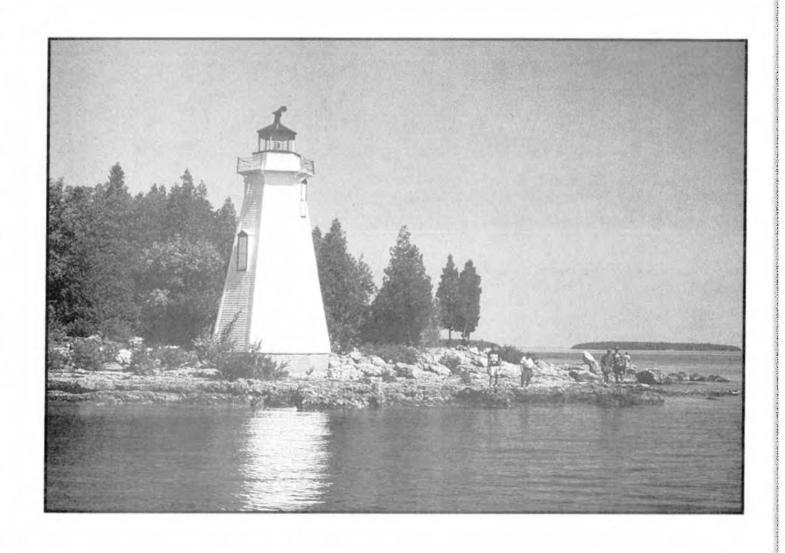
FATHOM FIVE NATIONAL MARINE PARK

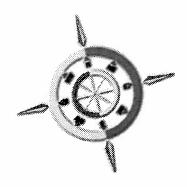
Management Plan







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Fathom Five National Marine Park

Management Plan

1998

Une version française de ce document est disponible sur demande à l'adresse suivante:

Parc marin national Fathom Five C.P. 189, Tobermory (Ontario) N0H 2R0 (519) 596-2233

FOREWORD

Sparkling blue waters, silent, tree-fringed islands, mysterious shipwrecks in the depths of a sweetwater sea.....Fathom Five National Marine Park protects for all time a part of our common heritage in which we, as Canadians, can take great pride. In the growing family of national parks and national historic sites, Fathom Five has the distinction of being the first national marine park, dedicated to the conservation and sustainable use of the marine ecosystem.

Management of marine ecosystems is a particular challenge. Because of the action of winds and currents, changes in the marine environment can occur rapidly over vast areas. Many species of fish and other marine wildlife range widely, without regard for man-made boundaries. Complex legislation and overlapping jurisdictions make the task of management more difficult. For these reasons, successful conservation of Fathom Five National Marine Park will require a high degree of co-operation between all levels of government and the public.

This management plan will provide direction for the activities of Parks Canada and our partners in conservation for the next 10 to 15 years. It was prepared with the assistance of the public, and we would like to invite you to join with us in bringing to life this vision of the Park's future. We cannot do it alone.

It gives us a great deal of pleasure to formally approve this management plan for Fathom Five National Marine Park.



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Sheila Copps

Minister of Canadian Heritage

Andy Mitchell

Secretary of State (Parks)

RECOMMENDED BY:

T. Lee Assistant Deputy Minister

Joe O'Brien Director General, Eastern Canada

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Table of Contents

Fathom Five National Marine Park Management Plan

1.0	The Management Plan	
2.0	National Marine Conservation Areas	
3.0	Fathom Five National Marine Park	
4.0	National Marine Conservation Area Description	4
	4.1 Location	4
	4.2 Physical Elements	4
	4.3 Biological Elements	
	4.4 Cultural Elements	6
	4.5 Current Uses	
	4.6 Relationship to Bruce Peninsula National Park	
	4.7 Recreational Opportunities	7
	4.8 Ecosystem Approach	7
5.0	Mission and Objectives	10
	5.1 Mission	10
	5.2 Objectives	10
	5.2.1 The Natural Environment	10
	5.2.2 The Cultural Environment	10
	5.2.3 Enjoying the Park	10
	5.2.4 Regional Integration	10
6.0	Marine Conservation Area Concept	12
	6.1 Guiding Principles for Planning	12
	6.2 A Vision for the Future	12
	6.3 Achieving the Vision	14
7.0	Zoning	15
	7.1 Zone I: Preservation	17
	7.2 Zone II: Natural Environment	17
	7.3 Zone III: Conservation	18
	7.4 Environmentally and Culturally Sensitive Sites	18
8.0	The Natural Environment	-20
	8.1 Ecosystem Management	20
	8.2 Aquatic Ecosystem Management	20
	8.3 Fish Management	20
	8.4 Terrestrial Ecosystem Management	21
	8.5 Aesthetic Resources and Natural Areas	22
	8.6 Rehabilitation	22
	8.7 Environmental Impact Assessment	23
	8.8 Monitoring Impacts of Use	23
	8.9 Natural Resource Information Base	24
	8.10 Ecosystem Analysis	24
	8.11 Research on Benchmark Ecosystems	25

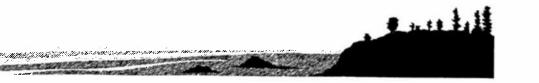




Table of Contents (continued)

Fathom Five National Marine Park Management Plan

9.0	The Cultura	I Environment
	9.1	Pre-European Contact Period
	9.2	Post-European Contact Period
	9.2.1	Terrestrial Components
	9.2.2	Submerged Aquatic Components
10.0	Enjoying Fa	thom Five
	10.1	Objectives
	10.2	Themes and Interpretation
	10.3	Appropriate Activities
	10.4	User Groups
		Scenic Sightseers
		Private Boaters
		Shoreline Users
		Tour-Boat Patrons
		Scuba Divers
		Ferry Users
		Educational Users
		Organized Groups
	10.4.9	Local and Regional Residents
11.0	Facilities an	d Services
	11.1	The Visitor Centre
	11.2	Marine Operations Base
	11.3	Diver Registration
	11.4	Park Offices
	11.5	Staff Housing
12.0	The Fathom	Five Land Base
13.0	Additional F	Public Services
	13.1	Public Safety
	13.2	Services for Disabled Persons
14.0	Regional Int	egration
15.0	Property Ma	unagement
16.0	Facility App	earance
18.0	Environmen	tal Impact Assessment47





Table of Contents (continued)

Fathom Five National Marine Park Management Plan

MAPS

Map 1: Regional Setting	
Map 2: Conservation Area Boundaries	9
Map 3: Land and Lakebed Zoning	16
APPENDICES	
Appendix A: Themes and Messages	49
Appendix B: Plans to be completed on approval of the Management Plan	50
Annendix C. Membership on Advisory Committee	7.1





The Management Plan

Fathom Five National Marine Park Management Plan

1.0 THE MANAGEMENT PLAN

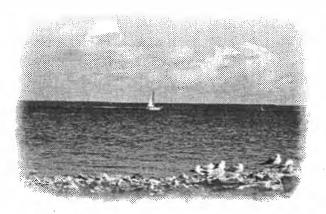
The purpose of this management plan is to provide long-term guidance for the management, development, operation, and public use of Fathom Five National Marine Park. Management of Fathom Five will be guided by the National Marine Conservation Areas Policy (a change in name from the former National Marine Park Policy) and the federal-provincial agreement which established Fathom Five. The name "Fathom Five National Marine Park" is retained throughout the management plan because it is the term used in the Federal-Provincial agreement.

The plan is not an end in itself, but rather a framework within which management decisions, detailed site planning, and subsequent implementation will take place. This plan for Fathom Five is intended to be strategic in nature: that is, it describes the Marine Conservation Area as it could ideally exist in 15 years, and then outlines the general strategies that must be adopted to make this vision a reality. Because each strategy could be achieved in different ways, and because economic, political, social, and environmental conditions will change in unpredictable ways over the life of the plan, it must allow flexibility in the means of implementation. Accordingly, it does not provide detailed instructions for the accomplishment of its objectives.



