, persistence and friendly manner were greatly appreciated by all who knew him. He will be greatly missed.

For further information on the McNabs and Lawlor Islands Provincial Park Management Plan, please contact

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1.0 EXECUTIVE SUMMARY

Located near the mouth of Halifax Harbour, McNabs and Lawor Islands Provincial Park encompasses the majority of lands on the two islands as well as some surrounding marine waters. Designated as provincial park in 2002, these islands include 430 hectares of land, of which 402 hectares are included within the park. The majority of the 28 hectares outside the park is owned by the federal government, with most administered by Parks Canada as part of Fort McNab National Historic Site of Canada. The park also includes an additional 202 hectares of marine waters, primarily within McNabs and Wreck (Back) coves and between Little Thrumcap Hook and Big Thrumcap at the southwest end of the island. The islands include a diverse and complex mix of significant natural and cultural heritage values and also provide important opportunities for outdoor recreation and nature-based education.

The purpose of this management plan is to define a vision and management philosophy that will guide park management decisions for McNabs and Lawlor Islands Provincial Park over the next 25 years. In addition, the plan identifies the actions necessary to support that vision and philosophy.

The Department has adopted five principal management objectives for McNabs and Lawlor Islands Provincial Park. The first is to preserve and protect the islands' significant natural and cultural heritage elements and values. Secondly, the park will provide opportunities for a variety of highquality outdoor recreation activities. Thirdly, the park will provide opportunities for exploration, education, and appreciation of the islands' heritage values through interpretation, information, and outdoor education programs. Fourthly, the park will play an important role in supporting local, regional, and provincial tourism efforts. Finally, basic services and facilities will be provided to enhance visitor enjoyment of the park.

Park management will utilize an environmentally sustainable approach which recognizes the importance of minimizing the impact of facility development and visitor use on the park's natural and cultural values. Management priorities will be directed toward retaining and enhancing those values. To that end, the park has been classed as a Natural Environment Park, with most of its lands included within an Environmental Protection Zone. Notwithstanding this commitment to the protection of heritage values, the Department of Natural Resources and its partners will provide opportunities for outdoor recreation and nature-based education that do not conflict with the management emphasis on protecting heritage values.

Park development will be limited to McNabs Island. The primary focus of development is on providing facilities and services that support day-use activities. The provision of limited camping opportunities is also addressed. Park development will be minimized by using existing facilities wherever possible. New facilities will be located to minimize their impact on the island's heritage values, natural landscapes, and viewscapes. Park development will depend largely on the establishment of partnerships between individuals, community-based organizations, business, and government.

Garrison Pier, and a proposed replacement for Range Pier, will serve as the main public access points to McNabs Island. It is recognized that additional consideration must be given to the provision of public access at Ives Point. The plan also recognizes the strong connection between the community

of Eastern Passage and McNabs and Lawlor islands. The primary means of travel on the island will be by foot. Bicycles will be permitted on certain trails when an adequate management regime is in place. Visitor services nodes are proposed for Maugher Beach, Wreck Cove, and Ives Cove. Maugher Beach, located near Garrison Pier, will be the main day-use area. Facilities will include a visitor services building offering basic food services, washrooms, change rooms, and interpretation and information. A small picnic area will be developed nearby.

Limited development is proposed for Wreck Cove, including vault toilets, change rooms, and an interpretive kiosk. With construction of a new wharf, some additional development may be considered to accommodate the anticipated increase in use.

The Ives Cove area includes Fort Ives, the Department's service wharf, and a number of former homes. Fort Ives will be maintained and interpreted, and a small picnic area will be established there. The former Conrad and Matthew Lynch homes may be used as an outdoor education centre, subject to a suitable partnership agreement. A small campground is proposed south of the Conrad house on the west side of the Old Military Road.

Emphasis will be placed on interpreting and understanding the island's diverse natural and cultural heritage values. The interpretive and education program will focus on self-directed opportunities, including brochures, on-site interpretive panels, publications, and special-event programming. Some interpretation and education efforts will occur off-site, at locations such as McCormacks Beach Provincial Park and major mainland departure points for island ferry service.

Cultural heritage management efforts will focus primarily on Fort Ives and the Conrad, Matthew Lynch, and Jack Lynch homes. While limited management intervention may also occur at some additional sites, the majority of cultural heritage sites will not be actively managed except for public safety reasons. Natural heritage values, including flora, fauna, marine environments, and the ecological processes they support, will be maintained and, where possible, restored. The Department's Vegetation Management Guidelines will be used to assist in achieving vegetation objectives.

Maintaining ecological integrity is an important goal of the park management plan. To that end, the Department will undertake a variety of measures to minimize visitor impact. Implementation of park zoning, baseline data collection, visitor impact monitoring, and appropriate management techniques will be used to maintain ecological integrity.

Lawlor Island will be managed as a natural area. Public access and use will not be permitted and no facilities or services will be provided. Interpretation of the island's heritage values will be incorporated within the park's overall interpretive strategy.

Implementation of the park management plan is proposed over four phases. Phase one will address key public safety issues and ensure protection of park values. The second phase provides for the development of interpretation and orientation materials, and the replacement of Range Pier. Phase three will focus on the delivery of interpretive signage and programming and the provision of basic facilities and services at Maugher Beach, Wreck Cove and Ives Cove. Phase four will see the construction of a small campground, construction of a visitor services centre at Maugher Beach,

development of an outdoor education centre, and an assessment of the feasibility of providing a public access point at Ives Cove.

Successful implementation of the phased development approach will depend largely on formal partnership agreements and availability of resources.

In September, 2003, Hurricane Juan caused extensive damage on McNabs and Lawlor islands, with some of the highest wind speeds in Nova Scotia recorded on the former. As much as 75 percent of the forest cover on the northern half of McNabs Island was damaged and many of the trails made impassable. In 2004, an extensive clean-up of the trails was completed and the island was re-opened to the public. The remaining downed and damaged spruce trees provide habitat for the Brown Spruce Long-horn Beetle, an exotic pest discovered on the island in 2000. The Department is working with the Canadian Food Inspection Agency (CFIA) to develop an appropriate management strategy for the BSLB outbreak. When completed, that strategy may necessitate the adjustment of elements of this plan.

2.0 BACKGROUND

McNabs and Lawlor islands are situated in the mouth of Halifax Harbour (Figure 1). The larger of the two, McNabs Island is approximately 5 kilometres long and 1.5 kilometres at its widest and comprises 372 hectares. Nearby Lawlor Island is almost 2 kilometres long and 600 metres at its widest and is approximately 58 hectares in size. The islands are easily accessible by boat.

Suggestions that McNabs and Lawlor islands be protected as parkland date from at least the mid-1960s. In 1974, the Province of Nova Scotia acquired most of the northern half of McNabs Island and in the following year designated McNabs and Lawlor islands as a regional park under the Halifax-Dartmouth Regional Development Plan. The intent of the regional park designation was "to protect areas of unique natural significance against adverse effects and to reserve sufficient open space for recreational purposes". In 1983, the Province assigned responsibility for the acquisition, management, and development of the islands as parkland to the Nova Scotia Department of Lands and Forests (now Natural Resources) through the Provincial Parks Program.

In 1985, the Department of Lands and Forests completed a preliminary management concept for McNabs, Lawlor, and nearby Devils islands. The concept was intended to provide a focus for discussion, review, and decisions regarding the future management and development of the islands. In addition, the concept was to provide a rationale and basic direction for management decisions affecting the islands until a park management plan could be completed. In 1988, following a policy review of Nova Scotia's provincial park system, the Province identified McNabs, Lawlor, and Devils islands as one of four priority areas for park development. In 1991, a planned public consultation process that was to lead to the development of a provincial park on the three islands was deferred when McNabs Island was recommended as the site of a proposed regional sewage treatment plant for the Halifax metropolitan area. It was subsequently determined, however, that construction of a regional sewage treatment plant on McNabs Island was not feasible due to the high costs involved.

The federal government involvement on McNabs and Lawlor islands dates back to 1906 when it took over lands formerly owned by the British War Department. Responsibility for most of these lands was assigned to the Department of National Defence (DND). Parks Canada's specific interest in these federal lands resulted from a 1965 Historic Sites and Monument Board recommendation that was based on a review of military installations on McNabs Island. At that time Fort McNab was designated of national historic significance. The Board also recognized that while Fort Ives did not meet the criteria for national significance it was of historic importance and should be maintained. Shortly thereafter, most federal lands on McNabs and Lawlor islands were transferred to Parks Canada.

In 1985, as part of ongoing federal-provincial discussions on the future management of the islands, Parks Canada completed a boundary delineation study for Fort McNab National Historic Site of Canada to identify what lands were required for the protection and management of the fort. In 1992, Parks Canada completed a management plan for the Halifax Defence Complex in which the proposed boundaries for Fort McNab National Historic Site of Canada were confirmed. Lands identified as surplus to Parks Canada's needs were to be transferred to the Province for park purposes. In 1995, decisions regarding the land transfer were deferred pending completion of a land use strategy for McNabs and Lawlor islands by the Department of Natural Resources and Parks Canada.

In October 1995, a joint public consultation process was initiated by the provincial and federal governments to assist in preparing a land-use strategy for McNabs and Lawlor islands. Devils Island was not considered in this process as the majority of the island is privately owned. Information, in the form of a preliminary park management concept, was widely circulated for public review and comment. Open houses in Eastern Passage, Dartmouth, and Halifax were attended by approximately 200 people, and many others were provided with background information on options for the future management of McNabs and Lawlor islands as parkland.

Formal public hearings in the same communities were completed in November 1995, providing interested parties with opportunities to make oral and/or written presentations regarding future management of the islands as parkland. In July 1996, a summary report by Evelyn Meltzer, the independent chair of the formal public hearings, was released by the Department of Natural Resources and Parks Canada (Meltzer, 1996). A draft land use strategy for McNabs and Lawlor islands, which reflected public comments received during the public open houses and formal hearings, was also prepared.

In December 1998, the provincial and federal governments formally adopted the Land Use Strategy for McNabs and Lawlor Islands (Parks Canada and Nova Scotia Department of Natural Resources, 1998). At the same time, the federal government committed to transfer the majority of Parks Canada's lands on McNabs and Lawlor Islands to the Province. This transfer was completed in October, 2000.

The transfer of these federal lands included several provisions that govern their future management and use. The surplus federal land was transferred to the Province expressly for provincial park purposes and if it ceased to be used for that purpose the land would revert to the federal government. The Province also agreed to preserve and protect the rifle muzzle loading (RML) battery and casements at Fort Ives, a classified heritage building as determined by the Federal Heritage Building Review Office. In return, the federal government agreed to provide professional and technical expertise in support of this ongoing obligation.

In early 2000, the Minister of Natural Resources appointed the McNabs and Lawlor Islands Provincial Park Advisory Committee to assist the Department in preparing a park management plan for the islands. The committee, representing a variety of community interests, met on a regular basis from July 2000, through the completion of the planning process. It is intended that the Committee will continue to function in an advisory capacity following adoption of the park management plan. In November, 2002, the islands were designated under the Provincial Parks Act.

The park includes most lands on McNabs Island and all but the navigational aid site on Lawlor Island (Figure 2). The majority of lands on McNabs Island not within the provincial park are owned by the federal government and include Fort McNab National Historic Site of Canada (Parks Canada, 15 ha), Fort Hugonin (DND, 8 ha) and 2 hectares at the western end of Maugher Beach that includes the lighthouse (Coast Guard). The Fort Hugonin property has been declared surplus by DND, and an environmental assessment of the site has been completed. Preliminary discussions have been held with the federal government regarding the transfer of this property to the Province. In addition, there are four privately-owned properties totaling 3 hectares.

On Lawlor Island, the federal government owns approximately 0.3 hectares at the eastern-most end of the spit opposite McCormacks Beach Provincial Park.

The park also includes approximately 202 hectares of marine waters associated primarily with McNabs Island. These include most of McNabs Cove, Wreck Cove, and waters adjacent to the southwest end of McNabs Island, generally between Little Thrumcap Hook and Big Thrumcap. At Lawlor Island, a small area of marine waters on either side of the spit opposite McCormack Beach Provincial Park has also been included within the designation. It is recognized that there may be jurisdictional issues associated with these waters. For example, although included within the provincial park, the federal government may retain certain rights and responsibilities.

Between 1974 and the 2002 park designation, the Province has spent approximately \$2 million on land acquisition and management on McNabs Island. This budget includes the acquisition of several key properties, staffing, maintenance of existing facilities, public safety, the provision of limited new facilities, park planning, and public consultations. Parks Canada has also committed significant funding over the same period in support of its ongoing management responsibilities on the islands.

Historic Land Uses

McNabs Island has experienced fairly extensive development and use over the years; however, much of the island today is in a relatively natural state. The Mi'kmaq were the island's first inhabitants, establishing seasonal camps there as early as 350 AD. A shell midden at the south end of the island is one of the few surviving records of this early usage.

By the 1690s, French fishermen were using Isle de Chibouqutou, as McNabs Island was then known, as the location of a seasonal fishing outpost. In 1711, a major French settlement was planned for the

island. However, after mainland Nova Scotia was lost to England under terms of the Treaty of Utrecht in 1713, the settlement was established at Louisbourg instead. Shortly after the founding of Halifax in 1749, some harvesting of the island's forests occurred, and a number of small tenant farms were established on the island, which was then called Cornwallis Island in honour of Governor Cornwallis, the founder of Halifax.

In 1782, Cornwallis Island was purchased by Peter McNab, a prominent Halifax merchant, who built a summer home on the island and began to settle a number of tenant farmers there. By the early 19th century, as much as half the island may have been cleared for agriculture, with up to 50 residents living there. Much of the cleared land was used for grazing livestock. The McNab family cemetery is located in what is now Fort McNab National Historic Site of Canada.

In 1828 a martello tower was completed at the tip of Maugher Beach. The Imperial Government began purchasing other land on the island in the 1860s, and the island soon began to play an increasingly important role in the defence of Halifax. Work commenced on Fort Ives in 1865, Fort McNab in 1888, and Fort Hugonin in 1899. Strawberry Battery was completed in 1940 to replace Fort Hugonin. Extensive areas around the fortifications were cleared for security reasons and to provide wide, seaward vistas and firing lines for the coastal artillery. Two rifle ranges were also constructed near the south end of the island.

In 1869, a Pleasure Ground was established on McNabs Island and quickly became one of the most popular recreational attractions in the Halifax area. The pre-eminence of McNabs Island as a recreational attraction continued until World War I when wartime restrictions greatly limited public access to the island. The growing popularity of the automobile following the war and the closure of the island's last midway show in the 1920s further diminished public use of McNabs Island for recreation.

During World War II, the island's military fortifications and associated facilities were significantly upgraded and expanded. Following the war, the fortifications served a much-diminished role, and many of the recently constructed facilities were removed. Beginning in the mid-1950s, the federal government began to declare the fortifications on McNabs Island surplus to Canada's military needs. Responsibility for all of the military installations except Fort Hugonin was later transferred from the Department of National Defence to Parks Canada.

Lawlor Island has also been extensively developed over the years. It was used primarily for agricultural purposes until 1868, when a quarantine hospital was established at the north end of the island. By 1938, the quarantine station was no longer needed; however the island was used by the federal government as a medical facility during the Second World War. Shortly after the war ended the facility was declared surplus. Today only the foundations and a few gravestones remain as evidence of the once-busy quarantine and medical facility.

The proximity of the islands to the mainland has resulted in a number of development proposals being put forth over the years, including large-scale residential and industrial development and, more recently, construction of a regional sewage treatment plant. In addition, the islands' significant natural and cultural heritage values and opportunities for a range of outdoor recreation activities have encouraged a number of proposals to manage and develop the islands for nature education, ecotourism, and outdoor recreation.