The Management Team is responsible for ensuring that the planning guidelines are followed. A business plan, updated annually, will be prepared to guide the implementation of the plan, which is subject to the availability of financial and staff resources, and the completion of the necessary studies. While the plan provides guidance based on a 15-year horizon, the main focus is on the first five years following plan approval. As required by the National Parks Act, a formal, comprehensive review of the plan will occur every five years, taking into account new information and changing circumstances. Opportunities for public review and comment will be provided as part of the review process. This plan, and subsequent revised management plans, will be tabled in Parliament.

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Fathom Five was established as Canada's first National Marine Conservation Area and it has served as a precedent for the planning and management of other national marine conservation areas. A preliminary management plan for Fathom Five was prepared in 1989 and is now replaced by this updated plan.

National Marine Conservation Areas

Fathom Five National Marine Park Management Plan

2.0 NATIONAL MARINE CONSERVATION AREAS

Many nations with extensive coastlines and fresh water resources, including Canada, have recognized an urgent need to conserve and protect their declining marine areas. To achieve this end, Canada has adopted a national system of marine conservation areas, with the long-term intent of representing the diversity of the marine environment. National marine conservation areas include the seabed (or lakebed in freshwater systems such as Fathom Five), its substrate, and — the fundamental component — the water column. Islands, wetlands, river estuaries, and other coastal lands may also be included.

Complex legislation and multiple jurisdictions make the task of managing both marine and freshwater ecosystems more difficult. In Ontario, for example, pollution abatement is the responsibility of the Ontario Ministry of the Environment, fisheries management is the responsibility of the Ontario Ministry of Natural Resources, and control of navigation is, as elsewhere in Canada, a function of Transport Canada. At the federal level, Parks Canada is the agency charged with the responsibility for establishing and managing national marine conservation areas. Therefore, to ensure the long-term ecological integrity of these protected areas, a high degree of cooperation between the public and all levels of government is required.

As described in the National Parks Act and the National Marine Conservation Areas Policy, the mandate of Parks Canada for marine conservation areas is to protect and conserve, for all time, natural marine areas of Canadian significance that are representative of the country's ocean and Great Lakes environments. Based on current scientific understanding, Parks Canada has designated 29 marine regions to represent the marine and aquatic environments of Canada. The National Parks Act provides interim legislation for management of national marine conservation areas; the National Marine Conservation Areas Policy provides general principles for their establishment, management, and use.

There is a fundamental difference between the mandate of marine conservation areas and terrestrial national parks. Where national parks traditionally attempt to prohuman activity, management of marine conservation areas seeks to ensure environmental sustainability. The intent is to ensure that the needs of the present generation are met without compromising the ability of the marine environment to meet the needs of future generations. Therefore, rather than adopt an approach that focuses exclusively on protection, the management philosophy for marine conservation areas includes a range of concepts, including preservation, sustainable resource use including harvest, and restoration of the natural marine environment.

For these reasons, the National Marine Conservation Areas Policy provides a zoning system that differs from the one used in terrestrial national parks in order to define and map appropriate levels of protection and use within the conservation area. The policy also provides for certain types of resource harvesting.

National marine conservation areas such as Fathom Five form a worldwide network of protected and productive marine ecosystems against which the impacts of local, regional, and global environmental change can be measured. As part of this network, Fathom Five will protect a part of the living diversity of our planet. With sound management practices, it will also serve as a protected area supporting the achievement of sustainable conservation strategies on a regional basis.

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Fathom Five National Marine Park

Fathom Five National Marine Park Management Plan

3.0 FATHOM FIVE NATIONAL MARINE PARK

Fathom Five National Marine Park has been established to represent the Georgian Bay Marine Region. As the first national marine conservation area in Canada, it provides Parks Canada with an opportunity to inform the public about the unique qualities of national marine conservation areas, and the differences between these areas and terrestrial national parks. As a nation, Canada has the world's longest coastline, and shares responsibility for the world's greatest freshwater lake system. Aquatic and marine resources are a special part of Canada and contribute to her identity.

Fathom Five was established, along with Bruce Peninsula National Park, by a federal-provincial agreement in July 1987. An important aspect of the agreement, which reflects the special nature of a marine conservation area, is that the Province of Ontario will continue to manage commercial and recreational fisheries within Fathom Five through a fisheries management agreement with Parks Canada. The exceptions are George Lake and what is known locally as "Bass Bay" (north of Stag Island) on Cove Island, neither of which are legally Great Lakes waters.

Fathom Five is renowned for its scenic water-and-island setting, dramatic "Niagara Escarpment" landscape, historic shipwrecks, and world-class scuba diving opportunities. For 15 years before it was established as a national marine conservation area, the waters of Fathom Five were managed as a provincial park under the jurisdiction of the Ministry of Natural Resources.

A Plan Concept developed for Fathom Five in 1989 proposed that conservation and protection of resources be given high priority, and that appropriate public use be encouraged. Public consultation on the concept was held in August 1989, in August 1991, and again in the spring of 1995. The input provided was invaluable in developing this management plan.

In 1990, the Niagara Escarpment was designated a Biosphere Reserve by the United Nations Education, Scientific, and Cultural Organization (UNESCO). The internationally recognized Biosphere Reserve Program promotes conservation of resources and sustained human use of ecosystems. Parts of Fathorn Five, along with parts of Bruce Peninsula National Park and other

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parks, are part of the Core Area of the Biosphere Reserve, a designation given to minimally disturbed natural areas within the Reserve. Core Areas are portions of a biosphere reserve that are protected by legislation, and in which the protection of resources is the overriding management principle. In marine areas, where the dominant wildlife can be seasonally transient, the Core Area may be representative of an important phase in the annual cycle.

Fathom Five is also a part of the Niagara Escarpment Parks System, a series of over 100 parks and protected areas stretching from Queenston to Tobermory, and linked by the Bruce Trail. As the northernmost park in the chain, and the only protected marine area, Fathom Five is an important element in the system.



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National Marine Park Description

Fathom Five National Marine Park Management Plan

4.0 NATIONAL MARINE PARK DESCRIPTION

4.1 Location

Fathom Five National Marine Park, situated adjacent to Tobermory, Ontario, is less than one day's drive from the major Southern Ontario population centres (see map 1). The conservation area's boundary outlines an area that is roughly triangular in shape (see Map 2). Parks Canada's jurisdiction includes the lakebed, water column, and all lands owned by Parks Canada within those boundaries.

The total size of the conservation area is approximately 11,175 hectares (27,600 acres) and includes 21 islands and smaller islets. There is also a land base near Tobermory. Private lands, including Devil, Doctor, and Middle Islands, exist within and adjacent to Fathom Five National Marine Park.

4.2 Physical Elements

Geology and Geomorphology

The Park provides a mix of aquatic and terrestrial features that are representative of the Georgian Bay Marine Region. The rocks of the Park area were laid down approximately 400 million years ago in a warm saltwater sea which then covered much of the continent. This resulted in a predominance of sedimentary rocks, notably limestone and dolomite, much of which were derived from the once-abundant coral reefs in the area. This bedrock was then shaped by the glaciers of at least four major glaciations over the past million years, as well as erosion by wind and water, forming the present coastline.

The islands of the conservation area, together with the mainland "land base" near Tobermory, provide a varied landscape. Some portions reflect the dramatic Niagara Escarpment, which is also found in the adjacent Bruce Peninsula National Park. The escarpment forms the eastern edge of the Michigan Basin, a geological structure into which sediments from several epicontinental seas were deposited. Other sections have more subtle, gently sloping lowland characteristics. Good examples of coastal landforms may be seen, including cliffs, caves, boulder beaches, raised beaches, rock pavements, and sea stacks.

Physiography and Bathymetry

Most of the conservation area is dominated by a midwater shelf which, at its deepest, ranges from 20-50 m in depth. Several shallow banks and shoals are found west of Cove Island, with depths of less than eight metres. The islands within the conservation area are exposed sections of the Niagara Escarpment. Like the Bruce Peninsula, they all slope gently to the southwest and have steep drop-offs to the northeast.

Where the Niagara Escarpment lies submerged east of Middle and Flowerpot Islands, an ancient spillway now influences the limnology of the Park, separating the shallow water shelf from the deeper water to the east. This submerged headland has a steep drop-off on the east side, ranging in depth from 60-100 m, and leads down to a deep profundal basin off the north coast of the Peninsula, with depths of more than 200 m.

Limnology

The Park boundary, in part, captures the physical features that play a major role in determining the trophic status and productivity of Georgian Bay. The Georgian Bay portion of the Park has deep, cold waters year-round, while the shallower Lake Huron side often becomes considerably warmer during the summer. The most striking feature is complex water exchange between Georgian Bay and Lake Huron. Water flow is vertically stratified: net deep current flow (depths > 25 m) is into Lake Huron from Georgian Bay, yet net surface flows can be in either direction. Most of the conservation area is ice-covered in winter and upwellings and seiches (wind-driven changes in water levels) are common physical phenomena.

The Park represents a healthy oligotrophic ecosystem — waters are clear, well oxygenated, low in nutrients, and with relatively low productivity. There is no evidence of significant pollution and any variations can be ascribed to natural phenomena. These conclusions, reached by assessing water chemistry, were further supported by biological studies of the microbial loop, sediment bioassays, plankton size fractionation, and vertebrate accumulation of contaminants.

Climate

The area has a maritime climate, with temperatures modified by the Great Lakes. Severe storms can blow up quickly and produce hazardous water conditions,



National Marine Park Description

Fathom Five National Marine Park Management Plan

particularly in fall and winter. Spring and early summer are noted for foggy conditions. These typical weather conditions have accounted for many of the shipwrecks that lie scattered throughout Fathom Five's waters.

4.3 Biological Elements

Shoreline vegetation

Aquatic plant growth is limited due to the physiography of the shoreline. In areas protected from high waves and where sediment can be deposited, aquatic vegetation is found. Common aquatic plants include pickerel-weed, pondweed, bulrush, and cattail. Significant locations for aquatic vegetation include Hay Bay, Bass Bay, and George Lake. Shrubs, stunted trees, and herbs often grow right down to the waterline on the coast and islands. Where coastal marshes occur, they are dominated by sedges, rushes and smartweed.

Although most of the islands have been logged in the past, they are now little disturbed and the forest cover has regrown. An interesting assemblage of plants exists on the islands and the mainland parts of the Park. Nineteen species are designated as rare or threatened provincially, including dwarf lake iris, Hill's thistle, and wall rue.

The Park, like the entire Bruce Peninsula, is well known for its diversity of ferns and orchids. Recent studies have found that the stunted eastern white cedars that grow on the cliff face are among the oldest trees in North America. Because of the harsh conditions, the cedars grow very slowly; a tree only a few feet high could well be over a thousand years old.

Plankton

Plankton include plants (phytoplankton) and animals (zooplankton) living in suspension in the water and drifting with the currents. Phytoplankton form the basis of the food chain in all aquatic environments. Zooplankton forage on phytoplankton and are, in turn, food for other zooplankton, for invertebrates, and some fish.

The Georgian Bay phytoplankton are generally composed of species associated with oligotrophic waters. In the conservation area, the phytoplankton community is dominated by diatoms and chrysonomid flagellates.

The zooplankton community is fairly typical of that

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found in the rest of the Great Lakes. Cyclopoid and calanoid copepods are the most numerous groups in the marine conservation area.

Benthic invertebrates

The lakebed, or benthic environment, is home to a variety of organisms, particularly invertebrates. In general, the nature of the lake bottom (rock, mud or sand) dictates what species occur where. Shallow areas in particular tend to have high numbers of invertebrates due the complexity of the substrate. Benthic invertebrates are a primary source of food for fish, particularly young fish and small forage fish such as minnows. In addition, these invertebrates are important indicators of water quality. Benthic invertebrates found in the conservation area include amphipods, oligochaetes, nematodes, sphaerium clams, snails, and insect larvae.

Fish

Water quality and aquatic habitat conditions in the marine conservation area are, by and large, close to their natural state. However, fish communities have undergone dramatic changes over the past hundred years, brought about directly, or indirectly, by human activity in the area.

Warm-water fish communities have been least affected. The shallow coastal areas of some of the islands, and of the Lake Huron portion of the Park, provide good habitat for such species as yellow perch, northern pike, and smallmouth bass.

The cold-water fish communities have been considerably changed. Over fishing, the invasion of the sea lamprey and the introduction of alewife and rainbow smelt have destabilized the native cold-water fish community of the conservation area. Most of the native deep-water ciscos are now extinct or have been extirpated, and those still present are in precarious shape. The most common native cold-water species today are lake white-fish, burbot and bloater.

The present commercial fishery within Fathom Five focuses primarily on the bloater, or chub as it is called locally, with stocked hybrid lake trout, whitefish, and yellow perch making up smaller components of the catch. Since the mid-1900s, bloater populations in the commercial fishery have increased relative to other species. This is due to the decline in its major predator,



National Marine Park Description

Fathom Five National Marine Park Management Plan

the lake trout, in response to over-harvesting, and invasion of the sea lamprey.

A considerable number of other species have geographic ranges which encompass the Park, including the native walleye, common white sucker, largemouth bass and lake herring, and the introduced rainbow trout, pink salmon and coho salmon.

Birds

The Park is an established migratory corridor for many bird species, notably raptors and neotropical migrants. Over 250 species have been recorded in the area, of which at least 80 are confirmed breeders. Breeding aquatic species within the conservation area include colonial waterbirds (e.g., double-crested cormorant, herring gull, great blue heron), wetland species (e.g., mallard, green-winged teal), and shorebirds (e.g., spotted sandpiper).

Many other species are commonly seen in the summer, including red-breasted merganser, common tern, Caspian tern and osprey. A variety of shorebird and waterfowl species migrate through the area, but large concentrations are not common. A few species are present for most of the year, including common loon, common merganser, ring-billed and herring gulls, and common goldeneye.

Mammals, Amphibians and Reptiles

A variety of mammals, reptiles, and amphibians, representative of this marine region inhabit the islands. Seventeen species of mammals can be found, though only the beaver is truly aquatic, occasionally making use of the shoreline and lake waters within the Park.

The Park is within the region of Canada that contains the greatest number of amphibians and reptiles. There are eight species of snake, including the northern water snake and the threatened Massasauga rattlesnake; two species of turtle, snapping and painted; and five species of frog, including the American toad. As well, there are five species of salamander, including triploid hybrids of the blue-spotted and Jefferson salamander.

Island Biogeography

The fauna of the islands has acted as a baseline, or "control", in studies to measure biodiversity in protected areas. For instance, testing species/area relations within

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an island biogeography study have provided a baseline for evaluating the effects of habitat fragmentation and insularization in areas outside the Park. Island biogeography also accounts for apparently unusual animal behaviour: meadow voles are preyed on by shrews, and therefore live in meadows, which shrews don't like, in order to avoid them. But on Bear's Rump, Flowerpot, and Cove Islands within Fathom Five, where there are no shrews, the voles have been able to expand into a different type of habitat than one would normally expect and can be found living in the forest.

4.4 Cultural Elements

The islands of Fathom Five, as well as the surrounding areas of the Bruce Peninsula, were originally home to Native peoples, who hunted, fished, and traded in the region for thousands of years. Archaeological evidence of this use, dating back to 1000 BC, has been found. Europeans settled in the upper portions of the Bruce Peninsula in the late 19th century. Early economic activities in the area focused on timber harvesting and mixed farming. As the timber industry declined in the early 1900s, commercial fishing became the primary economic activity, and Tobermory developed into a prominent fishing port. Commercial fishing has continued to the present, although it is much reduced.

With an increase in population, the mouth of Georgian Bay became an important crossroads for shipping. Despite the construction of several lighthouses, including those at Cove Island (erected 1856), Big Tub (erected 1885), and Flowerpot Island (erected 1897), many vessels were wrecked in the area.