In recent decades McNabs and Lawlor islands have increasingly been valued and used as parkland. Public interest in managing the islands as a park began to grow in the 1960s. This interest led to the 1974 designation of the islands as a regional park. In the 1980s, a private entrepreneur began offering regular ferry service to McNabs Island and at the same time developed The Island Teahouse as a rustic restaurant and information centre on the island. When the business ceased in 1992, the building was acquired by Natural Resources. It has not operated since that time.

Visitation to McNabs Island experienced tremendous growth during the 1980s, peaking at an estimated 35,000 visitors annually by the late 1980s. During the 1980s, Parks Canada staff provided interpretive services on McNabs Island, with a particular focus on Fort McNab National Historic Site of Canada. Additional amenities, such as vault toilets, improved hiking trails, and additional interpretive programs, were provided for park visitors by the Friends of McNabs Island Society beginning in the early 1990s.

A more detailed historical account of McNabs and Lawlor islands may be found in <u>*Discover McNabs</u></u> <u><i>Island*</u> (Friends of McNabs Island Society, 1995).</u>

Contemporary Land Uses

Today McNabs Island still displays many elements of its rich history. Of the island's military structures, Fort Ives appears to be in the best condition, having recently undergone significant stabilization work. In many respects the fort appears little changed from its early years. Fort McNab National Historic Site of Canada occupies a commanding location at the southern end of the island, overlooking the harbour entrance. This site is managed by Parks Canada and will continue to serve as an important component of the Halifax Defence Complex, which also includes Georges Island, the Citadel, York Redoubt, and the Prince of Wales Tower. The future management and use of Fort McNab is subject to a separate planning process by Parks Canada. The future use of Strawberry Battery and Fort Hugonin, the latter owned by the federal government, will require additional study and review.

Garrison and Range piers are the main public access point to McNabs Island. Garrison Pier was recently acquired by the Department of Natural Resources, and extensive repairs were completed in 2002. Range Pier, in Wreck Cove, is in poor condition, and public access and use is not encouraged. The development of suitable public access at Wreck Cove is viewed as a priority. The Department of Natural Resources maintains a small wharf at Ives Cove for park management purposes.

Several old trails provide access to many areas of McNabs Island. Garrison Road, Forsythe Street, and the Old Military Road form the main north–south transportation route linking Fort Ives, Garrison Pier, Fort McNab, and Wreck Cove. The Friends of McNabs Island Society maintain many of the trails through formal agreement with the Department. Numerous foundations and clearings are also scattered about the island, evidence of earlier uses.

A number of pit toilets provided by the Department of Natural Resources are located around the island for public use and are maintained by the Friends of McNabs Island Society. McNabs Cove Beach and Wreck Cove Beach are extensively used for a variety of recreational pursuits, and several sites around the island are popular for camping.

The Department also maintains several former residences and other buildings on McNabs Island, including the Conrad house, the Matthew Lynch house, the Jack Lynch house, and the Tea House. The Conrad house is the largest of these building and has undergone extensive renovations since being acquired by the Province. It is currently used on an infrequent basis by groups conducting tours of the island. Some maintenance work has been done on the Matthew Lynch house over the years, and like the Conrad house, it is used from time to time by groups visiting the island. The Jack Lynch house currently serves as a full-time residence for the Department's caretaker as well as a park office and operations base. Several small cottages were acquired by the Department in 1974 when it purchased a major portion of the island. All have since been removed due to their poor condition and the cost of maintaining them.

Major features of Lawlor Island now include the ruins of the former hospital, a small cemetery, and several formerly cleared areas, which are at various stages of reverting to forest cover. Lawlor Island receives relatively few visitors annually. There is no wharf or formal access point, and no facilities or services are provided.

Regional Relationships

Prominently situated in the midst of Atlantic Canada's largest metropolitan area, which is one of the region's most significant tourism destinations, McNabs and Lawlor Islands Provincial Park has the potential to become a major attraction in its own right.

The park is located on the western boundary of the Eastern Shore Beaches landscape, one of 80 natural landscapes identified in Nova Scotia. As part of the planning process for Nova Scotia's Protected Areas System Plan, the islands were identified as providing good representation of the inshore drumlin islands that are found in this landscape dominated by beaches, salt marsh, headlands, and islands. Nearby Cole Harbour-Lawrencetown Coastal Heritage Provincial Park is also located within this landscape.

McNabs and Lawlor Islands Provincial Park is an important addition to the system of national, provincial, and municipal parks in the metro area. Additional coastal provincial parks situated nearby include McCormacks Beach Provincial Park, and Crystal Crescent (Pennant Point) Provincial Park. Point Pleasant Park, managed by Halifax Regional Municipality, is prominently situated on the west side of Halifax Harbour, immediately opposite McNabs Island.

McNabs and Lawlor Islands Provincial Park, which includes Fort Ives and Strawberry Battery, also has a direct relationship with several nearby National Historic Sites, including Fort McNab, the Halifax Citadel, York Redoubt, Georges Island, and the Prince of Wales Tower. In particular, the anticipated opening of Georges Island National Historic Site of Canada will potentially offer significant complementary opportunities in terms of visitor access, interpretation, and marketing and promotion. The possible acquisition of Fort Hugonin by the Province and its subsequent inclusion in the park will further enhance interpretive opportunities. The federal government will develop Fort McNab National Historic Site of Canada as the provision of park facilities and services occurs at McNabs and Lawlor Islands Provincial Park.

McNabs and Lawlor Islands Provincial Park also complements efforts by a number of community development agencies to enhance the tourism appeal of the greater Halifax metropolitan area. These development efforts include strengthening downtown and waterfront business districts, Pier 21, Historic Properties, Halifax Harbour, Fisherman's Cove, and Purcells Cove.

The community of Eastern Passage has had a strong, traditional connection with McNabs and Lawlor islands. Many Eastern Passage residents think of their community as the "Gateway to the Islands".

Thus, in combination with other adjoining provincial parks and protected areas, several National Historic Sites, and other public- and private-sector developments, the park will play an important role in the future of the province. Together they will provide protection of significant natural and cultural heritage, high-quality outdoor recreational opportunities, and economic benefits through enhanced tourism.

Park User Groups

McNabs and Lawlor Islands Provincial Park has the potential to provide high-quality opportunities for outdoor education, recreation, and tourism to a wide range of local and out-of-province user groups. Park visitors will include users interested in natural and cultural heritage, outdoor recreation, and nature-based tourism and may include day users, campers, individuals, organized groups, and special interest groups. The park's primary focus will be on day users who will be attracted by the range of natural and cultural heritage values, self-directed interpretive programs, and a variety of outdoor recreational opportunities including, hiking, beach activities, bird watching, and nature appreciation. A limited number of camping opportunities may also be provided.

It is anticipated that park visitors will be drawn largely from the local area, although other Nova Scotians and out-of-province visitors will also be significant users.

3.0 VISION

The foundation of this park management plan rests on the park vision, a brief statement that presents the broad long-term direction for the park. This vision describes the park management philosophy and what the park will be like in the future.

Vision

McNabs and Lawlor Islands Provincial Park will ensure the long-term preservation of the islands' natural and cultural heritage values for the benefit of present and future generations. These benefits include the preservation and interpretation of the islands' heritage values and features, the provision of opportunities for healthy outdoor recreation in a natural setting, and the provision of opportunities for peace and solitude in the heart of a busy urban setting. These

benefits are achieved through the active commitment of concerned citizens, community-based organizations, businesses, and government.

Purpose

The purpose of McNabs and Lawlor Islands Provincial Park is

- to preserve and enhance natural and cultural heritage values contained within a drumlin island system situated in Halifax Harbour
- to provide opportunities for outdoor recreation on McNabs Island that are compatible with the over-riding emphasis on preservation and protection
- to enhance public understanding and appreciation of the islands, including their natural and cultural heritage
- to provide for public access to McNabs Island for the purpose of education, enjoyment, and scientific research and for restricted access to Lawlor Island for scientific research
- to complement and enhance local, regional and provincial tourism attractions

Significance

The park derives its primary significance from the following:

- it consists of two islands composed of 430 hectares of land in a relatively natural condition, which contain historic sites, open spaces, wildlife habitats, and 22 kilometres of undeveloped shoreline, all within Halifax Harbour
- it provides opportunities for land- and water-based education, outdoor recreation, and tourism within Atlantic Canada's largest urban area

Contributing to the significance of the park are

- archaeological resources from early aboriginal occupation of McNabs Island some 1,650 years before present
- a number of other historic sites and landscapes resulting from over 250 years of European settlement and use
- the presence of Fort McNab National Historic Site of Canada and several other fortifications on McNabs Island
- a diverse range of natural communities

- one of the highest concentrations of nesting great blue heron and osprey in eastern North America
- the proximity of several other complementary attractions, including Georges Island National Historic Site of Canada, Fisherman's Cove, Pier 21, and the Halifax waterfront

4.0 PARK VALUES

Island Setting

As a result of their distinctiveness and relative isolation, islands have played a prominent role throughout history. During the early European settlement of North America, for example, islands were often seen as a safe haven from real or perceived dangers. As settlement patterns evolved, islands such as McNabs and Lawlors often served as military, prison or quarantine outposts. They may also have been popular for recreational outings or as vacation destinations. Often times islands contain a rich diversity of natural and cultural values as a result of past uses and their general remoteness. More recently, as the public has come to better appreciate these islands, a number have become parkland (Boston Harbour Islands National Park, Georgian Bay Islands National Park, Mingan Archipelago National Park Reserve, St Lawrence Islands National Park, and Newcastle Island (Nanaimo, B.C.) Provincial Marine Park).

McNabs and Lawlor Islands Provincial Park offers a unique setting as relatively natural islands in the midst of a large urban environment. The park is also unique in that it is the only operational island provincial park in Nova Scotia.

Natural Heritage

Natural heritage values include natural features and processes that create the bio-physical and aesthetic setting that gives the islands their underlying character and value.

Geology and Soils

McNabs and Lawlor islands are underlain by rocks of the Meguma Group of which the 400-millionyear-old Halifax slate formation is predominant. The central portion of McNabs Island is underlain by the older Goldenville quartzite. Only a few minor surface exposures of bedrock are found, and these are limited to McNabs Island.

McNabs Island essentially comprises a complex of drumlins oriented roughly from northwest to southeast. These drumlins provide a gently to steeply rolling topography with several small waterways or depressional areas found between the drumlins. Lawlor Island contains a single drumlin with no significant exposures of surface water. Elevations range from sea level to 48 metres on McNabs Island and 27 metres on Lawlor Island.

The drumlins are formed from glacial deposits – reddish-brown till derived from shale, sandstone, and mudstone of the Carboniferous age. Natural coastal processes combine to constantly reshape

the islands. On McNabs Island the glacial till is actively eroding at several locations where wave action is cutting steep banks in exposed drumlin material. On Lawlor Island erosion is occurring primarily at the exposed southern end of the island. In general, the highest rates of erosion occur along beaches facing the Atlantic Ocean.

Human activity has also helped to shape McNabs Island. Large-scale removal of rock from cobble beaches at the southern end of the island has accelerated erosion, especially of Little Thrumcap. A causeway and road constructed to provide access to the lighthouse had prevented the natural flushing of McNabs Cove, enabling Maugher Beach to develop and McNabs Cove to become a freshwater pond.

In September, 2003, the maximum wind core (eastern eye wall) of Hurricane Juan passed over Halifax Harbour, resulting in wind gusts of up to 176 km/h on McNabs Island. In addition to the winds, McNabs and Lawlor islands were also pounded by massive waves which measured 9 metres in Halifax Harbour. As a result, coastal areas of both islands experienced significant erosion. Maugher Beach, for example, was breached and tidal waters once again flush McNabs Pond. Further work is required to better determine the full impact of Hurricane Juan on the islands.

Soils on the islands are classed as the Wolfville series and consist mainly of sandy clay loam, but vary from gravelly clay loam to loam (Canada Department of Agriculture and Nova Scotia Department of Agriculture and Marketing, 1963). These soils are typically acidic and well drained, although groundwater occurs close to or at the surface in low areas. Several small areas of soil are mapped in the Coastal Beach series. Formed by wave action, these deposits vary in texture from fine sand to coarse gravel. On McNabs Island this soil series is often a heterogeneous cobble, mostly occurring at the southern end of the island, at the western end of Maugher Beach, the barrier beach at Green Hill Cove, on Thrumcap Hook, and on the isthmus connecting Big Thrumcap with the rest of the island. Soils rich in sand are found primarily at Maugher Beach and Wreck Cove Beach. On Lawlor Island, a cobble beach is found on the western shore, opposite Range Pier. A sand beach and spit have formed on the island's eastern shore, opposite McCormacks Beach Provincial Park.

Flora

The *Forest Classification of the Maritime Provinces* (Loucks, 1962) places McNabs and Lawlor islands within the Spruce-Fir Coast Zone, Atlantic Shore Ecoregion, Eastern Shore District. The Spruce-Fir Coast Zone occurs along the coast of Nova Scotia and develops under climatic conditions of late springs, cool summers, frequent fog, strong winds, and generally poorer soils. White spruce, red spruce, black spruce, and balsam fir are the dominant tree species of mature stands, with red maple and yellow and white birch also common.

The Eastern Shore District (Mahone Bay to Cape Breton Island) of the Atlantic Shore Ecoregion includes McNabs and Lawlor islands. Here white spruce is the dominant tree species due to its tolerance to salt spray and constant wind. Further inland, black spruce and, in certain locales, balsam fir share dominance with white spruce.

In terms of landscape classification, McNabs and Lawlor Islands Provincial Park is located at the western extremity of the Eastern Shore Beaches Landscape (DNR, 1994). Stretching along the

Atlantic coastline of Nova Scotia from Halifax Harbour eastward to Ship Harbour, this landscape is characterized by a lowland coast of resistant rock types covered with varying thicknesses of glacial drift. A post-glacial rise in sea level has produced a complex shoreline of eroding headlands, major inlets, embayments, islands, offshore reefs, and major beach-dune systems.

The vegetation of the Eastern Shore Beaches landscape is characterized by Acadian mixwood and Maritime boreal forests. The major terrestrial ecosystem types found within this landscape include well to imperfectly drained red, black, and white spruce-balsam fir undulating terrain and well-drained tolerant hardwood-red spruce drumlins. There are also several minor terrestrial ecosystems types. Common coastal ecosystems include sandy beaches, cobble beaches, rock cliffs, sand dunes, salt marshes, and coastal islands. The islands also possess numerous distinct coastal, unforested and forested ecosites, each supporting a particular flora and fauna of interest. These ecosites include salt marsh, eroding coastal headlands, regenerating open fields, and climax and successional forest types.

McNabs and Lawlor islands were identified as being representative of several ecosystems, features, and elements of this landscape (DNR, 1994).

McNabs Island

McNabs Island is dominated by several well-drained tolerant hardwood (American beech, sugar maple, yellow birch) drumlins located in the central and northern parts of the island and the well-to imperfectly drained red spruce-dominated undulating terrain ecosystems. The drumlins support a mosaic of forest types dominated by climatic climax species – tolerant hardwoods and red spruce, with varying amounts of the early successional species white spruce, balsam fir, white birch, red maple, and aspens. As succession proceeds, the climax species will become even more dominant. The lower slopes of the drumlins that immediately border the coastline support a salt- and wind-tolerant white spruce/white birch (*Betula cordifolia* and *Betula papyrifera*) forest type.

Low areas between the drumlins, and the southern part of the island, support the well- to imperfectly drained undulating terrain ecosystem. This ecosystem type is dominated by the climatic climax red spruce, with varying amounts of early successional coniferous and deciduous tree species, including balsam fir, black spruce, white spruce and red maple. Again, a white spruce/white birch forest band extends along the immediate coastline of this ecosystem type.