Historic shipwrecks are considered one of the most distinctive cultural features of the marine conservation area. They are a reminder of the violent storms that frequently occur in the Main Channel, Georgian Bay and Lake Huron waters. Over 20 known historical wrecks, dating from the mid-1800s to the early 1900s are found within the boundaries of Fathom Five, many in shallow, clear water, making them readily accessible to divers, tourists and researchers.

Historic resources associated with all of these stages contribute to the heritage values of the conservation area.





The Management Plan

Fathom Five National Marine Park Management Plan

4.5 Current Uses

In more recent years, tourism has become a major economic pursuit throughout the Bruce Peninsula. Scuba diving, cruising and sailing, and touring of some the wrecks and islands are popular activities within Fathom Five.

Commercial fishing, once a mainstay of the local economy, is now carried out by only a few operators. Sport or recreational fishing has increased in importance within the conservation area and can be subdivided into two main types — the inshore, warm-water fishery focused primarily on smallmouth bass and northern pike, and the offshore cold-water sport fishery which is based on stocked populations of trout and salmon.

4.6 Relationship to Bruce Peninsula National Park

Bruce Peninsula National Park, also agreed to be established in 1987, is located adjacent to Fathom Five on either side of Highway 6 (see Map 1). This terrestrial park is intended to protect a representative example of the St. Lawrence Lowlands natural region. Within Bruce Peninsula National Park can be found the world-renowned Niagara Escarpment and Georgian Bay land-scape of rocky cliffs, boulder beaches, and exposed headlands, and the more subtle charms of the Lake Huron shore.

4.7 Recreational Opportunities

The northern Bruce Peninsula offers many attractive recreational opportunities, including Fathom Five and Bruce Peninsula National Park. Visitors to the northern part of the peninsula and to the parks can be divided into user groups, including scenic sightseers to Tobermory, private boaters, shoreline users (including hikers), tourboat patrons, scuba divers, ferry passengers, educational groups, organized groups and regional residents.

The Ontario Northland ferry service between Tobermory and Manitoulin Island carries approximately 250,000 travellers through the waters of the Park annually. Tourboats based in Tobermory, which provide pleasure cruises as well as water-taxi services to Flowerpot Island, carry some 40,000 visitors per year. The Bruce Trail, which skirts the Fathom Five land base, attracts numerous hikers, while the waters off Tobermory lure scuba

divers from around the world. The Diver Registration

Centre in Tobermory registers approximately 7,000

scuba divers annually, as well as 24,000 other visitors annually. Parks Canada's interim Visitor Information Centre in Tobermory attracts approximately 40,000 people annually. In the past two years, Flowerpot Island, the main recreation node within the conservation area's boundary, has attracted approximately 25,000 day-use visitors and nearly 500 campers and overnight boaters annually.

4.8 Ecosystem Approach

Parks Canada has adopted an ecosystem approach to the management of national parks and national marine conservation areas. This integrated approach involves regional conservation of "greater ecosystems", including core protected areas, buffer zones, appropriate adjacent land uses, and a high degree of co-operation among land managers.

Fathom Five National Marine Park, Bruce Peninsula National Park, and the Ministry of Natural Resources' nature reserves in St. Edmunds and Lindsay Townships complement each other by setting aside a diversity of lands and waters for conservation and protection purposes. They also offer a variety of natural experiences and recreational opportunities within easy reach of both local people and visitors to the region.

The recent designation of the Niagara Escarpment as an International Biosphere Reserve will encourage a coordinated, ecosystem-based approach to the management of natural areas and tourism opportunities in the Upper Bruce Peninsula Ecosystem.

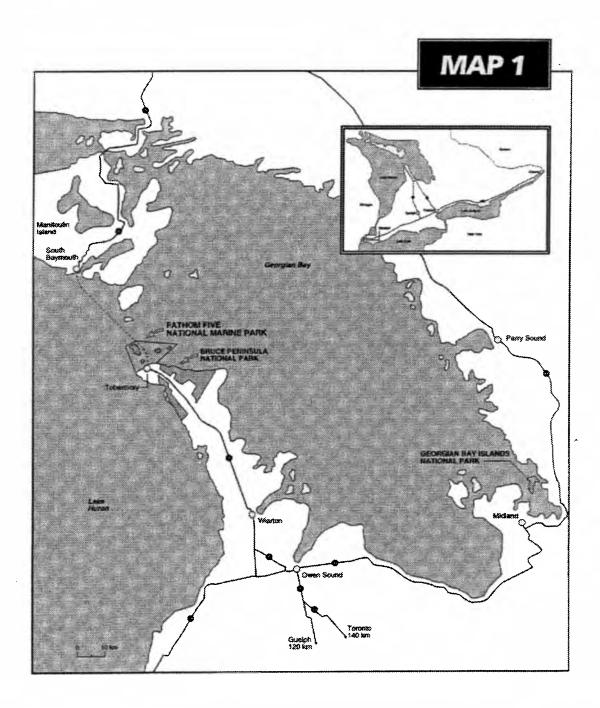




Regional Setting

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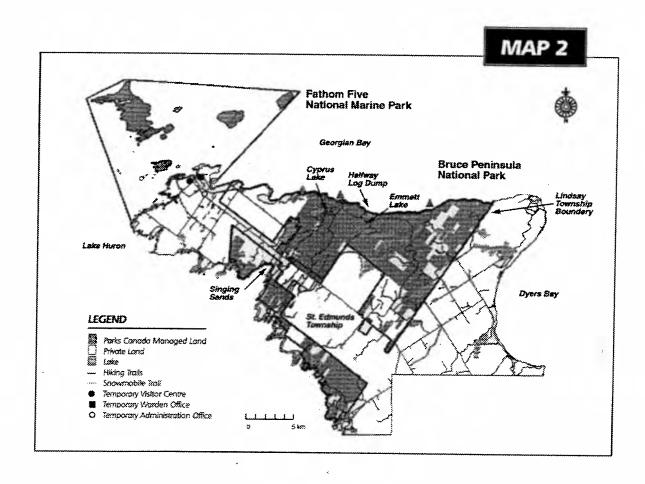
Fathom Five National Marine Park Management Plan





Conservation Area Boundaries

Fathom Five National Marine Park Management Plan



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Mission and Objectives

Fathom Five National Marine Park Management Plan

5.0 MISSION AND OBJECTIVES

5.1 Mission

Within the context of the Niagara Escarpment Biosphere Reserve, to work with partners to conserve and protect the Georgian Bay marine ecosystem, including the waters and lakebed, the undisturbed islands, the Niagara Escarpment, and the historic shipwrecks, and to provide high-quality experiences that inspire others to become committed stewards of our natural and cultural heritage.

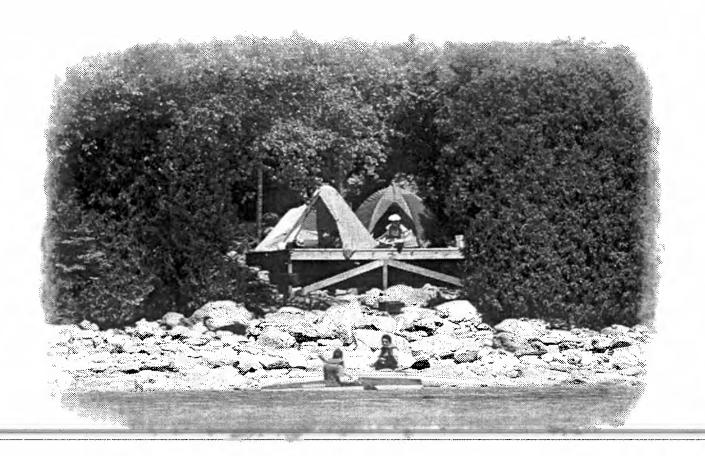
5.2 Objectives

The following objectives, to be achieved in co-operation with the Ministry of Natural Resources, the Township of St. Edmunds, and other concerned agencies, provide long-term management direction for Fathom Five and will guide the planning, development, management, and use of its resources.

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5.2.1 The Natural Environment

- To conserve and protect the aquatic and terrestrial environments in the marine conservation area, emphasizing significant and representative features and processes of the Georgian Bay Marine Region, including plant and animal species and related habitats and their relationships, unique or sensitive areas, shoreline environments, and geological features.
- To ensure that the maintenance of the structure and function of marine ecosystems will be the first priority when considering zoning and management of visitor use and renewable resource harvesting activities.
- To promote aquatic resource conservation on a regional level through the collection, analysis, and sharing of natural resource information, and by working co-operatively with other interested groups.



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Mission and Objectives

Fathom Five National Marine Park Management Plan

5.2.2 The Cultural Environment

- To protect and manage the conservation area's significant cultural resources, both submerged and terrestrial.
- To ensure that cultural resources are fully respected in planning, developing, and using Fathom Five through the appropriate application of Parks Canada's Cultural Resource Management Policy.

5.2.3 Enjoying the Park

- To offer Fathom Five's visitor groups and other regional audiences appropriate opportunities to understand, appreciate, and enjoy the natural and cultural values of the Park, and to create awareness of the importance of protecting the natural and cultural environment.
- To support a range of appropriate visitor activities in keeping with the natural environment experience provided by the Park.
- To provide a range of orientation, information, interpretation, and extension services and facilities to help visitors and the public better understand, protect, and safely enjoy the Park.
- To work co-operatively with local agencies and groups and other partners in the private sector to provide appropriate opportunities, activities, and services.

5.2.4 Regional Integration

- To integrate Fathom Five's conservation, education, and recreation programs with those of related federal, provincial, and municipal agencies, the private sector, and the First Nations in the region.
- To encourage and develop co-operative initiatives with appropriate agencies and institutions, the First Nations, and private interests, particularly those that have control of lands and waters adjacent to Fathom Five, in order to foster a more integrated approach to the planning and management of the marine environment.
- To promote Canadian identity by fostering pride in our magnificent landscapes and waterscapes, and to build constituency support for marine heritage conservation and for Parks Canada.
- To encourage continued provision by the private sector of facilities and services that are in harmony with

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- the objectives of marine area conservation, enhance the visitor's experience, and help to stabilize the local tourism economy.
- To provide opportunities for the public to provide input to planning and plan implementation for Fathom Five National Marine Park, through the Bruce/Fathom Five Advisory Committee and other means.
- To fulfill Fathom Five's role as a core protected area
 of the Niagara Escarpment Biosphere Reserve and
 the northern anchor of the Niagara Escarpment Parks
 System, and to have Parks Canada take a lead role on
 the appropriate co-ordinating committees.

Marine Park Concept



Fathom Five National Marine Park Management Plan

6.0 MARINE PARK CONCEPT

6.1 Guiding Principles for Planning

Seven underlying assumptions guided the development of the management plan.

- 1.Maintaining the structure and function of marine ecosystems must be the first priority when considering zoning, visitor use, and renewable resource harvesting. Parks Canada's efforts to encourage public understanding, appreciation, and enjoyment of national marine conservation areas and their resources must be firmly rooted in resource protection.
- 2.Fathom Five represents one of the best remaining opportunities on the Great Lakes for both open-water vistas and a natural shoreline/island experience. Protection of these natural shorelines is thus a key component of this plan. Similarly, Fathom Five harbours an important concentration of historic shipwrecks; these provided the impetus for the original founding of the Provincial Park and are a key resource to be protected for the education and enjoyment of this and future generations.
- 3.One of Parks Canada's responsibilities is to demonstrate sound environmental practices in its own operations and management in order to foster a sense of environmental responsibility among visitors. Accordingly, Fathom Five will be managed as an exemplary model of environmental stewardship.
- 4. Parks Canada cannot achieve its objectives for Fathom Five by working on its own. The issues and management problems — whether they deal with resource protection or with contributions to the regional tourism economy — are too complex and involve too many other interests to be solved by any one agency. Therefore, since assuming responsibility for Fathom Five in 1987, Parks Canada has sought opportunities to work with a variety of public- and private-sector partners in protecting resources and providing visitor experiences in order to fulfill common objectives. The Bruce/Fathom Five Advisory Committee, which provides advice on planning and operational issues to the Management Team, is one example of the mechanisms for cooperation developed to date. Parks Canada will continue to work closely with the Advisory Committee.

- 5.Fathom Five will continue to offer satisfying, highquality park experiences to its visitors, as well as a range of outreach and educational services to its various users. Exposure to key marine conservation area themes will be a major criterion in the planning and provision of new services and facilities targeted to visitor activity groups. In the short term, emphasis will be placed on serving priority target markets.
- 6.Fathom Five cannot be all things to all people. Parks Canada will focus its efforts on marine-related experiences and opportunities. Fathom Five's educational and recreational programs, facilities, and services are targeted towards specific markets in order to achieve optimal use of scarce staff and financial resources, as well as to maintain the high quality of Park experiences.
- 7.For 15 years before Fathom Five came under the jurisdiction of the federal government in 1987, it was operated as a provincial park. Therefore some visitor facilities and other Park infrastructure are already in place, although some essential facilities have not been provided because of ongoing financial restraint. Over the next 15 years, Parks Canada believes that the emphasis should be placed on protecting and restoring the Park's ecosystems, managing visitor opportunities and impacts, developing working arrangements with partners, and developing the most essential infrastructure, including basic services and facilities, and a visitor centre designed to serve key visitor activity groups.

6.2 A Vision for the Future

In the year 2012, at the end of the 15-year lifespan of this management plan, Fathom Five National Marine Park will be managed in a way that is consistent with its international status as a Core Area within the Niagara Escarpment Biosphere Reserve, and as Canada's first National Marine Conservation Area. In keeping with this role, Fathom Five will help protect important biological systems in co-operation with key partners such as the Ministry of Natural Resources, user groups, and the public. It will assist in demonstrating the concept of sustainability and provide opportunities to integrate research, monitoring, public experience, education, and training in the conservation and sustainable use of resources. In addition, as the first national marine conservation area in Canada, Fathom Five will provide a model for future

Marine Park Concept



Fathom Five National Marine Park Management Plan

As part of an active regional conservation network, the Park's managers will continue to work in close co-operation with partners in the public and private sectors to address common resource protection and environmental issues. In particular, the Province of Ontario will manage, in co-operation with Parks Canada, commercial and recreational fisheries within the Park. Natural resources will be managed on an ecosystem basis.

The resources of the Park will be managed using current scientific information. Systematic research and monitoring programs will be in place to support resource conservation and protection efforts. A comprehensive resource information base will be well established. Research data will be collected, both within and beyond Fathom Five's boundaries, and shared with Parks Canada's partners in order to obtain complete information on the structure, function, and condition of the Georgian Bay marine ecosystem. A suite of ecological indicators will be established for monitoring the success of our ability to maintain or enhance ecological integrity. For example, a viable self-sustaining population of lake trout may be considered one indication of successful resource management.

Fathom Five will be managed to conserve and protect one of the few relatively undisturbed island archipelagoes left in the Great Lakes. For the visitor, the islands provide an unsurpassed experience of both natural shorelines and open waters. To protect the natural shorelines, as well as the sensitive island resources, the majority of Fathom Five's facilities will be provided on the mainland; development on the islands will be limited

State-of-the-art visitor management techniques will be used to minimize the impact of visitors on heritage resources. Programs will be monitored to ensure that impacts arising from providing public opportunities to experience the Park remain within acceptable limits. Anticipated growth in visitation will have been accommodated primarily in the spring and fall shoulder seasons, and through day use. The Park will continue to be a destination for most visitors to the North Bruce and will continue to serve primarily the regional market.

A data base focusing on those who experience the area (and those who might visit it) will be well established.

The Park will continue to provide high-quality natural

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experiences that are consistent with Parks Canada's mandate and are based on appreciation of the natural environment. Since not all visitor needs or expectations can be met, the emphasis will be on providing appropriate opportunities for specific visitor groups: scenic sightseers, private boaters, shoreline users, tour-boat patrons, scuba divers, ferry users, educational users, organized groups, and regional residents. Scuba diving, which is the most complete way for visitors to experience the aquatic environment, will continue to be enjoyed safely and with no undue impact on resources resulting from the presence of visitors.