The islands' vegetation has been heavily modified in a number of ways by the most recent 250 years of human use. All of Lawlor Island and most of McNabs Island were cleared at one time for agriculture, military uses, or forest harvesting. Two predominant stages of early successional forest are evident on the islands as these cleared areas revert to forest. The usual successional forest on old fields (most of Lawlor and large areas of McNabs) is dominated by white spruce. The second, and on McNabs Island more common, is dominated by white birch, which originates more on disturbed mineral soils. Both species are salt tolerant and generally wind firm.

A number of previously cleared areas on McNabs Island are regenerating naturally, and as a result early successional intolerant hardwoods are found in either small pure stands or, more commonly, forming mixed wood stands with the conifers. White spruce also prevails on formerly cultivated lands.

A number of non-native plant species have also been introduced to McNabs and Lawlor Islands by European settlers. These introduced species are especially apparent on McNabs Island around the former Hugonin-Perrin estate, which includes the present site of the Tea Room. It is thought that Frederick Perrin established an extensive English garden sometime after he acquired the property in 1885. A 1966 survey of the garden indicated that

the Perrin estate, uncultivated since 1930, contains the relics of a once beautiful English garden. Amid tall grasses bloom lilies, lupines, roses and bugle. Hedges of common barberry and English hawthorn surround the garden. Large trees of Scotch elm, linden and horse chestnut line the edge of the property. Hemlock, larch and white pine line the roadway and black locust, lilac, Japanese maple, copper beech and Japanese knotweed occur around the old foundation (Nova Scotia Museum, 1966).

Much of these early plantings are still present. A row of elms marks the base of a crescent-shaped slope below the Tea House. At the top of the slope runs a hedge of English hawthorn. Along the back of this level terrace is another hedge of common barberry. A pair of large Japanese maples are set out from the front corners of the former Hugonin-Perrin home. A copper beech sits in the centre of this upper terrace. For at least the past decade this beech has been in poor condition. Three horse chestnuts line the south side of the lawn in front of the ruins of the Hugonin-Perrin house. The lawn itself is an open area with a few lilacs at the bottom of the slope. The presence of *Rosa spp.* suggests there once may have been an extensive planting of roses. Plantings on the north side of the lawn include several false acacia, a large red oak, and a white birch. Virginia creeper forms a dense tangle in this area.

Four large basswood remain along the lower edge of an open field behind the foundation of the former Hugonin-Perrin home. Two more basswood and three horse chestnuts also remain from what was once a continuous row of trees along this same field. Some of these trees were damaged during Hurricane Juan.

Other notable early plantings are the rows of basswood in front of the Matthew Lynch house. These stately trees were planted in the mid-19th century at a time when the original Peter McNab III home stood on this site. Several of these trees were destroyed by Hurricane Juan.

Although no rare or endangered plant species are known from McNabs Island, there are several vegetation communities of interest. These include climax hardwood stands of sugar maple, yellow birch, and beech, several almost pure stands of beech, which show little or no sign of canker, potential old-growth red spruce stands, and the variety of introduced species associated with the Hugonin-Perrin estate.

Lawlor Island

Lawlor Island is dominated by mixed wood stands of white spruce, red maple, and white and yellow birch. Relatively high levels of plant diversity are found in the mixed wood forest, cobble shore,

eroding cliff face and old-field habitats. No rare or endangered plant species are known from Lawlor Island.

Hurricane Juan

The preceding description of the flora of McNabs and Lawlor Islands Provincial Park was written prior to Hurricane Juan which, in September, 2003, caused extensive damage to the islands' forest cover. Up to 75 percent of the forest cover on the northern half of McNabs Island was significantly damaged. Efforts are currently underway to document the impact of Hurricane Juan on the islands' flora.

Fauna

Birds are excellent indicators of the variety and conditions of habitats. In total, 206 species have been sighted on and around McNabs and Lawlor Islands Provincial Park, including 82 species for which there is evidence of breeding. Most notable of the islands' bird life is the nesting of great blue heron and osprey, the latter representing one of the highest concentrations in eastern North America.

The variety of habitats on McNabs Island and its proximity to the Atlantic coast contribute to the rich avifauna there. As well as being an excellent place for bird-watching in itself, McNabs Island (and neighbouring Lawlor Island) also provides nesting and roosting opportunities for birds seen in Halifax and Dartmouth parks.

Several rare bird species have been noted on McNabs Island. Most of these were outside their normal range and are not rare where they normally occur (e.g., ivory gull, southern herons, whippoor-will). Several other endangered species sighted on McNabs Island were either vagrants with one sighting each (loggerhead shrike, Coopers hawk) or such widely ranging residents or migrants (harlequin duck, peregrine falcon, and roseate tern) that their occurrence on the island is probably not important for maintenance of their populations.

The piping plover is the only endangered species that may have bred on the island. During the 1991 breeding season, piping plover were found several times on beaches at the southern end of the island and were classed as probable breeders (Willison et al, 1996a). In a 1996 survey, no piping plover were reported from McNabs Island. Despite a lack of conclusive proof that piping plover have bred on McNabs Island in recent years, the bird's presence on the island and the existence of suitable breeding habitat offer hope that breeding may occur.

A 1991 aerial survey identified 11 occupied osprey nests on McNabs Island, most around Timmonds Hill. In the past, great blue heron have bred in several locations on McNabs Island. Over the years, however, they appear to have relocated to Lawlor Island. The relocation of this species from areas of greater to areas of lesser disturbance, combined with the extreme sensitivity of this species to human disturbance, suggests that the colony may have relocated due to human disturbance (Willison et al, 1996).

A 1996 breeding bird survey identified 84 bird species on Lawlor Island and in the surrounding waters (Willison, 1996b). No threatened, endangered, or otherwise rare species were sighted during

this survey. Lawlor Island is regionally important, however, for its nesting colonies of great blue heron and osprey. In 1996 there were at least 14 active great blue heron nests and 10 active osprey nests.

The high density of breeding herons and osprey on McNabs and Lawlor Islands, so close to an urban centre, is unique in Canada and perhaps in North America. Since both herons and, to a lesser extent, osprey are sensitive to human disturbance, the islands act as a natural sanctuary for them.

The most prominent mammal on McNabs Island is the white-tailed deer. The total population is small, likely about 10 to 15 animals. Numbers were larger in the recent past but have been reduced by coyotes, a recent arrival on the island. Others species of terrestrial mammals reported on McNabs Island include the masked shrew, snowshow hare, red squirrel, meadow vole, muskrat, meadow jumping mouse, red fox, raccoon, and river otter. Moose, bobcat, and black bear have been reported on McNabs Island but are not long-term residents of the island. Two species of bats (little brown bat and northern long-eared bat) are found on McNabs Island.

Reptiles include the maritime garter snake, eastern smooth green snake, and northern redbelly snake. Amphibians include the eastern American toad, northern spring peeper, and eastern redback salamander.

Like McNabs Island, the most prominent mammal on Lawlor Island is the white-tailed deer, with an estimated population of about 10 to12 animals. The density of white-tailed deer on Lawlor Island is currently much higher than McNabs Island, suggesting that Lawlor Island may be acting as a temporary sanctuary against predation by coyotes on McNabs Island. Several other small mammals (red squirrel, meadow vole, and masked shrew), at least one reptile (maritime garter snake), and at least two amphibians (eastern American toad and eastern redback salamander) are also found on the island.

Marine Environment

Situated in Halifax Harbour, McNabs and Lawlor islands provide a unique opportunity to understand and explore a portion of Nova Scotia's marine environment. The park experience includes a boat trip to the islands, exposure to a variety of marine habitats and coastal processes, and an opportunity to study marine plants, fishes, mammals, and invertebrates.

Climate

McNabs and Lawlor islands are situated within a maritime-temperate climatic zone, strongly influenced by proximity to the Atlantic Ocean. The average annual temperature is 6.5°C and the mean July temperature is 17.5°C. The islands receive, on average, 209 hours of sunshine monthly between May and September, and 129 hours from October to April. Average precipitation for May to September is 100 millimetres, compared with 124 millimetres for the balance of the year. Average annual snowfall is 190 centimetres, with accumulations varying greatly from year to year.

Cultural Heritage

The Province is committed to protecting and preserving cultural values that are significant to our understanding of Nova Scotia and the park. McNabs and Lawlor Islands are rich in cultural heritage values, which include archaeological sites and historic structures and features. They require protection for interpretive, educational, and research purposes.

Important cultural features that are still visible on McNabs Island include a Mi'kmaq shell midden, the foundations of several houses built by early settlers, a cemetery for some of the island's earliest residents, remains of a turn-of-the-century picnic ground and a soda pop factory, and remnants of a once-extensive Victorian garden. Numerous military fortifications can be found, including Fort McNab National Historic Site of Canada, Fort Ives, Fort Hugonin, and Strawberry Battery. Other features, such as the original McNab house, Sherbrooke Tower, the main burial site of cholera victims from the *SS England*, and the gibbets where the bodies of executed sailors were displayed, have long since disappeared from sight, but remain as archaeological features.

The most prominent cultural features visible on Lawlor Island are the ruins of the quarantine hospital, which helped protect Halifax and Dartmouth against outbreaks of potentially deadly disease from the mid-19th century to the early 20th century.

A wide variety of materials, including maps, military plans, paintings and sketches, photographs, written accounts, and artifacts, form part of collections maintained by agencies such as the Public Archives of Nova Scotia and Parks Canada, as well as a number of private collections. These materials provide invaluable information from which to interpret the historic significance of McNabs and Lawlor islands. The careful protection and controlled public use of these values is fundamental to the management of McNabs and Lawlor Islands as parkland.

Outdoor Recreation and Aesthetics

For many years McNabs Island and, to a lesser extent, Lawlor Island have provided a welcome respite for Halifax-Dartmouth area residents and visitors who wanted to enjoy a quiet, natural area nearby. The islands' natural environments and existing system of old trails and numerous viewpoints have provided a welcome setting for a wide variety of outdoor pursuits, and their green, forest-covered slopes are an attractive visual contrast to the surrounding urban environment.

Historically, McNabs Island has played a major role in providing recreational opportunities for metro area residents. In the latter part of the 19th century and early 20th century, several pleasure grounds were located on the island. It was not uncommon for 4,000 to 6,000 people to attend some of the major outings on the island during this period. It was here that the Bill Lynch Midway Show, still one of the largest carnivals in Atlantic Canada, got its start.

In 1991 an estimated 30,000 to 35,000 people visited McNabs Island. By 2001, the number of visitors was approximately 15,000 to 20,000. The sharp decline is due in part to the demise of the McNabs Island Ferry Company, which, in addition to being one of the island's biggest promoters, operated both the largest passenger ferry service to the island between 1980 and 1992 and the McNabs Island Tea Garden. Visitation to Lawlor Island is minimal.

The outdoor recreational and aesthetic values of McNabs Island are provincially important and also contribute significantly in meeting demands for outdoor recreation in the Halifax-Dartmouth metropolitan area. As an island it represents a unique recreational and open space opportunity within metropolitan Halifax-Dartmouth. Maugher Beach and Wreck Cove Beach on McNabs Island are focal points for intensive warm weather recreation activities such as sunbathing and picnicking. Completion of a proposed system of sewage treatment plants could significantly improve water quality in Halifax Harbour and result in increased demand for access to the harbour for aquatic activities.

Sailing and boating to McNabs and Lawlor Islands are already popular and are expected to increase as a wider range of recreation and services are offered on McNabs Island. Protection of the natural qualities of the islands, together with the provision of facilities, would enhance the quality of sailing and pleasure boating in the Halifax-Dartmouth metropolitan area.

The presence on Lawlor Island of large numbers of nesting blue heron and osprey which are sensitive to human disturbance, and the current lack of docking facilities and basic facilities and services, will mean that recreational use of Lawlor Island will not be encouraged.

Interpretive Opportunities

McNabs and Lawlor Islands provide a wealth of opportunities to interpret their rich natural and cultural heritage values. A number of potential interpretive themes have been identified, including natural and cultural heritage, terrestrial habitats, forest succession, marsh ecology, introduced species, coastal processes, wildlife, and marine ecology. For many of the potential themes, extensive written and visual materials are available from a variety of sources.

Each of these themes, and others that may be identified, should be presented in a manner that reflects the park goals and objectives. Key messages should include heritage preservation and conservation, the park's significant natural heritage values and processes, its important historical features and events, and park management issues. Interpretation should be managed as an integral part of the park experience rather than as a distinct activity. In addition, interpretive programming should be coordinated with Parks Canada to avoid duplication and, where feasible and practical, to encourage co-operation.

For many park visitors, pamphlets and interpretive panels could be used to provide basic interpretive information. For others, particularly school groups, interpretive programs could be prepared to provide a more structured learning process both on and off the islands. An outdoor education facility could provide additional learning opportunities and teaching resources.

Much of the cultural heritage values of McNabs Island, including several military fortifications, former pleasure grounds, the Hugonin-Perrin estate, and sites of early settlers, are located on the island's western side and easily accessible from a network of trails. Opportunities to interpret terrestrial habitats and forest succession may be found at a number of locations around the island.

Salt marshes at Maugher Beach, Finlay Cove, and Wreck Cove provide opportunities to study and appreciate this habitat. The Hugonin-Perrin estate provides an excellent opportunity to study

introduced species. The old English garden, for example, includes a number of exotic and nonindigenous plant species. The recent introduction of the brown spruce long-horn beetle to McNabs and Lawlor islands, and its short- and long-term impact on forest ecosystems, would also be an excellent topic for interpretation.

There are a number of locations on McNabs Island where the full cycle of coastal processes – erosion, transport, and deposition – can be interpreted. The southern part of the island, and the drumlin at Strawberry Battery in particular, is being extensively eroded. This material is being transported by wave action and water currents northward to Maugher Beach where first the cobble and then the finer materials are deposited. Along the extensive sand beach that has developed at Maugher Beach is a developing dune system.

The park's setting as islands in the midst of Halifax Harbour also provides opportunities to learn about a range of marine ecology subjects. Marine life and the effects of harbour pollution on aquatic and terrestrial habitats are examples of topics that could be incorporated into interpretive programming.

Due to the significant numbers of nesting great blue heron and osprey on Lawlor Island and their sensitivity to human disturbance, the lack of public docking and access points, and a desire to limit public use of the island, interpretation of the natural and cultural heritage values on Lawlor Island will not occur on the island itself. Instead, interpretive information will be provided on McNabs Island, at McCormacks Beach Provincial Park in Eastern Passage, and key mainland departure points for island ferries.

For a number of years the Friends of McNabs Island Society has played an important role in the provision of interpretation and information services on McNabs Island. Interpretive walks, brochures, the publication of Discover McNabs Island, and the preparation of a teacher's education kit have provided the principal interpretive opportunities on the island.

5.0 LEGISLATIVE AND POLICY FRAMEWORK

This management plan is a long-range vision for McNabs and Lawlor Islands Provincial Park and as such defines the basic management philosophy that will guide decisions regarding the preservation, development, use, and management of the park. To that end, it establishes management objectives and the means and strategies that will be implemented to achieve them. The plan also outlines why certain visitor activities and park facilities and services are recommended, where they should occur, and how park values will be maintained or enhanced. In addition, the plan will help ensure that future park development and management will complement Parks Canada's objectives for Fort McNab National Historic Site of Canada. Opportunities for partnerships with other levels of government, organizations, or individuals are also identified.

The management plan is based on the Department's legislative mandate under the Provincial Parks Act, its Provincial Parks Policy, other Provincial and Departmental policies and guidelines, the Federal - Provincial Land Use Strategy for McNabs and Lawlor Islands, and municipal planning requirements, together with the park's heritage and outdoor recreation values. Other Provincial legislation may also apply. In addition, the need to complement Parks Canada's future plans for Fort McNab National Historic Site of Canada is recognized. The plan also includes actions required to ensure that protection of the islands' heritage values remains the overriding management focus. The term heritage values, as used throughout this document, encompasses both cultural heritage and natural environments.

Provincial Parks Act

The Provincial Parks Act stipulates that "all provincial parks are dedicated in perpetuity for the benefit and enjoyment of present and future generations of Nova Scotians." To this end, the purpose of the Act is to preserve important elements of Nova Scotia's natural and cultural heritage; provide a range of opportunities for outdoor recreation and heritage appreciation; enable residents and out-of-province visitors to discover, experience, and enjoy Nova Scotia's distinctive outdoor recreational and heritage values; and to assemble and maintain, within a system of provincial parks and park reserves, a land base adequate to meet present and future needs of Nova Scotians for the protection of heritage values and outdoor recreation opportunities.

The park management plan will achieve the objectives of the Provincial Parks Act through a number of initiatives. The plan will place an over-riding emphasis on the protection of the islands' significant natural and cultural heritage values. The plan also encourages the development of a range of outdoor recreational and nature-based educational opportunities that are compatible with protection objectives. Through partnerships with other government agencies and non-governmental organizations, the plan envisions McNabs Island as a regionally and provincially significant attraction for both local residents and out-of-province visitors. Formal designation of the islands under the Provincial Parks Act helps meet the present and future needs of Nova Scotians and visitors alike for heritage protection and outdoor recreation.

Provincial Parks Policy

The Parks Policy (DNR, 1988) was adopted after extensive public consultation and provides guidelines and mechanisms that will ensure the continued maintenance, enhancement, and expansion of Nova Scotia's provincial parks system. It also ensures that important heritage sites, beaches, trails, and waterways will be recognized, preserved, and maintained.

The Policy provides for facilities and services that better meet the needs of park visitors, improved attractions for local residents and tourists, park opportunities and services that recognize the needs of senior citizens and the disabled, and the protection and interpretation of significant natural sites and heritage values.

This management plan complements the Park Policy by placing an emphasis on the protection of heritage features and values while providing for a range of compatible outdoor recreation and heritage appreciation opportunities. The plan proposes that limited facilities and services be provided on McNabs Island through partnerships with interested parties. These facilities and services will accommodate visitors' basic needs while providing opportunities for them to understand, appreciate, and enjoy the islands' heritage values.

Other Park Policies, Procedures and Guidelines

In addition to the above-noted legislative and policy mandates, the Department of Natural Resources is also governed in its management of parks by a number of other policies, procedures and guidelines. These include park operational policies and vegetation management guidelines. All applicable policies, procedures and guidelines will be followed in the planning, development and operation of McNabs and Lawlor Islands Provincial Park.

Federal - Provincial Land Use Strategy

A Land Use Strategy for McNabs and Lawlor Islands (Parks Canada and Nova Scotia Department of Natural Resources, 1998) was adopted by the federal and provincial governments following extensive public consultations. The Strategy provides future policy and planning direction with respect to the park, rather than land use allocations, which the name may suggest. In particular, the Strategy establishes several fundamental principles for the long-term management of McNabs and Lawlor islands as parkland:

- The Department of Natural Resources and Parks Canada are committed to the formal designation of McNabs and Lawlor islands as parkland and the management of the islands' heritage resources in a manner that will ensure their long-term ecological and commemorative value.
- Nova Scotia Crown lands on the islands will be managed for provincial park purposes.
- Parks Canada will retain ownership and management control of lands associated with Fort McNab National Historic Site of Canada.
- The Department of Natural Resources and Parks Canada will work co-operatively, and with other potential partners, in the planning, development, management, and administration of the islands.
- Acquisition of the balance of private lands on McNabs Island is a high priority.
- Extension of the provincial park boundary to include waters adjacent to the islands will be examined to determine its feasibility and implications. The purpose of any such boundary extension would be specifically to enable the regulation and control of recreational use in immediately adjacent waters.
- The primary management objectives for McNabs and Lawlor Islands Provincial Park will include protection and maintenance of the islands' heritage values, development of interpretive and outdoor education opportunities, provision of opportunities for compatible forms of outdoor recreation and nature tourism, and provision of basic visitor services.
- Lawlor Island will be afforded special protection status within the parks program as a sanctuary for wildlife such as heron and osprey.

- McNabs and Lawlor Islands Provincial Park will be classed as a Natural Environment Park, and its lands will be zoned to reflect an appropriate balance between the protection of heritage values and recreational development and use.
- While the Department of Natural Resources and Parks Canada will maintain a strong presence in the ongoing management and operation of their respective areas of responsibility, a range of partnership initiatives will be considered as long as they are consistent with the objectives of maintaining the islands' natural and cultural heritage values.
- Improved docking and mooring facilities on McNabs Island will be provided when there is a management regime in place and a commitment to provide adequate facilities and services for higher visitation levels.
- Appropriate facilities and services will be provided, with most concentrated in the west central portion of McNabs Island.
- The level of facilities and services depend on the availability of partners willing to participate in their planning, design, development, and operation.
- All proposals for partnership agreements will be evaluated to ensure consistency with the land use strategy.

This management plan has been developed consistent with these principles.

Municipal Land Use Policy and Zoning

McNabs and Lawlor islands fall within the Eastern Passage/Cow Bay Plan Area of Halifax Regional Municipality. The Municipal Planning Strategy (MPS) for this area was adopted by the former Municipality of the County of Halifax in October 1992 and continues in force under the amalgamated region. Major amendments were made to the MPS in 1997and 1998, but these did not affect the two islands. The policies of the MPS are implemented through the Land Use By-law (LUB) for the Area.

Both islands fall under a Special Area Designation in the MPS, on the basis of their environmental and historical significance and the provision of a focus to local communities and areas beyond. Policy SA-2 of the MPS calls for a provincial park zone throughout the islands, supporting recreational and park uses.

In addition, Policy SA-4 of the MPS allows Halifax Regional Council to consider permitting commercial uses by development agreement on McNabs, Lawlor, and Devils islands, provided that these are intended primarily to serve park users, highlight the history and character of the park, and are not of themselves a primary attraction. The policy includes requirements to ensure sensitivity in exterior finish, style, signage, building size, refuse handling, and environmental disruption during and after construction. Because most of the property on McNabs Island belongs to the Province, which is not subject to municipal regulations, Policy SA-5 enjoins Council to request that the development agreement provisions be written into any lease entered between the Province and a

private business owner. In 1985, a development agreement was signed for the former Tea Room, and this agreement remains in effect.

Policy SA-3 is of particular interest, enjoining Council "to request that, in making decisions on the future development of McNabs Island as a provincial park, the provincial government have regard to the policies of this strategy relating to the development of the community of Eastern Passage and place an emphasis upon public consultation in consideration of any access which is to be provided to the park site. Further, Council shall encourage the provincial government to work toward a resolution of ownership, development and maintenance of the park, including provisions for municipal and regional representation in all matters."

The Land Use By-law zones both McNabs and Lawlor islands as P-3 (Regional Park), which limits development to recreation uses, conservation related uses, public and private parks and playgrounds, and existing dwellings. Siting requirements from the Community Facility Zone or Mobile Dwelling Zone are applied as appropriate to the use.

This management plan is consistent with the intent of the MPS and LUB.

Fort McNab National Historic Site of Canada

Fort McNab National Historic Site of Canada is the responsibility of the federal government and will be managed by Parks Canada. The Historic Sites and Monument Board of Canada determined in 1965 that Fort McNab was of national historic significance. In 1996, Parks Canada completed a Commemorative Integrity Statement for Fort McNab National Historic Site of Canada. It stated that Fort McNab was of national historic significance "because of its role as part of the Halifax Defence System in protecting one of the principal naval stations of the British Empire and of Canada between the 1880s and 1940s; and for its examples of defence technology and ordnance." Based on direction provided in the 1965 recommendation of the Historic Sites and Monuments Board, this statement was intended to ensure the site's integrity "for the benefit, education and enjoyment of this and future generations in a manner that respects the significance and irreplaceable legacy represented by these places and their associated resources."

This management plan respects the intent of the Historic Sites and Monument Board's recommendations regarding Fort McNab National Historic Site of Canada. Management of McNabs and Lawlor Islands Provincial Park will be complementary to those objectives.

6.0 PARK MANAGEMENT PLAN

The park management plan provides a framework for the conservation of broad park values, the protection and preservation of significant and sensitive heritage features, the development of appropriate recreational and outdoor educational facilities, the provision of visitor services programs, and the operation and maintenance of park facilities.

Opportunities and issues addressed by the park management plan incorporate a review of background reports, field work, consultations with the McNabs and Lawlor Islands Provincial Park Advisory Committee, and comments received during several public information sessions.

Park Objectives

The primary management objectives for McNabs and Lawlor Islands Provincial Park includes protecting the islands' natural and cultural heritage values, including natural processes, ecological functions and selected cultural sites; maintaining or restoring biodiversity; providing opportunities for compatible forms of outdoor recreation; developing interpretive and outdoor education opportunities; and providing sustainable nature tourism activities.

Management of McNabs and Lawlor Islands Provincial Park incorporates the following as principal objectives

Protection

To protect significant natural and cultural elements and values of McNabs and Lawlor Islands Provincial Park.

Park management will place particular emphasis on protecting both representative and rare ecosystems as well as cultural heritage values, wildlife habitat, and nesting areas that are significant in a local, regional, provincial, or national context. The Province will work closely with Parks Canada to ensure that the commemorative integrity of Fort McNab National Historic Site of Canada is protected.

Outdoor Recreation

To provide a variety of high-quality passive outdoor recreation opportunities on McNabs Island, including hiking, beach activities, and camping.

The park will be managed to provide for high-quality outdoor recreation activities such as hiking, viewing, nature appreciation, photography, kayaking and boating, restricted cycling, and limited camping, where those activities do not compromise the ecological integrity of the islands' natural values.

Heritage Appreciation

To provide opportunities for exploration, education, and appreciation of the park's heritage values through interpretive, information, and education programs.

Heritage appreciation programs will emphasize significant natural and cultural heritage features and themes relating to conservation, geology and landscape development, flora, fauna, marine ecology and human settlement and use. The Province will work closely with Parks Canada to coordinate outdoor education and interpretation efforts where practical and feasible.

Tourism

To provide Nova Scotians and out-of-province visitors with opportunities to discover, experience, and enjoy McNabs and Lawlor Islands Provincial Park.

The park will be managed to serve both destination and stop-over visitors and also to complement and enhance regional tourism infrastructure, opportunities, and strategies, in particular those that emphasize natural and cultural heritage themes. The Province will work closely with stakeholders to coordinate and package the appropriate marketing, presentation, and interpretation of McNabs and Lawlor Islands Provincial Park with similar efforts for Fort McNab and Georges Island National Historic Sites of Canada and other public and private tourism attractions.

Facilities and Services

To ensure the provision of basic visitor services, including wharf access, orientation and information services, camping, picnicking, potable water, washrooms, and change rooms. Appropriate facilities and services will be provided primarily through partnerships involving interested parties where such development is compatible with the park management plan. The Department will also work with commercial ferry operators and appropriate regulatory agencies to ensure that public water transportation to McNabs Island is safe, dependable, and of high quality.

Park management, including the provision of facilities and services, will utilize an ecologically sustainable design approach. This concept recognizes that nature must be preserved and perpetuated not only for the survival of the human community, but also because nature, in and of itself, has an inherent value which is worthy of protection.

As part of the Department of Natural Resources' commitment to maintaining ecological integrity, the planning, design, and construction of park infrastructure will incorporate sustainable development strategies and environmental protection measures. Key aspects of this ecologically sustainable design approach include limitations on new park development, a requirement that new infrastructure support park goals and objectives, re-use of existing structures wherever possible, adoption of sustainable technology, efficient use of resources, and the provision of learning examples of sustainable park development and operation. The provision of new facilities and services will be phased as demands increase and partnership agreements are established.

Park Classification

McNabs and Lawlor Islands Provincial Park, by virtue of its outstanding natural and cultural heritage values, will be managed as a "Natural Environment Park" as defined by the Provincial Parks Regulations. Natural Environment Parks incorporate representative natural landscapes with outstanding recreational opportunities. This classification emphasizes the protection and conservation of natural and cultural heritage features. Outdoor recreational use and infrastructure development will occur within the context of maintaining the natural character and quality of the environment.

The World Conservation Union (previously known as the International Union for the Conservation of Nature [IUCN]) has developed a six-part system for classifying parks and protected areas, and many countries, including Canada, have adopted this system. The Natural Environment classification assigned to McNabs and Lawlor Islands Provincial Park is consistent with the intent of Class II of the IUCN Protected Areas Management Categories. The Class II designation is used

where the primary management intent for a park or protected area is to protect the ecological integrity of ecosystems.

Park Zoning

Park zoning allocates park lands and waters on the basis of the importance attached to their protection as heritage resources and to their capability and suitability for recreational use and associated facility and service development. Zoning defines the degree of protection, conservation, and development that may occur within respective park areas. The Provincial Parks Regulations establishes three park zones: environmental protection, resource conservation, and recreational development. The first two are protection oriented, while the third allows for more intensive development and use.

Marine waters included within the park designation have not been zoned per se. Nonetheless, they will be managed in a manner consistent with park management objectives. Where possible, marine waters will also be managed consistent with the management of adjoining parkland.

Environmental Protection Zones

The environmental protection zone incorporates areas of the park that are highly sensitive or contain significant heritage values that require protection. Interpretive, educational, and scientific activities may be permitted if they do not compromise protection objectives. The development of facilities is not normally permitted, and new trail construction is considered only in exceptional circumstances.

All of Lawlor Island and approximately two-thirds of McNabs Island are designated as Environmental Protection Zones on the basis of the sensitivity of these areas to human disturbance (Figure 3).

Lawlor Island

Lawlor Island is significant for its concentration of nesting osprey and great blue heron. In 1996, at least 14 active great blue heron nests and 10 active osprey nests were found on the island, one of the highest concentrations in an urban setting in North America. Another 84 bird species were reported from Lawlor Island and surrounding waters. In addition, the island supports a small but healthy deer population. The osprey and great blue heron are sensitive to human disturbance, particularly during nesting periods. In light of the need to protect these important natural heritage values, and in consideration of the current lack of facilities and services on the island and correspondingly low visitation levels, Lawlor Island is zoned Environmental Protection.

Eastern McNabs Island

The eastern portion of McNabs Island, extending from Wreck Cove to Indian Point and around to Ives Cove, contains one of the largest, relatively undisturbed regions within the park. This area includes mature and climax forests (sugar maple, yellow birch, beech, and red spruce), several drumlins, osprey nesting sites, the best examples of salt marsh and tidal mud flats within the park,
and a Mi'kmaq shell midden. The northeastern end of McNabs Island also contains numerous archaeological sites pertaining to early island settlers, as well as several trails. To protect these significant natural and cultural values from conflicting uses, this portion of McNabs Island is zoned Environmental Protection.

A large portion of the forest cover in this area was extensively damaged by Hurricane Juan. The large numbers of damaged spruce trees, in combination with the known presence of the brown spruce long-horn beetle, have raised concerns about the potential for a significant increase in the beetle population over the next few years. The Department of Natural Resources is currently working with the Canadian Food Inspection Agency to develop a strategy to address this potentially serious problem.