The educational role of Fathom Five will be particularly enhanced in order to explain the marine conservation area's role in contributing to a sustainable environment and to encourage a sense of environmental stewardship. Presentation of the interpretive messages, both within and outside Fathom Five, should enhance public understanding and appreciation of its heritage values. Developing interpretive programs and providing a permanent Visitor Centre will enable Fathom Five to serve local schools, the school boards of Grey and Bruce counties, and school groups and special interest groups from farther afield.

The Visitor Centre will provide the necessary infrastructure for organized groups, primarily group motor-coach tours, who now visit the area in very small numbers because their needs cannot currently be met. An increase in the numbers of educational groups and organized motor-coach tours is expected to enhance the tourism market in the shoulder seasons and provide greater stability to the North Bruce tourism economy.

A wide variety of public and private sector partnerships will be in place to assist Parks Canada in carrying out its obligations. Through increased partnerships, co-operative activities, and involvement in regional planning and resource management programs, Fathom Five will be managed, not in isolation, but as a key player in regional tourism and resource management.

Visitors and regional residents alike will have a high level of awareness of national park values, environmental stewardship, and the values of the resources protected within Fathom Five National Marine Park. The local community will feel they are full partners and will share



Marine Park Concept

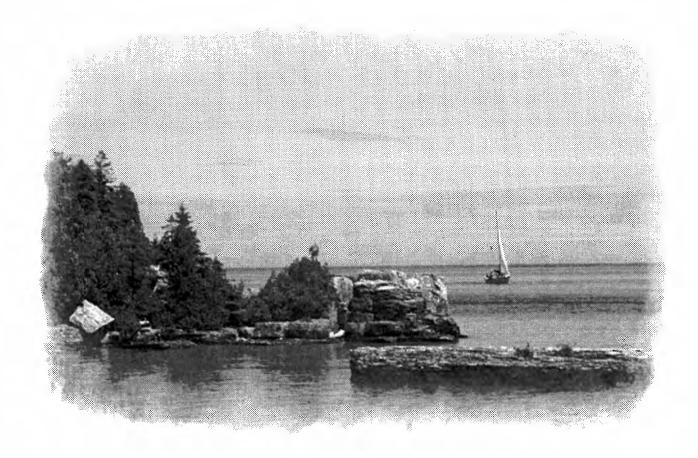
Fathom Five National Marine Park Management Plan

with Park staff a sense of pride and satisfaction in the fulfilment of Parks Canada's mandate.

6.3 Achieving the Vision

The initiatives in this plan will begin to achieve the long-term vision described above. As a package, the initiatives are modest in nature. The main emphasis is on research into Fathom Five's resources and visitors, and into appropriate ways to provide visitor, operational, and administrative requirements in a time of fiscal restraint. The Visitor Centre is the sole development of significant scale in this plan.

Approval of this management plan does not constitute automatic approval of funding for its implementation, which will depend on the availability of financial resources. Standard financial management funding approvals, and the directives of central agencies responsible for government spending and accountability, will be adhered to at all stages of implementation. Responsibility for implementation of the management plan rests with the Management Team.



Park Zoning



Fathom Five National Marine Park Management Plan

7.0 PARK ZONING

The Fathom Five management plan applies the zoning system set out in the revised National Marine Conservation Area Policy. This system provides different levels of protection and use in different portions of marine conservation areas. For a number of reasons — because commercial fishing is permitted, because the marine environment is constantly in transition, and because different agencies have overlapping jurisdiction over aquatic area management — national marine conservation area zoning requires an innovative and more flexible approach than is applied in terrestrial national parks.

The zones established in the National Marine Conservation Area Policy are different from those in the National Park Policy. In the Marine Conservation Area Policy, there are three zones:

- 1. Preservation
- 2. Natural Environment
- 3. Conservation

The zoning scheme used in this plan is an adaptation of the one described in the policy. Because Parks Canada has relatively little experience in applying the marine zoning system — Fathom Five is the first such application — it is anticipated that it may be necessary to reassess elements of the zoning system as time goes by, to ensure that they are workable.

Work will be undertaken during the first five years of this management plan towards developing a more comprehensive zoning plan. If, during the life of the plan, a change to the approved zoning is considered, public consultation on a proposed amendment to the management plan will be undertaken.

In a marine park, activities can have an effect on the water's surface, on the lake bottom, and in the water column. In applying the zoning system to Fathom Five, the planning team chose to designate the lakebed and the water column above it differently. The rationale is that many activities can take place in or on the water column without impacting upon the lakebed itself. Therefore the lakebed has been designated as Zone II in recognition that it is highly representative of the

Georgian Bay marine environment, while the water col

umn is designated Zone III to permit a variety of activities which do not impact negatively upon the lakebed. Map 3 shows the zoning for the lakebed and islands zones and the zoning for the water column and surface (map insert).

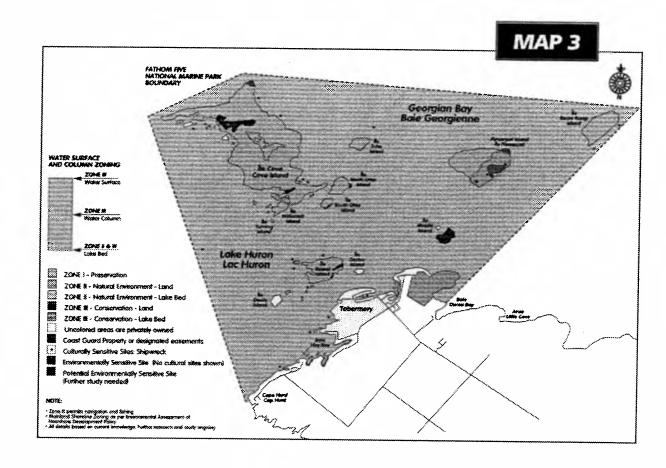
The following section includes both a description of the National Marine Conservation Area Zones, as adapted from the Parks Canada Policy, and an identification of those areas of Fathom Five designated under each zone.