McNabs Pond and Dune System

McNabs Pond is one of the richest wildlife habitats on McNabs Island and also provides important wildlife viewing and outdoor education opportunities. Although once more a brackish pond due to the breaching of Maugher Beach by Hurricane Juan, it is believed that McNabs Pond will continue to provide important wildlife habitat. The sand dunes and associated vegetation adjacent to Maugher Beach depict evolving coastal processes and are sensitive to disturbance. For these reasons, this area is zoned Environmental Protection.

South End of McNabs Island

The south end of McNabs Island is the most remote part of the island in terms of public accessibility and is therefore less prone to human disturbance. Until recently, there was a fairly significant concentration of nesting great blue heron in this area. Osprey still nest in this vicinity. It appears that most heron and osprey have relocated to Lawlor Island, however, perhaps due to human disturbance. This area also includes a small salt marsh adjacent to Big Thrumcap, a former piping plover nesting area, a series of brackish ponds, and examples of active coastal erosion and deposition. To protect these important natural heritage values, and to maintain areas of the island in a natural condition, this portion of McNabs Island is zoned Environmental Protection.

Resource Conservation Zones

The resource conservation zone includes those areas of the park containing significant natural, cultural, and recreational features and landscapes that require a high standard of conservation. This zone also permits activities and land uses that do not conflict with or compromise the inherent natural character and aesthetic qualities of park values. These areas include a number of trails, scenic viewpoints, beaches, fortifications and numerous archaeological sites. Approximately one-quarter of McNabs Island is zoned Resource Conservation.

The resource conservation zone also incorporates and protects scattered sites with unusual flora as well as culturally significant sites and features that do not warrant specific designation within an environmental protection zone. Planning for any activities or land uses within the resource conservation zone must consider the full range of protection options as the priority.

Northwest End McNabs Island

The northwest end of McNabs Island includes a variety of natural and cultural heritage features. Public use and enjoyment of this area of the island must occur within the context of an over-riding emphasis on protection. Fort Ives, which the Province has committed to protect and maintain, will become a major attraction. The Tea House, the former Finlay property which was last occupied by the Farrant family, the site of the former Detention Barracks (on top of the drumlin immediately east of Garrison Pier), and the former Hugonin-Perrin estate, the latter with its wealth of introduced flora, are located in this zone. Fort Hugonin, should it be acquired by the Province, will also become a significant attraction.

Maugher Beach, and Strawberry Battery

Maugher Beach is one of the most popular day-use areas on McNabs Island. The beach, and its proximity to Garrison Pier, makes this area a natural attraction for island visitors. Although water quality in McNabs Cove generally meets guidelines for water-contact activities, ongoing public concerns about the quality of water in Halifax Harbour serve to limit public use of the beach to land-based activities. Sewage treatment projects proposed for Halifax Harbour may result in a much cleaner harbour and increased participation in water-contact activities on McNabs Island. The inland portion of the beach is bordered by a sensitive dune system zoned Environmental Protection. The western tip of Maugher Beach, which includes the lighthouse and popular viewing area overlooking the entrance to Halifax Harbour, is owned by the federal government.

Strawberry Battery is situated on the western face of an eroding drumlin overlooking Halifax Harbour. The back side of the drumlin overlooks McNabs Pond. This eroding drumlin offers one of the best opportunities within the park to understand drumlin structure and coastal processes. Strawberry Battery is surrounded on almost all sides by water, so access is difficult. The site also presents a number of public safety concerns that must be addressed.

Lands Near Fort McNab National Historic Site of Canada

Lands surrounding Fort McNab National Historic Site of Canada have been included in the resource conservation zone. These lands include Wreck Cove Beach, a popular recreational beach, and frontage on McNabs Pond.

Recreational Development Zones

A recreational development zone includes an area of a park that is capable of supporting the development of facilities and services associated with outdoor recreation activities and more intensive visitor use. This zone is used to focus park facilities and services, as well as public use, within the most appropriate park areas without compromising protection-oriented values of the park.

Three areas of McNabs Island are zoned Recreation Development. Proposed uses within the recreation development zone are generally limited in scope and include access points, day-use areas with associated facilities and services, an outdoor education centre, and group camping.

To make the best use of existing facilities on the island, and to ensure that any new development does not compromise the island's heritage values, the following special guidelines are established for this zone:

- Wherever practical and feasible, and in keeping with park objectives, new park developments will use current facilities and structures and existing disturbed areas.
- Park development will be limited to facilities and services which meet the basic needs of park visitors (e.g. access, first aid, shelter, emergency phone, potable water, toilets, orientation information), and complement and enhance park objectives (outdoor education centre, interpretive signage, limited camping). These facilities and services will be designed to minimize environmental, aesthetic, and visual impacts.
- New park development will be subject to detailed site plans, consider impacts on natural and cultural values, incorporate appropriate buffer zones, and will complement and enhance park objectives.

Ives Cove

The Ives Cove recreation development zone contains a concentration of existing facilities, including the Conrad house, Matthew Lynch house, and Jack Lynch house, associated open spaces, and the Department of Natural Resources service wharf. Subject to partnership agreements, it is anticipated that future development in this area will focus on existing facilities and associated areas and that the primary uses will include outdoor education, picnicking, and park administration. The zone also extends southward along the west side of Military Road where a small camping area is proposed.

McNabs Cove

The McNabs Cove recreation development zone includes Garrison Pier and lands adjacent to Garrision Road, including the former Detention Barracks site. It is anticipated that this will be one of the most heavily used areas on McNabs Island, given that it includes one of the main public access point to the island and one of the most popular day-use areas. In addition to Garrison Pier, other facilities and services proposed for this zone include an orientation/information kiosk, change rooms, and visitor services centre. To minimize the impact a visitor service centre may have on the island, the centre will be located on the former oil storage tank site which is well buffered from adjoining uses.

Range Pier

The area around Range Pier, including Wreck Cove Beach, is popular for a variety of day-use activities and also serves as one of the main access points to McNabs Island. This zone is intended to include a new docking facility, an orientation / information kiosk, change rooms, and toilets.

Managing for Ecological Integrity

McNabs and Lawlor Islands will be managed as a natural environment park, so protection of the ecological integrity of the islands is of paramount concern. Coastal geomorphic processes, such as erosion and sediment deposition, are integral to the ecological integrity of the islands, as are biologic processes, such as ecological succession. These evolutionary natural processes underlie the biological diversity that is valued by visitors. Biodiversity is also the fundamental indicator of ecological health. Retaining the ecological integrity of both terrestrial and aquatic ecosystems will be considered in park management decision making.

Ecological integrity must be maintained to ensure the sustainability of both the natural environment and the human uses of the park. In doing so, values such as water quality and the beauty of the landscape will also be preserved. The scientifically based monitoring needed to retain ecological integrity will also provide research opportunities that will enhance the educational and interpretive values of the islands.

Monitoring the impact of visitor use will enable management decisions that permit visitor enjoyment of McNabs Island while maintaining ecological integrity. As part of its efforts to manage visitor use, the Department will determine visitor carrying capacity and the park carrying capacity and manage the park appropriately.

A key tool in maintaining or restoring the park's ecological integrity is ecologically sustainable design. The sustainable design approach adopted by this management plan is integral to the park management philosophy. Its goals are to provide a basis for achieving sustainability in facility planning and design, emphasize the importance of biodiversity, and encourage responsible decisions. Sustainable design principles will be incorporated within the following key areas: interpretation, management of natural and cultural values, site design, building design, energy management, water supply, waste prevention, and facility maintenance and operations.

Park Development

Park development will provide the facilities and infrastructure necessary to protect the park's values and features, while ensuring public safety and appreciation and enjoyment of the park. Subject to the primacy placed on the protection of park values, and as budgets allow, the Department of Natural Resources and its partners will provide a range of facilities and services on McNabs Island that will foster use and enjoyment of the island in an environmentally sensitive manner (Figure 4). Any infrastructure development must support park goals and objectives. Wherever feasible and practical, all new infrastructure will be guided by a "sustainable design" philosophy. No park facilities or services are proposed for Lawlor Island.

The Department will either prepare, solicit, and/or evaluate development proposals that are consistent with the intent of the management plan. In addition, the Department will monitor visitor use of McNabs and Lawlor islands to determine its impact on ecological and cultural heritage values. Proposed projects may be canceled or modified, and visitor uses restricted or prohibited, where it is determined that the impacts are inconsistent with the intent of the park management plan.

This plan includes provision for the following facilities and services on McNabs Island: public access, a visitor service centre, orientation and interpretation information, washrooms and change rooms, food services, picnic facilities, an outdoor education centre, a network of trails for hiking, viewing and interpretation, and group and individual camping facilities. Most facilities and services will be concentrated in the west central portion of the island, close to one of the main public access points at Garrison Pier and adjacent to Garrison Road. Other development nodes are Ives Cove and Range Pier.

Consistent with the sustainable design philosophy, the plan attempts to minimize new development by using existing facilities or areas which have already been disturbed, wherever possible. Proposed new facilities will be located to minimize their impact on the island's natural and cultural heritage values. In addition, new facilities will be designed and sited to maintain the island's natural landscape and to minimize impacts on viewscapes of the islands from surrounding mainland and marine locations. Furthermore, consistent with the philosophy of sustainable design, new facility development will not only minimize environmental impacts, it will also strive to minimize the importation of goods and energy as well as the generation of waste. Implementation of park development projects, as outlined in this plan, will depend largely on the willingness and ability of partners to participate directly with responsible government agencies in the planning, design, development, and operation of park facilities and services.

The primary focus of park development is to provide facilities and services that support day-use activities - hiking, walking, picnicking, beach activities, and heritage appreciation. The provision of limited camping opportunities is also intended.

Wherever possible, development within the park will be consistent with provisions of Halifax Regional Municipality's Municipal Planning Strategy and Land Use By-law. The park management plan supports the intent of the MPS in terms of mitigating environmental and aesthetic impacts of park development, limiting commercial development and, where appropriate, using development agreement provisions in any lease agreement that would facilitate the provision of facilities within the park. The plan also recognizes the long-standing association that residents of Eastern Passage have with the islands.

Public Access

Given the park's setting as two islands in Halifax Harbour, public access will be provided primarily by ferry and water taxi service. The Department will encourage the provision of these service from Halifax, Dartmouth, and Eastern Passage. To ensure safe access to McNabs Island, all public docking facilities on the island will be managed as part of the park, and ferry access will be subject to park policies and regulations. Traditional access to McNabs Island in private vessels will be permitted, subject to park management objectives concerning the protection of park values and features.

Due to the strong emphasis placed on the conservation and protection of park values on Lawlor Island, public access to the island will not be provided. Visitation to the island will be restricted to scientific and other purposes that enhance management of the island through greater understanding of, and appreciation for, the island's natural and cultural heritage values.

Currently two main public access points are used on McNabs Island: Garrison Pier situated in McNabs Cove on the island's western shore and Range Pier at Wreck Cove on the island's eastern shore. In addition, the Department maintains a small, shallow-water service wharf at Ives Cove. This plan recognizes the need to further explore the development of a public access point at Ives Point. Wreck Cove and, to a lesser extent, Timmonds Cove, are also popular moorage locations for boaters.

Major repairs to Garrison Pier were completed in 2002, and further improvements are planned. Replacement of Range Pier, the main access point from Eastern Passage, has been identified as a priority. Responsibility for improved docking and moorage facilities will be shared among key island stakeholders and partners.

This plan proposes that passenger ferry service to McNabs Island be left to the private sector as is currently the practice. Notwithstanding, however, the option to utilize Metro Transit ferry service will be used if feasible. No exclusivity or monopoly in the provision of this service is contemplated. Certain provisions will govern the implementation and delivery of this service:

- All commercial ferry operators will require a permit from the Department of Natural Resources to land or pick up passengers on McNabs Island.
- Commercial ferry services may land and pick up visitors only at locations within McNabs and Lawlor Islands Provincial Park that are approved by the Department.

The Department of Natural Resources will consult with commercial ferry operators on the development and implementation of a park fee collection system. Monies raised through this fee will be used for park improvements.

Based on a Parks Canada review on the provision of public access to Georges Island National Historic Site of Canada, this plan may be amended to improve public access should opportunities arise to partner with Parks Canada or others in the delivery of public access to both Georges Island National Historic Site of Canada and McNabs and Lawlor Islands Provincial Park.

Accessibility

The needs of the physically challenged will be considered in any decisions affecting public access to McNabs and Lawlor Islands Provincial Park. Where practical and feasible, Provincial accessibility standards applicable to Natural Environment Parks will be met. On the island, rest spots will be located on main trails. If feasible, some form of transportation may be provided for the physically-challenged.

Garrison Pier

Given its relatively good condition, ability to accommodate larger passenger boats, geographically central location, and proximity to most island facilities, Garrison Pier is the primary public access point to McNabs Island for commercial ferry operators from the Halifax side of the harbour. Such service ideally would be offered from downtown Halifax, Dartmouth, and Eastern Passage. The

Department, with financial assistance from Parks Canada and others, completed repairs to the pier in 2002. Due to the height of the pier, and the difficulties encountered by passengers off-loading from smaller craft, installation of a floating dock and ramp is a priority. The Department intends to install both a floating dock and ramp by 2006. To prevent congestion, docking of boats at the pier will be permitted only for periods of short duration, sufficient to allow passengers to be dropped off or picked up.

Range Pier

Although the public continues to use Range Pier, the structure is in such poor condition that repairs are no longer feasible or practical. Due to its hazardous condition, public use of Range Pier is prohibited. As this is an important access point to McNabs Island, particularly for residents of Eastern Passage and surrounding areas, the replacement of this facility is a priority. Replacement of Range Pier will depend in large measure on funding from stakeholders and partners.

A new pier at Wreck Cove would cater primarily to small commercial craft and private vessels. The option of renting overnight docking space at the new pier should be examined to determine public demand and financial feasibility.

Ives Cove Pier

Use of the Natural Resources' wharf at Ives Cove will continue to be restricted to Department of Natural Resources and other authorized vessels.

Ives Point

Ives Point is well-suited as a potential access point to McNabs Island. The remains of a wharf dating to the mid-1800s are still evident on the east side of Ives Point. Being the closest point to Halifax and Dartmouth, this was at one time the main entry to McNabs Island. The option of constructing a new wharf at this location should be explored, particularly at such time that passenger ferries (e.g. Metro Transit ferries) may be used, possibly in conjunction with a ferry service involving both McNabs and Georges islands, for which Garrison Pier or the new pier contemplated for Wreck Cove are not suitable.

Mooring Sites

Wreck Cove and other sites along the coast of McNabs Island, have long been popular locations for overnight moorage. As McNabs and Lawlor Islands Provincial Park is developed, demand for additional moorage sites is anticipated. As an interim measure, the Department of Natural Resources will initiate discussions with Fisheries and Oceans Canada and other responsible agencies to develop a co-operative arrangement that would ensure that marine waters surrounding the park are managed in a manner consistent with park objectives.

During the initial phases of park development, and until jurisdictional issues are resolved, no mooring buoys will be installed or authorized by the Department of Natural Resources.

Travel on the Islands

McNabs Island is approximately 5 kilometres long and has a maximum width of 1.5 kilometres. Much of the harbour (western) side of the island is accessible over a network of trails. Garrison Road, the main travelway on the island, extends from Ives Point at the north tip of the island, to Fort McNab and Wreck Cove towards the southern end. Many of the island's principal sites are accessed by Garrison Road, including Fort Ives, Hugonin Battery, the former Hugonin-Perrin estate, Garrison Pier, Maugher Beach, Fort McNab, and Wreck Cove. The Old Military Road, a branch of Garrison Road, passes by the Conrad and Lynch houses at the northern end of the island. Maugher Beach lighthouse is accessible via the Lighthouse Road.

The primary means of travel on the islands will be by foot. Bicycles will be permitted on McNabs Island for general recreational purposes when an adequate management regime is in place. It is intended that bicycles will be restricted to designated trails (Old Military, Garrison, and Lighthouse roads).