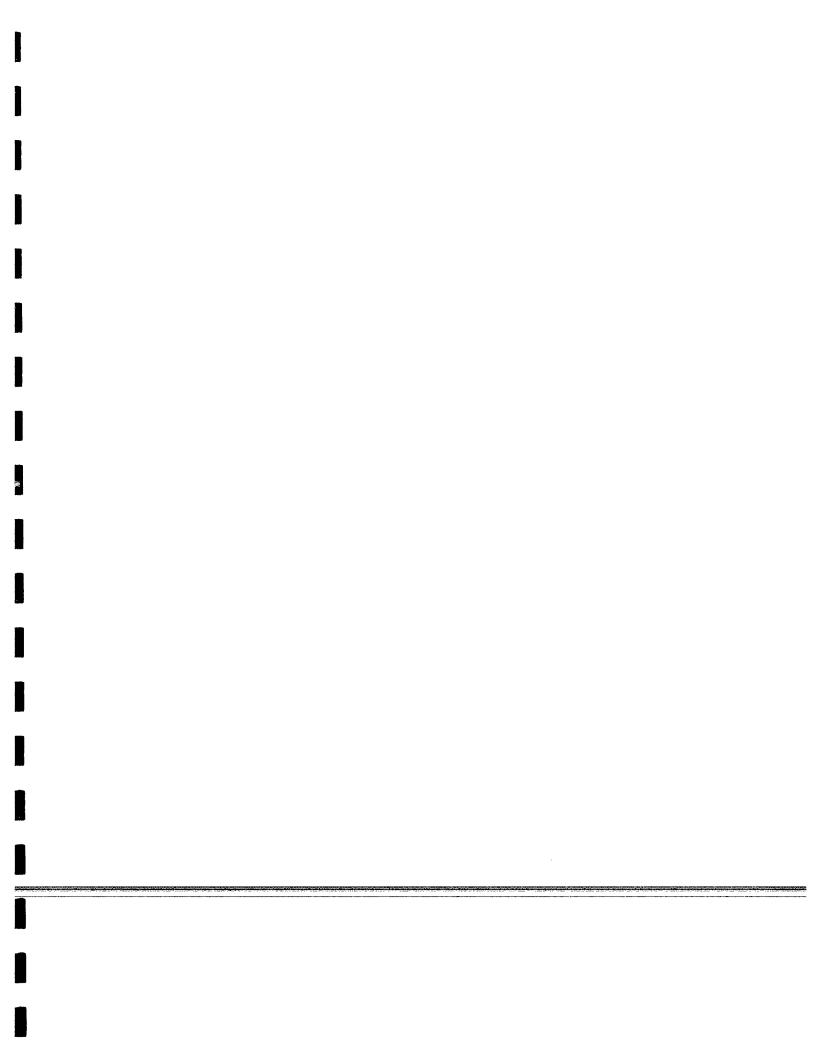


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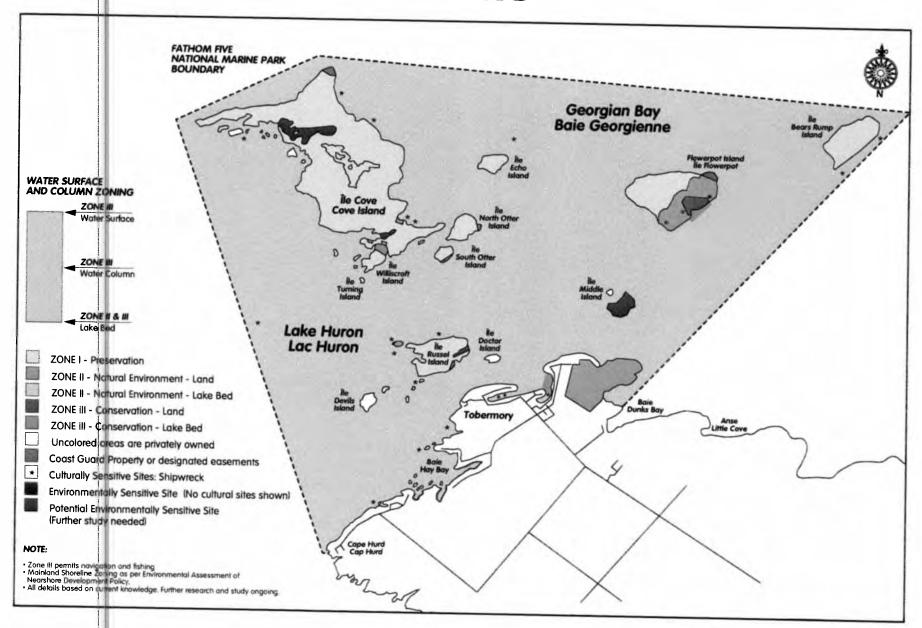
Land and Lakebed Zoning

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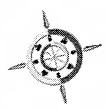




ZONING



Park Zoning



Fathom Five National Marine Park Management Plan

7.1 Zone I: Preservation

Areas are considered for Zone I designation when management objectives involve protecting:

- habitats deemed critical to the survival of depleted, vulnerable, threatened, or endangered species
- habitats of more common species and communities that are particularly sensitive to human disturbance
- unique or best examples of a natural feature, community, ecosystem, or process
- · significant cultural resources
- resources that are considered important for long-term environmental monitoring or ecological research.

In Zone I areas, resource protection is given priority and harvesting is not permitted. Visitor use is not normally allowed, but in certain cases, where the public educational benefits are high, provision may be made for limited and closely supervised visitor access. In the case of Fathom Five, casual shoreline day use with no fires and a "pack in, pack out" policy will continue to be permitted, as long as the present relatively low levels of use do not cause significant impacts. Permanent facilities will not be permitted unless they are essential for public safety or the protection of natural features.

The following areas have been designated Zone I:

- Bear's Rump Island
- · most of Cove Island
- · most of Russel Island
- North Otter Island
- South Otter Island
- · Echo Island
- · Williscroft Island
- Turning Island
- Harbour Island
- White Rock Island
- part of Flowerpot Island
- all of the smaller islands (all less than two hectares each) owned by the federal government.

Islands have a special effect on the way life colonizes them. In nature, predator-prey relationships (such as foxes preying on hares) and dramatic events (such as fire or human activity) can change the species composition of any area. Nature's reaction to this is to recolonize the area with opportunistic species, which migrate from adjacent areas to take the place of those that are gone. In an island situation, this migration is hindered by the surrounding water. The larger an island is, the less chance there is of an event extirpating any species. In addition, the more isolated an island is from the mainland, the less chance there is of recolonization.

In most of the Great Lakes, human activities have obscured these relationships, but not in Fathom Five. These islands, taken as a group, continue to represent the phenomenon of island biogeography very well. For example, Cove Island is the largest island in the Park and the only one that is home to black bears. While bears can move easily from island to island, Cove is the only one large enough to sustain them.

These islands are home to 19 rare and endangered plant species, and to an especially good example of the cliff-edge, old-growth forest of white cedar. Archaeological resources of potential national significance are also found there.

It is as an assemblage, rather than for the significance of any one island, that it is important to classify these islands Zone I. Undisturbed islands are now very rare in the Great Lakes basin, as well as being particularly sensitive to disturbance — and these islands are relatively undisturbed.

7.2 Zone II: Natural Environment

Areas are considered for Zone II designation when management objectives involve:

- creating a buffer zone around Zone I areas in order to enhance protection of their special habitats or features
- protecting highly representative areas that provide opportunities for non- consumptive recreational use and education in as natural a setting as possible
- conducting environmental monitoring and research projects in which public education is an integral part of the study program.

Park Zoning



Fathom Five National Marine Park Management Plan

Resource protection is given priority in these areas and, normally, resource harvesting is prohibited. In Fathom Five, however, the zoning includes the lakebed, the water column, and the surface. Since commercial fishing and angling take place essentially in the water column (with the exception of sinkers and weights sitting on the bottom, a technicality that will not be considered), the Zone II designation will not result in outright prohibition of resource harvesting.

Commercial fishing and angling will be managed under a Fisheries Management Plan developed jointly by Parks Canada and the Ministry of Natural Resources. No resource harvesting will be allowed on the dry-land areas of this zone.

Research, public education, and low-intensity outdoor recreation are permitted. Non-motorized transportation is encouraged where it is practical and safe. Only minimal facility development is allowed.

The following areas have been designated Zone II:

- · the northwest corner of Russel Island
- small areas in McRae's Harbour, Laronde's Harbour, and Tecumseh Cove on Cove Island
- · part of Flowerpot Island
- all of the Great Lakes lakebed in the Park, except for Laronde's Harbour and the part of Little Tub Harbour that is within the Park and south of a line between North Point and the Northland ferry dock
- the land on the Bruce Peninsula in St. Edmunds Township known as the land base.

A shoreline classification system has been prepared to regulate near-shore developments and encroachments related to private sector and Park activities.

7.3 Zone III: Conservation

Areas are considered for Zone III designation when management objectives involve:

- renewable resource harvesting and marine transportation activities
- providing opportunities for a broad spectrum of outdoor recreation and public education activities.

The following areas have been designated Zone III:

- Beachy Cove and the adjacent campground and picnic area lands on Flowerpot Island
- those portions of Tobermory Harbour within Park boundaries

(Note: inner Little Tub Harbour is not within the Park boundary).

The entire Great Lakes water column and surface area, and the area on Cove Island known as Bass Bay, are also designated Zone III in recognition of permission for commercial fishing and angling. In addition, the area of Canadian Coast Guard easements (for potential use for aids to navigation) on Russel Island, Flowerpot Island, North Otter Island, South Otter Island, and Cove Island are Zone III.

Resource conservation will be given priority in these areas, although a broad range of sustainable outdoor recreational and educational opportunities may be permitted. Facility development must respect the natural character of the marine conservation area. Various management techniques, including the Boating Restriction Regulations, will be used to segregate and control uses.