Motorized vehicles, other than wheelchairs and emergency and maintenance vehicles, will be prohibited from the islands.

The existing network of trails on McNabs Island is felt to be generally adequate in terms of providing access to the island's many attractions. It is proposed that a significant portion of the island remain relatively inaccessible due to the absence of formal trails. This plan does not support the construction of new trails at this time. Public access will not be provided to Lawlor Island, and public use will be discouraged.

Extensive blow-downs caused by Hurricane Juan resulted in significant damage to the island's trail system. These trails will be re-opened as soon as possible.

Visitor Services

Based on usage of McNabs Island over the past two decades, it is anticipated that most island visitors will visit on a day-use basis. These visitors use the park for a variety of activities, including hiking, exploring the island's rich natural and cultural features, and beach activities.

The main day-use area will be located close to Garrison Pier, the major day-use area associated with Maugher Beach, and adjacent to Garrison Road. This site provides one of the best locations for such development due to its location, previous development history, and established buffers. A visitor services centre, providing information, washrooms and change rooms, food services, and the main interpretive facility, is proposed for this site.

Another day-use area will be located at the north end of the island near Ives Cove and will include Fort Ives, the Conrad house, Matthew and Jack Lynch homes, and the small campground.

Although only limited facilities and services are proposed in association with Wreck Cove, it is noted that this area is also popular, particularly with people from the Eastern Passage area. As there are environmentally sensitive areas adjacent to both Maugher Beach and Wreck Cove, advisory signs

will be posted and other management techniques, such as boardwalks, implemented to protect the ecological integrity of the dunes and salt marshes.

Currently only limited facilities and services are offered on McNabs Island. Some of these have been provided through agreement with the Friends of McNabs Island Society and include maintenance of pit toilets, garbage collection, trails, and several public interpretive programs. No facilities or services are currently offered on Lawlor Island, and none is proposed for the foreseeable future.

The Department will endeavor to provide potable water at a limited number of locations on McNabs Island (Ives Cove and Maugher Beach Recreation Areas) for the benefit of park visitors. Provision of potable water will occur only where the Department is confident that there is a safe and reliable source of water and that public health concerns are addressed.

The development of park facilities and services on McNabs Island, whether undertaken directly by the Department of Natural Resources or through partnership agreements with the private and/or not-for-profit sector, must be consistent with this management plan and applicable federal, provincial and municipal regulations.

Maugher Beach Recreation Area

The Maugher Beach day-use area overlooks McNabs Cove and, with its sand beach and view of Halifax Harbour, reinforces the park's island setting. This area includes Garrison Pier, a main island access point; Maugher Beach, and a high quality sand beach and popular island destination. Garrison Road, the main travel route on the island, passes through this area.

An information/orientation kiosk is proposed just off the landward end of Garrison Pier. This structure will provide island visitors with information on island attractions, location of facilities and services, and park management messages, including the mandate of McNabs and Lawlor Islands Provincial Park. The kiosk will also serve to shelter departing visitors waiting for the ferry.

A park visitor service building is proposed at the site of the former oil storage tanks on the east side of Garrison Road near Maugher Beach. This facility will be constructed in a manner compatible with the architectural styles of existing residential buildings on the island and will be designed and sited to minimize impacts on the natural appearance of the island's landscape. Earthen berms previously constructed for the oil storage tanks will provide a visual buffer for the visitor centre. The visitor services building will provide visitor information, interpretive messages, washrooms, change rooms, and food services. A small picnic area will be established in association with the facility.

Access to Maugher Beach will be located near the north end of the beach in order to protect the dune system from visitor impacts. As the beach is not intended to provide intensive water-based recreational use, no lifeguard service will be provided. However, if the quality of harbour waters improves following completion of the proposed regional wastewater treatment system, a lifeguard service may be provided as the need demands.

In the short term, the World War II-era concrete building at the north end of Maugher Beach will be secured to prevent public access. Over the longer term, a determination will be made as to whether the building should remain and, if so, what function it should have.

The Department will encourage the Coast Guard to restore access to the Maugher Beach lighthouse.

Ives Cove Recreation Area

Located in the Ives Cove area of McNabs Island are Fort Ives, the Conrad house, the Matthew and Jack Lynch homes, and the Department's service wharf. Consistent with the terms under which the Province accepted ownership of Fort Ives from the federal government, the commemorative integrity of this fortification and other associated buildings will be maintained. Interpretive panels will be installed to describe the site's significant interpretive themes. View planes from the fort may be partially opened through selective removal of vegetation, but will not be restored to a condition that existed during the period when Fort Ives was an active military post.

A small picnic area will be established at the north end of McNabs Island and will include potable water, toilets, and limited garbage facilities.

Subject to the establishment of a suitable partnership arrangement, it is proposed that the Conrad and Matthew Lynch homes be used as an outdoor education centre. In conjunction with this role, part of one or both homes may also be used to provide accommodations for small groups. Significant improvements to both buildings are required to meet building and fire codes. The exterior architectural styles of both buildings will be preserved, and, if practical and feasible, the former stone fireplace on the Lynch House will be restored. A detailed assessment will be undertaken in the short-term to determine the current conditions of the Conrad, Matthew Lynch, and Jack Lynch homes and necessary maintenance implemented as soon as possible.

A small camping area serving primarily group campers will be provided on the west side of the Old Military Road, south of the Jack Lynch home.

Wreck Cove Recreation Area

Wreck Cove, with its high-quality sand beach, sheltered cove, and proximity to the mainland has long been a popular destination for private boaters and other island visitors. A number of private mooring sites in Wreck Cove provide anchorage to small craft. In earlier times, Range Pier also served as a convenient docking site. The pier is now in poor condition and is no longer safe to use. In the short term, toilets, change rooms, an information kiosk, and orientation signage will be provided adjacent to Wreck Cove Beach. The need to replace Range Pier with a safe and reliable docking facility is an immediate priority.

It is anticipated that completion of a new docking facility at Wreck Cove will result in increased usage. While it is the intent of this plan to maintain the cove's natural character by providing only basic facilities and services, additional limited development may be considered to accommodate this increased usage.

Camping

There has been a long history of camping on McNabs Island, by both individuals and organized groups. This use generally occurs at a number of traditional sites scattered throughout the island. To minimize potential environmental impacts of unregulated camping and to provide campers with basic facilities and services, the provision of camping opportunities will be pro-actively managed.

While McNabs Island will be primarily a day-use park, a limited number of formal campsites will be established off the Old Military Road. All camping will require advanced reservation and must occur only at designated campsites. Unregulated camping will not be permitted. Organized group camping, as defined by provincial parks policy, will have preference over individual camping. The provision of camping opportunities will be managed to respond to social and environmental impacts. The Department, in consultation with the Park Advisory Committee, will determine camping sites, rates of usage, and monitor the environmental impacts of camping. Based on the results of the monitoring program, camping will be managed so as to maintain ecological integrity. The Department will promote a low-impact, "pack it in; pack it out" philosophy to help minimize the impact of camping on the island's ecological values. Open campfires will not be permitted.

Until formal camping areas are established, the public will be permitted to use existing sites if deemed suitable by DNR staff. These sites will be designated as soon as possible to prevent this activity from occurring in sensitive areas. No reservations will be required in the interim period.

Before a decision is made with respect to the provision of camping at one or more of the following sites, further study and evaluation is required to more precisely determine their suitability.

Military Road Campground

A small campground is proposed just west of the Old Military Road. This site will include an area to accommodate the needs of organized groups and a separate area for individual campers. The campground will offer an open or semi-open area, potable water, a cooking shelter, pit toilets, and recycling and garbage facilities.

Special Events Camping

In exceptional circumstances the Department may consider permitting organized groups to camp at Fort Ives or below the Tea House. Such use would normally be permitted only if it could not be accommodated in the proposed Old Military Road campground, where it would not unduly interfere with the enjoyment and use of the island by other park visitors, or to minimize environmental impacts which may result from the use of other island locations.

Information and Promotion

An information and promotion program will be developed to attract and orient visitors to the park, its facilities, programs, and regulations, as well as to associated regional attractions. A major focus of this program will be the proximity of McNabs and Lawlor Islands Provincial Park to the Halifax

metropolitan area and the many opportunities it offers for outdoor education, nature appreciation, and outdoor recreation.

The information program will be provided by the Department of Natural Resources, preferably in partnership with other agencies and stakeholders (e.g. FOMIS), and will initially consist of a park brochure, interpretive and orientation signage, and general tourism literature. Information currently available includes the Discover McNabs Island guidebook (FOMIS, 1995) and a park brochure (FOMIS, 2000). Efforts will be made to link McNabs and Lawlor Islands Provincial Park with local and regional marketing efforts promoting the many complementary attractions (e.g., Halifax and Dartmouth waterfronts, several local National Historic Sites of Canada, Pier 21, Halifax Harbour, Fisherman's Cove, Purcells Cove, etc.).

Marketing and communication plans will be prepared to direct the information and promotion program.

Park promotion will be done with due consideration for the need to protect the park's heritage values and to sustain a quality visitor experience. The park will not be promoted to the extent that its capacity to handle visitors in an ecologically sustainable manner is exceeded.

Interpretation and Outdoor Education

Three broad interpretive themes have been identified for McNabs and Lawlor Islands Provincial Park, which, in turn, include a number of sub-themes that warrant special emphasis:

Natural History

- landscape development through glaciation and coastal processes
- terrestrial habitats, including the island setting, humans as an agent of change, and introduced species
- island fauna, with a focus on birds
- marine ecology
- ecological processes (including responses to human disturbance)

Cultural Heritage

- use of the islands by First Nations peoples
- settlement and use by European peoples as conveyed through the McNab family and their tenants
- the prominent role played by McNabs Island in the defence of Halifax Harbour
- the use of Lawlor Island as a medical and quarantine station
- the historic role of McNabs Island as a recreation destination for metro residents

Parks and Protected Areas

• McNabs and Lawlor Islands as part of an evolving network of parks and protected areas that conserve important elements of Nova Scotia's natural and cultural heritage

These themes help highlight the important role that the islands' evolving landscape, defined in the broadest terms to include physical, social, political, historical, and military elements, has played in the lives of Nova Scotians. The themes, and their many components, also celebrate the islands' underlying characteristic as relatively natural areas that provide opportunities for interpretation and outdoor education programs and opportunities for outdoor recreation.

The presentation of interpretive themes enhances the understanding, appreciation, and enjoyment of heritage features, values, and processes. In addition, it also helps foster environmental stewardship. Interpretation motivates learning and nurtures support for the integrity of parks and protected places. It also influences behaviour and is a useful tool for explaining and gaining compliance with park regulations, policies, and management actions. By providing an awareness of the environment, values are taught that are necessary for the protection of the environment. The incorporation of the sustainable design philosophy will also seek to affect not only immediate behaviours but also the long-term beliefs and attitudes of visitors.

An interpretive program focusing on self-directed opportunities will be developed to facilitate visitor understanding, appreciation, and exploration of the park and to support park management practices. The interpretive program will utilize brochures, on-site interpretive panels, interpretive panels at the visitor service centre, publications, self-guided trails, and special-event programming, such as tours sponsored by the Friends of McNabs Island Society or offered through the Department's Parks are for People program. Interpretation of Lawlor Island will occur offsite at locations on McNabs Island and McCormack Beach Provincial Park in Eastern Passage. Interpretation of the park's heritage values will also be provided at key points along the harbour waterfront.

In addition, the interpretive program will encourage and develop co-operative interpretation and outdoor education programs with schools, universities, and other organizations such as youth groups, naturalist groups, and historical societies. The interpretive program will feature several levels of field interpretation, as well as the facilities and resources of the proposed visitor services centre at Maugher Beach and the proposed outdoor educational centre at the Conrad and Matthew Lynch homes.

First-level field interpretation will be achieved with interpretive panels at selected sites, while brochures and related publications will provide higher level, self-guiding field interpretation. The proposed outdoor educational centre will provide educational programming to a range of user groups.

Sites chosen for environmental education and nature tourism programs will be selected only after it is determined that limited visitation can occur without disturbing the site's heritage values. These sites will be monitored to determine the impact of visitation levels and to identify appropriate mitigative measures if impacts become undesirable.

Special Management Strategies

Special management strategies are required to address specific issues as outlined below. While this plan endeavors to protect both natural and cultural heritage values, it is recognized that in some instances the protection of natural values, for example, may take precedence over the protection of

cultural values and vice versa. These special management strategies therefore set out those heritage values which have a higher priority for protection.

In general, the protection of cultural values associated with Fort Ives, the Conrad and Lynch homes, the Hugonin - Perrin estate, Fort Hugonin, the remains of buildings associated with the Finlay Farm, the shell midden, and other priority cultural sites which may yet be identified would have precedence over the protection of natural values. Natural values, on the other hand, would generally have priority over the remainder of the island.

Cultural Heritage

Long before European contact, aboriginal peoples used the park for hunting and fishing and as a seasonal home. European settlement of McNabs Island dates from at least the 17th century. This legacy of human use includes a range of known and potential cultural sites and features scattered throughout the islands, which should be protected from inappropriate park development and use.

Heritage resource management efforts will focus primarily on the maintenance of Fort Ives and the Conrad, Matthew Lynch, and Jack Lynch homes. While limited management intervention may occur at additional sites as described below, the majority of heritage sites will not be actively managed except for public safety reasons. Regardless of the degree of active management, all heritage sites will be protected by the Provincial Parks Act and provisions of this management plan.

Archaeological Features

The Department of Natural Resources will undertake to secure funding for a comprehensive archaeological survey of the islands in order to identify, and establish the significance of, archaeological sites and their associated management requirements. Before any park facilities or services are built, an archaeological survey will be undertaken to determine if the proposed development will affect the islands' archaeological features.

The integrity of the shell midden site will be protected. Access will be restricted to authorized research efforts only.

Archaeological sites may have been disturbed as a result of trees uprooting during Hurricane Juan. As a consequence, the need to undertake an archaeological survey of the islands will be pursued in the short-term.

Fort Ives

Built in 1874, Fort Ives is the oldest of the four remaining fortifications on McNabs Island. The site consists of the fortifications, several period buildings, and two 10 inch (254 mm) rifle muzzle loading (RML) guns dating from the fort's earliest years. The RML guns, sitting on their original carriages, are unique within the former British Empire. These emplacements, with their shields, ordnance, mountings, and supporting buildings, are also a unique feature within the Halifax Defence Complex. In 1996, as a condition of transfer to the Province, Parks Canada undertook extensive stabilization of Fort Ives.

In acquiring ownership of Fort Ives from the federal government, the Province has committed to maintain the site's commemorative integrity. Parks Canada has agreed to provide professional and technical assistance. To that end, the Department of Natural Resources will work closely with Parks Canada staff to identify commemorative values associated with Fort Ives and the most appropriate means to ensure their protection. As part of that effort, Natural Resources will undertake regular inspections of the fort. In addition, the commemorative value and condition of the searchlights and casements at Ives Shore Battery will be determined.

Public access and use of Fort Ives will be encouraged, and interpretive messages will be presented to foster a greater understanding of, and appreciation for, the role of Fort Ives as a military fortification within a broader system of fortifications protecting Halifax Harbour. Buildings within Fort Ives will remain secured until their future role in commemorating the site's historical importance is determined.

The Department of Natural Resources will pursue designation of this site as a Provincial Heritage Property under the Heritage Properties Act.

Conrad and Matthew Lynch Homes

The Conrad and Matthew Lynch homes have the potential to provide opportunities for visitor services. These homes were acquired by the Province from the Conrad estate in the late 1980s. Built about 1905 by A. J. Davis, and later owned by Ralph and Gladys (Lynch) Conrad, the Conrad house is a large three-storey residence with first- and second-floor balconies on the north and east sides. The two-storey Lynch home was built in 1931 by Matthew Lynch, a former lighthouse keeper on the island. In the absence of a clearly defined role for the Conrad and Matthew Lynch homes, only limited public use has been made of these properties since their acquisition by the Province.

This plan envisages that over the long term the architectural integrity of the Conrad and Matthew Lynch homes will be preserved, and they will be used in a manner compatible with their historic character. One option is to develop the homes into an outdoor education centre, with one or both buildings possibly providing limited accommodations. An assessment will be undertaken to determine the structural integrity of these homes, particularly with respect to their possible use for outdoor education and accommodation purposes.

Interim public use of the Conrad and Lynch homes will not be promoted. However, some limited use may be approved for small groups engaged in activities that are consistent with park objectives. The Department will pursue designation of both homes as either provincial or municipal heritage properties.

Jack Lynch Home

The Jack Lynch home was built in the 1940s and acquired by the Province in 1974. Since the mid-1980s it has been used as a residence by the Department's full-time caretaker on the island. The Jack Lynch home will continue to be used as the caretaker's residence and, for the foreseeable future, as the park office. An assessment will be undertaken to determine the structural integrity of this house.

Hugonin-Perrin Estate

Located off Garrison Road, immediately northeast of Garrison Pier, the Hugonin-Perrin estate dates from the 1850s. This site includes the foundation of the former Hugonin-Perrin home, remnants of a once extensive English garden, open spaces used for a variety of activities over the years, and the former Tea House built in 1985.

Remnants of the English garden include hedges of common barberry and English hawthorn; a variety of introduced tree species, including Scotch elm, linden, horse chestnut, hemlock, white pine, black locust, lilac, Japanese maple, and copper beech; and numerous introduced herbaceous plants. Four large basswood remain along the lower edge of an open field behind the main house foundation. From what was once a continuous row of trees along this same field, two more limes and three horse chestnuts also remain. Although overgrown, the terraced lawn in front of the foundation is clearly visible.

A site management plan will be prepared to determine the location and extent of plants, both native and introduced, that once formed part of the landscaped element of the Hugonin-Perrin estate. This plan will consider the limited restoration and stabilization of the Victorian gardens and historic elements of the Hugonin-Perrin estate. This may include planting replacements along rows of trees and hedges, clearing the terraces, and exposing the foundation of the Hugonin-Perrin home.

Existing open spaces associated with the estate will be maintained. Future uses of this area will include interpretation, outdoor education and picnicking. The Tea House building will be maintained over the long term, and efforts will be undertaken to identify a potential future use.

Hugonin Hill

Hugonin Hill, located immediately behind the Tea House, is one of the highest points on McNabs Island and for many years was used for grazing livestock. When cleared, the hill also provided excellent views northward to Halifax and Dartmouth and toward Halifax Harbour. The field is being gradually invaded by white spruce and other species, with much of the open space and scenic vistas lost.

A portion of the historic open space and view planes on Hugonin Hill will be restored. The Department will prepare a vegetation management plan to identify these open spaces and view planes and determine to what extent they will be restored. Based on that plan, trees will be removed to preserve selected views of Halifax-Dartmouth and Halifax Harbour. A site management plan will also facilitate restoration of a portion of Hugonin Hill with tolerant hardwood trees (sugar maple, yellow birch, beech), which once would have dominated this site.

Construction of a viewing platform near the top of Hugonin Hill may be considered if it is determined such a structure would not interfere with the area's visual aesthetics.

Strawberry Battery

Strawberry Battery, built during World War II to replace Fort Hugonin, included two quick-firing guns and several searchlights to guard the submarine net protecting Halifax Harbour. The battery was decommissioned in 1956, and the armaments and searchlights were removed. Presently, access to the site is difficult. Interim management will discourage visitation to the site.

In the short term, Strawberry Battery will be assessed from a public safety perspective, and necessary measures will be taken to address significant safety concerns. The physical condition of the fortification will also be assessed to determine whether the site contains sufficient commemorative value to warrant stabilization and/or restoration and future presentation to park visitors.

Rifle Range

The rifle range was built in 1879 and originally consisted of two 730 metre military rifle ranges at the southern end of McNabs Island. The remains of one of these is still visible, with its rifle butts and target mechanisms still in place. Further study is required to determine the commemorative value of these butts and mechanisms. In the interim, public visitation will be discouraged and safety concerns addressed. Vegetation will be allowed to regenerate naturally over the length of the range.

Finlay Farm

The Finlay farm is located on the Timmonds Cove Trail, immediately north of the Hugonin-Perrin estate. The site includes the ruins of the Finlay house and the foundations of several other buildings, including the Pure McNab soda pop factory. This area was cleared for farming in the early 1800s and now consists of old pasture regenerating to an early successional forest.

The Finlay house, constructed about 1875, has completely fallen down and presents a safety hazard as part of it lies on the Timmonds Cove Trail. The remains will be removed, and its foundation, and those of nearby buildings, will be interpreted as part of island's cultural heritage. A majority of the old fields will be allowed to revert to forest and will be used to interpret forest succession. A portion of the old fields immediately surrounding the former Finlay farm buildings will be kept opened.

Range Pier

Due to its deteriorated condition, Range Pier presents a number of public safety concerns. In the short term, signs will be posted on the pier to warn visitors and prohibit public use. Replacement of Range Pier with a suitable landing and/or mooring dock for small craft is a priority. Potential partnerships and funding sources will be pursued to enable construction of a new facility at this location.

Fort Hugonin

Built in 1899-1900, Fort Hugonin consists of four quick-firing gun emplacements, subterranean magazines, crew shelters, and several associated buildings. In 1940, the fort was taken out of active service, and the guns were transferred to Strawberry Battery. Until 1992, one of the buildings was

still in use by the Department of National Defence as a listening post to monitor ship traffic in the harbour. The building is in poor condition and presents many safety concerns. The site has been declared surplus to the needs of the federal government.

While the Province has expressed some interest in acquiring this property, as of early 2004 it is still administered by the federal government. To that end, the Department of Natural Resources does not currently have a mandate to manage the property. The Department will explore options for acquiring the site on terms that are mutually agreeable to the federal and provincial governments. If it is acquired by the Province, Fort Hugonin will be stabilized and interpreted.

Quarantine Hospital, Lawlor Island

Following the threat of cholera in 1866, the Government of Nova Scotia acquired the use of Lawlor Island as a quarantine station. With the threat of another cholera epidemic in 1871, three quarantine hospitals capable of accommodating at least 500 people were constructed on the island. In 1899, over 2,000 Doukhobor immigrants from Russia were quarantined there.

Except during the Second World War, the quarantine station was used sparingly in the 20th century. Today only scattered foundations and a small cemetery remain.

Interim management of the quarantine station will include undertaking an inventory of historical remnants associated with the station. Access to the site, like access to all of Lawlor Island, will not be encouraged. Further study will be required to determine the long-term management strategy for the quarantine station.

Open Field, Lawlor Island

A portion of the open field on the east side of Lawlor Island, immediately opposite MacCormacks Beach Provincial Park, will be managed for wildlife viewing opportunities.

Other Cultural Heritage Sites

With over 1,600 years of documented human habitation and use, McNabs and Lawlor islands contain numerous heritage sites. The primary focus of heritage management efforts will be on Fort Ives, the Conrad and Lynch homes, the shell midden, and other priority sites that may be identified. Heritage sites beyond those referred to in the previous section will be assessed and protected from inappropriate development and use under the Provincial Parks Act and provisions of this management plan. Natural processes will be permitted to reclaim these sites, and no stabilization or other restorative work will be undertaken except for public safety reasons.

Natural Heritage

Despite a long history of human development and use, and their proximity to the Halifax-Dartmouth metropolitan area, McNabs and Lawlor islands still contain extensive natural areas, which support a variety of natural heritage values. The intent of this plan is to maintain and, where possible, restore these values, which include flora, fauna, and marine environments, as well as the ecological

processes they support. As part of that effort, inventories of flora and fauna will be updated as necessary to enhance our knowledge of the islands' natural heritage values.

Fauna

Given the importance of McNabs and Lawlor Islands Provincial Park for both migratory and breeding birds, as well as for other wildlife species, the integrity of the park's existing natural habitats will be maintained or, where possible, restored.

The status of nesting osprey and great blue heron on McNabs and Lawlor islands will be monitored by the Department. Public access to Lawlor Island, where the osprey and heron are most heavily concentrated, will be discouraged.

McNabs Island provides suitable habitat for the endangered piping plover, which was reported on the island in 1991. The Department will monitor the islands to determine if nesting is occurring, and conservation measures will be put in place as needed.

In keeping with the designation of McNabs and Lawlor Island as a provincial park, hunting and trapping are prohibited.

Flora

The Department of Natural Resources, Parks and Recreation Division, has recently developed draft guidelines for the management of vegetation in provincial parks (DNR, 2003). The intent of these guidelines is to provide clear direction on vegetation management objectives and options within provincial parks, park reserves, beaches, and trails. These guidelines will be applied to McNabs and Lawlor Islands Provincial Park.

The guidelines provide the following general direction to park managers:

- Vegetation management must be consistent with park goals and objectives.
- Within the environmental protection and resource conservation zones, a non-intervention approach will be adopted so that evolutionary natural processes will be maintained. Within trail corridors, vegetation will be managed for access and safety.
- Within the recreation development zone, vegetation management that is consistent with park goals and objectives may be undertaken to allow for the development of park facilities and services, associated open space areas, and public safety. If required, new plantings of trees and shrubs will use only native species.
- Non-native insect and disease infestations, and invasive non-native vegetation, may require proactive intervention. Any intervention will be directed as narrowly as possible to the specific problem and implemented only after appropriate consultation. Intervention will be consistent with the vegetation management guidelines, this plan's "sustainable design" philosophy, and applicable federal, provincial, and municipal regulations.

• Infestations of native insects will usually be allowed to progress undisturbed in the park, except as described below.

In addition, a monitoring program will be established to assess the impacts of park development and use on the islands' vegetation.

It is difficult to develop and implement guidelines that consider all circumstances. To that end, the following allowances have been made for McNabs and Lawlor Islands Provincial Park:

- The approach to vegetation management must recognize that both islands contain native and introduced vegetation. The intent of this plan is to encourage restoration of native vegetation. Exception will be made for certain managed cultural sites such as Fort Ives, the Conrad and Lynch properties, and the Hugonin-Perrin estate. The management of exotic or invasive species is addressed in further detail in the following section.
- Selective management of trees on the north- and west-facing slopes of Hugonin Hill (resource conservation zone) will be initiated to maintain limited viewscapes of Halifax-Dartmouth and Halifax Harbour.
- Tolerant hardwood trees (sugar maple, yellow birch, beech) will be re-established on a portion of Hugonin Hill.
- Selective thinning and pruning of trees and vegetation on the north- and west-facing slopes of Fort Ives (resource conservation zone) may be undertaken to provide limited viewscapes of Halifax Dartmouth and Halifax Harbour.
- Selective thinning of trees will occur in a portion of the open field on the east side of Lawlor Island and tolerant hardwoods planted for the purpose of wildlife viewing
- Existing exotic vegetation associated with the former Hugonin-Perrin estate (resource conservation zone) will be maintained. New plantings of exotic vegetation will require a site management plan that considers, among other issues, the potential for escape and invasion.

A vegetation management plan will be completed in advance for deviations from these vegetation guidelines.

Hurricane Juan

Hurricane Juan caused extensive damage to the forest cover of McNabs and Lawlor islands. The large number of damaged and downed trees are of two primary ecological concerns

- the potential habitat they may provide for the brown spruce long-horn beetle, an exotic pest discovered on the islands in 2000
- the increased risk of a severe fire.

Since its discovery in Nova Scotia, the brown spruce long-horn beetle has been the subject of an intensive eradication program led by the Canadian Food Inspection Agency (CFIA). With the potential for greater brown spruce long-horn beetle reproduction rates due to the islands' extensively damaged forest cover, the implementation of radical measures may be required to control this pest.

The CFIA has jurisdiction over the control of the brown spruce long-horn beetle. The Department of Natural Resources will continue to work with the CFIA to develop and implement an appropriate management response. At the time of writing this plan there appears to be a strong possibility that CFIA will require a management response of a magnitude that would normally be considered inconsistent with the objectives of a natural environment park (i.e. removal of all damaged spruce from the most severely-damaged areas of McNabs Island). If this level of intervention is required, the Department will make every effort to minimize the long-term impacts such activity would have on the islands' ecological and aesthetic values and the opportunities for outdoor recreation, nature-based education, and tourism which they support.

The increased risk of fire which the extensively damaged forest presents is dealt with in the section entitled "Fire Suppression."

Exotic or Invasive Species

Exotic or invasive species include both non-native flora and fauna. Some exotic and most invasive species are of concern because of their potentially significant negative impacts on native species. Active management of exotic or invasive species may therefore be required to conserve native populations.

Examples of exotic or invasive species include the brown spruce long-horn beetle and Japanese knotweed.

The brown spruce long-horn beetle can be destructive to spruce trees and, if left uncontrolled, could cause significant damage to the islands' softwood forests. An eradication program managed by the Canadian Food Inspection Agency and the Department of Natural Resources is being developed as a result of Hurricane Juan.

Japanese knotweed was originally brought to McNabs and Lawlor islands by early settlers. Several large patches are now found on McNabs Island, including one on the Timmonds Cove Trail near the Finlay house and another along Garrison Road, between Wambolt Trail and Fort McNab. If left undisturbed, these patches will continue to expand at the expense of native vegetation and may also interfere with trails and interpretive signage. As a result, vegetation management will encourage the removal of Japanese knotweed.

Marine Environment

Situated near the mouth of Halifax Harbour, McNabs and Lawlor islands are greatly influenced by the surrounding coastal marine environment. These waters have important environmental, outdoor recreational, aesthetic, and educational values, which contribute to the visitor experience. Of particular significance are several sites within the islands' inter-tidal zone. These include the algae-

covered bedrock outcrop near Maugher Beach and salt marshes at Thrumcap, Wreck Cove and Finlay Cove. The Department of Natural Resources will work with responsible agencies and other stakeholders to ensure that management of adjacent waters is consistent with park objectives.

Managing Visitor Impacts

McNabs and Lawlor Islands Provincial Park is located in the midst of Atlantic Canada's largest metropolitan area. The future development and management of the islands as a provincial park will result in increased visitation, which will, in turn, place greater pressures on the islands' heritage and park infrastructure. In addition, there is potential for conflicts among island visitors. These may include conflicts between various user groups (e.g. walkers versus bikers) or those seeking different experiences (e.g. solitude and a quiet escape versus a social experience involving a large group of people).

Through legislation, regulations, policy, and provisions of this management plan, the Department of Natural Resources will manage visitor use at McNabs and Lawlor Islands Provincial Park to ensure protection of the islands' heritage values and to enhance visitor experiences. Classification of the islands as a natural environment park clearly establishes that park management priorities will emphasize the protection of natural and cultural heritage. Establishment of a park zoning regime which designates approximately 90 per cent of the park in either environmental protection or resource conservation zones, is another indication of the Department's commitment to manage visitor use, minimizing impacts on the park.

The Department will undertake a number of other measures to minimize visitor impacts. Baseline data on visitor impacts will be collected and evaluated to establish island carrying capacities and develop visitor-management strategies. Management objectives will be established for specific areas of the park that will describe as precisely as possible the experiences to be offered visitors and the appropriate ecological and social conditions to accompany each experience. The impact of visitors on the social, physical, and ecological well-being of the park will be monitored and appropriate management techniques implemented to resolve undesirable consequences.

The Department of Natural Resources, in consultation with the park advisory committee, will identify monitoring priorities. These priorities may include salt marshes, sand dunes, climax forest stands, other sensitive ecosystems, selected fauna, and sensitive cultural sites. One of the primary reasons for choosing these monitoring priorities is to identify changes and determine if any specific change is part of a natural process or driven by undesirable impacts of visitor use.

As part of ongoing efforts to manage visitor impacts, the Department will provide information to visitors through park literature, interpretive signage, and park programs on management objectives and appropriate (and inappropriate) activities and behaviours. The Department, in conjunction with other agencies, partners, and stakeholders, will also enforce applicable legislation, regulations, policies, and guidelines to ensure that heritage values are protected and to prevent the occurrence of undesirable activities and user conflicts.

Waste Management

As part of the sustainable design approach, the Department of Natural Resources is committed to minimizing the impact of waste on the park environment. The Department recognizes that McNabs and Lawlor Islands Provincial Park is negatively affected by waste generated by park visitors as well as waste generated beyond its boundaries. Therefore, to be successful a waste management approach must address both sources of waste.

A solid waste management strategy will be developed by the Department of Natural Resources which includes a variety of techniques to reduce and/or eliminate waste. The strategy will include educational programs for park staff and operators, as well as park visitors. With respect to the latter, the Department will promote the concept of "pack it in, pack it out" to minimize the accumulation of waste in the park. The principles of the strategy will be the embodiment of the phrase "reduce, re-use, recycle." This approach recognizes that the best way to reduce waste is to avoid materials that become waste problems and to use materials that can either be re-used or recycled.

Where possible, the Department will participate in waste reduction, composting, and recycling programs implemented by Halifax Regional Municipality. The Department will also work to heighten public awareness of the negative impacts that waste generated outside of the park (e.g. domestic sewage, litter that washes ashore) can have on park values and visitor experiences.

Included in the waste management strategy will be policies on water conservation and waste water treatment.

Park Operations

Primary responsibility for the operational aspects of McNabs and Lawlor Islands Provincial Park will rest with the Department of Natural Resources' Regional Services Branch, Waverley office. This responsibility may vary, depending on the terms and conditions of any agreements entered into between the Department and its partners.

Park Season

The public will be invited to use McNabs and Lawlor Islands Provincial Park year-round, although facilities and services will normally be provided only during the park operating season as determined annually by DNR.

Staffing

Implementation of the management plan will require departmental staff resources for both operational and ongoing planning requirements. The extent of these resources will depend on future agreements between the Department and its partners. At a minimum, the present full-time caretaker as well as additional enforcement personnel will be required. The potential for additional staffing resources from partnerships and volunteers will be explored.

It is critical that staffing levels are sufficient to ensure long-term protection of the islands.

Park Boundary

McNabs and Lawlor Islands Provincial Park is 604 hectares in size. The park boundary encompasses all provincial Crown land on McNabs and Lawlor islands, consisting of 344 hectares on McNabs and 58 hectares Lawlors. In addition, 202 hectares of coastal waters, primarily in McNabs and Wreck coves, have been designated as part of the park. An additional 28 hectares on McNabs Island and 0.29 hectares on Lawlor Island are not included within the park designation. The majority of these lands are owned by the federal government and include Fort McNab National Historic Site of Canada (14 hectares), Hugonin Battery (8 hectares), and the Maugher Beach lighthouse (2 hectares). Three hectares of private land also remain on McNabs Island. Expansion of the park boundary, through the acquisition of additional lands, is proposed over the long term to enhance management of the park.

Park Boundary Offshore

Jurisdiction for the waters surrounding McNabs and Lawlor Islands currently rests with the federal government through Fisheries and Oceans Canada. The Halifax Port Authority also has some responsibility for waters surrounding the northern portion of McNabs Island.

As islands in the midst of Atlantic Canada's largest metropolitan areas, and one of Eastern Canada's busiest seaports, activities in the waters immediately surrounding the islands may affect the Province's ability to protect the park and ensure high-quality park visitor experiences. To facilitate park protection, while ensuring that island visitors enjoy a quality park experience, it would be desirable to extend the park boundary offshore beyond the ordinary low water mark around both islands. This would provide protection for the park's marine heritage.

The Department of Natural Resources will work with the federal government and the port authority to investigate the extension of park boundaries beyond ordinary low water mark around both islands, excluding the passage between Lawlor Island and McCormacks Beach Provincial Park. As an interim measure, the Department will work to have its concerns addressed through the existing regulatory powers of Fisheries and Oceans and/or the Halifax Port Authority.

Land Acquisition

Several small privately-owned properties remain on McNabs Island. In addition, the Fort Hugonin property has been declared surplus by the Department of National Defence, and other federal properties may also become surplus. The federal government owns the eastern-most tip of Lawlor Island and maintains a navigational aid there.

To ensure that the park's vision and objectives are not compromised by the management of adjacent private lands, the Province should acquire the remaining private properties on McNabs Island as soon as possible. Public ownership of these properties would enhance the Department's ability to protect park values and to provide for effective park development and management options. In addition, subject to suitable terms and conditions, provincial acquisition of the Fort Hugonin site is recommended. The acquisition of other federal properties on McNabs Island should also be explored.

In the interim, or where acquisition may not be possible, the Department will explore options for entering into formal agreements with adjacent landowners, as provided in the Provincial Parks Act, to ensure that adjoining private properties are managed in a manner that is compatible with park management objectives and values.

Public Safety Issues

Public safety at McNabs and Lawlor Islands Provincial Park presents many challenges. Because they are islands in Halifax Harbour, there may be a delay in emergency response. Fortifications and other facilities designed to 19th- and 20th-century military standards create some risk for visitors. Old foundations and wells, limited fire suppression measures, rugged terrain, changing weather conditions, and visitor activities (e.g., boating, swimming, and hiking), all must be considered when addressing public safety concerns.

Public safety measures will place an emphasis on accident prevention through the following:

- regular inspection, monitoring, and maintenance of park facilities and sites, and public use areas (i.e trail corridors)
- advising visitors of potential risks and hazards
- staff training
- adoption of emergency plans
- coordination of emergency services with other agencies (RCMP, Coast Guard, Halifax Regional Municipality, etc.).

The Department will undertake to ensure that public access and use of the islands are carried out as safely as possible. A hazard assessment and public safety plan will be completed, as well as regular inspections of park facilities.

Emergency Response

The Department of Natural Resources will prepare an emergency response plan in consultation with relevant agencies.

Fortifications and Other Military Facilities

Fortifications and other military facilities present a number of potential hazards to park visitors. These hazards primarily involve heights and the potential for falls causing injury. The Department will take appropriate action to reduce public safety risks. Measures may include signage, guardrails, construction of barriers, or removal of the risk.

Old Foundations and Abandoned Wells

McNabs and Lawlor islands contain numerous old foundations and abandoned wells, which may present a public safety concern. The Department will undertake to identify all such sites on both islands and develop and implement a plan to ensure that public safety concerns are addressed.

Fire Suppression

There is little or no infrastructure (water supply and distribution system) and limited on-site staff and equipment on McNabs and Lawlor islands for fighting fires. As islands, the park would also be difficult to access for municipal fire departments. A park fire suppression plan will be prepared by the Department of Natural Resources and, where possible, will contain measures to include co-operation and coordination from adjacent municipal fire departments and the Department of National Defence. In the interim, fire suppression measures will rely primarily on the Department's own fire-fighting resources available through local district offices and the Shubenacadie fire control centre.

The large number of trees damaged or downed by Hurricane Juan may significantly increase the risk of a severe fire on the islands. Depending on measures taken to reduce the potential of a major brown spruce long-horn beetle infestation, the Department of Natural Resources may have to be more proactive in reducing the fire risk. Measures may include the removal of some damaged trees, restricting access to some areas of the park, or improving fire fighting capabilities.

As part of fire suppression efforts, open fires will not be permitted and all uncontrolled fires will be aggressively fought. A fire ban will be enforced throughout the island.

Eroding Cliffs

Both islands include a number of steep, eroding cliffs, which may present a public safety hazard. The Department will not develop trails in these areas and, through a variety of methods (interpretive materials, signage, direct public contact, etc.), will discourage public activities from occurring in these areas.

Visitor Activities

While in the park or traveling to and from the mainland, park visitors participate in a variety of activities such as hiking, camping, swimming, or boating. To ensure a high standard of public safety, the Department will maintain park facilities and services to an appropriate standard, provide information on potential risks, and adopt appropriate emergency response plans for injuries.

Special Events

Provincial park policy and regulations currently allows special events by permit. Before granting a special event permit for McNabs and Lawlor Islands Provincial Park, proposed activities will be screened for compliance with the park management plan and assessed for potential impacts. Only those events which are consistent with the intent of the management plan will be considered. In reviewing applications for proposed events, advise may be sought from the park advisory committee.

7.0 PARTNERSHIPS

The Department of Natural Resources is committed to ensuring that the park's natural and cultural heritage values are protected and used wisely. The Department, however, has limited resources to

independently deliver the full range of facilities and services envisaged by this plan. Therefore, a community-based approach involving other government agencies, the private sector, and not-forprofit groups will be pursued. To this end, the Department of Natural Resources will consider a wide range of partnership initiatives, subject to their consistency with park management goals and objectives.

The Department has previously maintained a partnership with the Friends of McNabs Island Society for trail upkeep, orientation signage, maintenance of vault toilets and the provision of interpretive programs.

Partnership proposals will be reviewed by the Department and park advisory committee in accordance with Provincial policy.

8.0 IMPLEMENTATION STRATEGY

The plan will be implemented in four phases. The pace of implementation will depend on available resources and partnership agreements. It is recognized that government funding will cover only a portion of the costs of implementing this plan. Funding from private, corporate, and not-for-profit groups will be actively pursued. Innovative approaches, such as the creation of an Island Foundation, may be used to spearhead fundraising efforts. The Parks and Recreation Division of the Department of Natural Resources will play a lead role in facilitating implementation of this plan, while other potential partners may play a leadership role in implementing specific projects.

A Park Advisory Committee will continue over the long term to advise the Department about the ongoing planning, management, and operation of McNabs and Lawlor Islands Provincial Park. There may be a need to redefine the advisory committee mandate and restructure its membership to reflect the focus on plan implementation.

Before encouraging visitor increases, mechanisms will be put in place to monitor park visitor impacts on the island's heritage values. This monitoring will be used to help in designing visitor management strategies.

The proposed phasing of park implementation is designed to provide an operational park in three years of the adoption of this plan. An operational park can generally be defined as a site which provides at least a basic level of visitor facilities and services and is managed to ensure visitor safety and the protection of park values. In the interim (i.e. until McNabs and Lawlor Islands Provincial Park is operational), the Department will ensure management and operational decisions are consistent with this plan.

Although the plan has a 25-year time frame, it will be reviewed every 5 years or as otherwise required. In this way, adjustments can be made should conditions change substantially, or if significant new information becomes available.

The Department of Natural Resources will assume a lead role in plan implementation. By assuming a lead role, Natural Resources does not necessarily accept sole responsibility for the planning,

funding, delivery, or ongoing management and operation of a particular initiative. In some cases, the lead role may lie with potential partners who will ultimately assume responsibility for the delivery of a facility, service, or program.

Implementation - Phase I

Phase I of park development is intended to address key public safety issues, ensure protection of park values, and deliver basic facilities and services on McNabs Island (access, orientation and information, trails, toilets, potable water, etc.). Implementation will depend on availability of resources. Before implementation, all development proposals will be reviewed to ensure that they are consistent with the intent of the management plan. Where required by law, or to facilitate proper management decisions, the Department will require an environmental assessment prior to development to ensure that projects are appropriate and can be completed in an environmentally responsible manner. Environmental and other assessments will be conducted as needed to permit the management process to be adaptive to the outcomes of the assessment and ongoing environmental, social, and economic conditions.

- 1. Complete an inventory and evaluation of the full effects of Hurricane Juan on the islands, including an assessment of known or potential sites of archaeological interest.
- 2. Develop a fire suppression plan.
- 3. Identify and mitigate potential public safety hazards (e.g. damaged trees adjacent to public use areas, abandoned wells, Range Pier, Strawberry Battery).
- 4. Prepare an emergency response plan.
- 5. Establish ecological and cultural benchmarks and implement a monitoring program to determine park visitor impacts.
- 6. Develop and implement a sustainable use strategy.
- 7. Develop and implement a waste reduction strategy.
- 8. Conduct a more detailed assessment of the condition of the Conrad and Matthew Lynch homes, particularly with respect to their potential as an outdoor education centre, as well as the Jack Lynch home.
- 9. Establish a base level of support (funding, staffing, etc.) adequate to address ongoing issues, including asset and visitor management.
- 10. Assess existing trails to ensure they meets acceptable standards.
- 11. Assess existing campsites to determine which are suitable for use on an interim basis.
- 12. Review the Terms of Reference for the Park Advisory Committee.

13. Develop an enforcement policy.

Implementation - Phase II

Phase II is intended to provide a higher level of facilities and services.

- 1. Replace Range Pier.
- 2. Undertake urgent repairs to the Conrad, Matthew and Jack Lynch homes as required.
- 3. Develop and implement a park interpretive plan, including interpretation of the marine environment.
- 4. Develop the following park orientation information:
 - a park brochure
 - an orientation kiosk and associated information at Garrison and Range Piers
 - orientation signage at key points on McNabs Island
- 5. Assess, and where possible, develop a reliable water supply for the Jack Lynch (caretaker's) house, preferably with design capacity to also meet demands of the Conrad and Matthew Lynch homes, the proposed Old Military Road campground, and a public water supply for the Ives Cove Recreation Area.

In addition, during this phase a number of ongoing initiatives may commence, including additional studies (i.e., resource inventories) as necessary to better manage park values.

Implementation - Phase III

Phase III of park development is intended to provide a higher level of facilities and services and visitor experiences, with a focus on interpretation, outdoor education, and day-use facilities. Implementation will depend on availability of resources. Additional emphasis will be placed on establishing partnerships for the delivery of Phase III.

- 1. Develop a marketing and promotional plan.
- 2. Design, construct and install interpretive panels.
- 3. Develop interpretive programming (on and off site).
- 4. Provide change rooms, toilets, and opportunities for picnicking near Maugher Beach.
- 5. Provide picnicking and toilets at Fort Ives.
- 6. Develop a system to collect a park entrance fee from commercial ferry boat passengers.

Implementation - Phase IV

Phase IV of park development focuses on the delivery of a visitor services facility, completion of a formal camping area, development of an outdoor education centre, and an evaluation of an alternate public access point. These initiatives will depend on formal partnership agreements and the availability of resources.

- 1. Construct visitor services facility (food service, orientation, and interpretation) close to Maugher Beach. (Partner(s) and DNR).
- 2. Assess the feasibility of developing a public access point at Ives Cove.
- 3. Develop an outdoor education centre. (Partner(s) and DNR).
- 4. Construct a campground off Old Military Road.

9.0 PLAN REVIEW

The vision and objectives of this plan are intended to guide the management of McNabs and Lawlor Islands Provincial Park for the next 25 years. The Department of Natural Resources, in consultation with the Park Advisory Committee, will undertake a review of the park management plan every five years, or sooner if required. In considering any significant deviation from this plan, and prior to approving any such deviation, the Department will seek input from the Advisory Committee and provide opportunity for public review and comment.

Additionally, this document calls for the preparation of several other plans (e.g. interpretive plan, marketing and promotional plan, and various vegetation management plans). These will all be made available for public review and comment prior to adoption. Where substantial departure from this management plan is contemplated, public consultation will be held.

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FIGURES

- Figure 1 Regional Location Map
- Figure 2 Property Ownership Figure 3 Park Zoning
- Figure 4 Development Concept