In Zone III areas, commercial and sports fishing is permitted, subject to the conservation requirements of the Fisheries Management Plan. Hunting is not permitted in Fathom Five. Permanent facilities for administration, public education, and visitor services are allowed.

7.4 Environmentally and Culturally Sensitive Sites

As an adjunct to zoning, certain sites, known or suspected to contain significant or sensitive natural or cultural resources requiring special management and monitoring, are designated "Environmentally Sensitive Sites" or "Culturally Sensitive Sites". Sensitive Site designation does not replace zoning, but is overlaid on the existing zone to allow additional management techniques to be used where necessary. It also indicates that further research may be required to ensure adequate conservation and protection of the special resources within a Sensitive Site.

Data collection and monitoring of resources within Sensitive Sites will be a priority over the life of this management plan. The degree of protection and type of management required at each site will be determined through a detailed assessment of the importance and



Fathom Five National Marine Park Management Plan

sensitivity of each resource. The newly developed Cultural Resource Management Guidelines will be followed.

As additional information on the natural and cultural resources of Fathom Five becomes available, the location of Sensitive Sites will be refined, new sites identified, and, if necessary, sites removed from the list. The addition or deletion of such sites will not require a revision to the management plan.

Map 3 indicates the location of currently identified Environmentally and Culturally Sensitive Sites within the Park. Due to their sensitivity to disturbance, none of the cultural sites on terrestrial portions of the Park, including its islands, are shown on the map.

Environmentally and Culturally Sensitive Sites include:

- · the marl pond on Flowerpot Island
- · the caves on Flowerpot Island
- certain archaeological sites, such as Native campsites, burial sites, etc. (not indicated on the map)
- part of the submerged Niagara Escarpment and deep trough east of Middle and Flowerpot Islands, recently identified as a major spillway in early postglacial times, as well as habitat for rare deep-water fish
- · Bass Bay on Cove Island
- · East Harbour (Griffon Cove) on Russel Island
- · all known shipwreck sites.
- Pot's Crook (a small bay on the south side of Hay Bay) and the Head of Hay Bay



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The Natural Environment

Fathom Five National Marine Park Management Plan

8.0 THE NATURAL ENVIRONMENT

8.1 Ecosystem Management

Parks Canada's primary goal is to conserve and protect the aquatic and terrestrial environments in Fathom Five National Marine Park, while working with others to foster conservation of the surrounding ecosystem. However, Parks Canada's mandate encompasses both resource protection and the provision of visitor experiences that lead to understanding and enjoyment. Without resource protection, there can be no natural outdoor experiences to enjoy; without public experience and understanding of natural ecosystems, support for environmental protection would be minimal.

The National Marine Conservation Areas Policy, which governs the management of marine conservation areas, recognizes the interdependence of the two elements of the mandate, clearly placing the emphasis on ecological integrity as the means of sustaining visitor use. The policy states that "Maintaining the structure and function of marine ecosystems will be a first priority when considering the zoning and management of visitor use and renewable resource harvesting activities."

8.2 Aquatic Ecosystem Management

Objectives:

- To conserve and protect the aquatic and terrestrial portions of Fathom Five as a representative area of the Georgian Bay Marine Region.
- To work with partners in the public and private sectors to demonstrate sustainable use of the Greater Park Ecosystem.

Guidelines:

- A basic inventory and analysis of Fathom Five will be completed to determine bottom structures, currents, species present, critical habitats, processes, and other unique, rare, or representative features in order to provide an ecological basis for natural resource management. Exotic species, such as zebra mussels, that are not a natural part of the Park's environment and may be having an impact on native species will be researched and may require active management.
- In addition, Parks Canada will work with purtners to undertake a basic inventory and analysis of the

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resources of the greater ecosystem as part of its contribution to the Biosphere Reserve program. This inventory and analysis will serve to identify ecological benchmarks for the ecosystem, so that future environmental change can be identified and its impact accurately assessed. Research requirements may be met through in-house research, contracts, cooperation with other land managers in the region, knowledgeable local sources (e.g., fishermen), or agreements with the academic community. Research must be co-ordinated and prioritized, and the results shared among the partners and with the public.

- Areas containing important species, habitats, or features will receive a high degree of protection.
 Restrictions on visitor activities or use may be necessary to ensure adequate protection.
- Parks Canada will refine its shoreline classification scheme to include an accounting of cumulative effects on the environment. This will be used to establish approvals for developments in the Park to ensure that ecological changes that occur are within acceptable limits.
- Recognizing that transboundary issues are especially
 acute in marine areas, Parks Canada will seek to
 establish management agreements with concerned
 partners in the public and private sectors in order to
 ensure appropriate conservation and protection of the
 aquatic environment. This approach to co-operative
 management is in keeping with the intent of the
 Biosphere Reserve program.
- The boundary of Fathom Five was established by the Province of Ontario primarily to protect the area's shipwrecks. Parks Canada will examine the adequacy of the Fathom Five boundary to encompass a representative example of the Georgian Bay Marine Region. This will include an evaluation of transboundary influences.

8.3 Fish Management

The National Marine Conservation Areas Policy permits renewable resource harvesting in national marine conservation areas, subject to protecting the area's ecosystem, maintaining viable stocks, and attaining the purpose and objectives of the marine conservation area. While both commercial and sport fishing are currently

The Natural Environment

Fathom Five National Marine Park Management Plan

pursued within Fathom Five, aquaculture (i.e. fish farming) is not.

In 1988, a Preliminary Fisheries Management Plan was signed with the Province of Ontario. This allows the Province to continue managing the fisheries resource, subject to protecting the ecosystem and to attaining the purpose and objectives of the marine conservation area.

Lake trout have largely disappeared from the area through a combination of over-harvesting and the introduction of the sea lamprey. Attempts to replace this native species with nonviable hybrids (splake) were successful only as "put, grow, and take" fisheries. Nonnative species of salmon have been introduced successfully on both the American and Canadian sides of the lakes and are evident in the vicinity of Fathom Five. Within Fathom Five, and to the north of the Park, are a number of shoals that were used historically by lake trout as spawning grounds. Parks Canada has assessed the feasibility of re-introducing lake trout to the area and believes that self-sustaining lake trout populations are a viable objective.

However, the non-native salmon species, which are still being stocked, compete with lake trout; continued stocking of salmon would limit the success of a lake trout reintroduction program. Before making a final decision, Parks Canada will undertake a further evaluation of the impact that introducing salmon has had on the ecosystem and will consult with the Ministry of Natural Resources and the public.

Objective:

 To ensure the long-term viability of natural fish stocks, and to protect rare and endangered species, where Fathom Five has the required habitat and natural viability is possible.

Guidelines:

 A monitoring program for fish resources will be established to assess population structures and harvest sustainability. To ensure that decisions on fisheries management are based on as complete and accurate information as possible, monitoring efforts must extend beyond the boundary in co-operation with the Province of Ontario and other partners. Present harvesting practices will be reassessed if the viability of

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Fathom Five's fish populations is jeopardized, and joint solutions will be sought with the Province of Ontario and commercial fishermen.

- A final Fisheries Management Plan will be developed in conjunction with the Ministry of Natural Resources, the First Nations, and other interest groups to detail management strategies for fisheries within the Park. Guidelines for rehabilitating or reintroducing native species and genetic stocks, protecting rare and endangered species, and maintaining the existing fish fauna and ecosystems will be included. The effects of exotic species on the ecosystem will be determined as part of this work.
- Fishing is permitted in Zone III areas. (All of the Great Lakes water surface and water column, and the area on Cove Island known as Bass Bay, are designated Zone III).
- Sport fishing (angling) in Georgian Bay and Lake Huron will mirror provincial regulations as per the federal-provincial agreement that established the Park.
- Although it does not contravene National Marine Conservation Areas Policy, aquaculture will not be permitted within Fathom Five because of the potential for damage to the limited amount of natural shoreline that still exists and the adverse pollutants that may be associated with such facilities (e.g., food and fish wastes).

8.4 Terrestrial Ecosystem Management

The islands of Fathom Five are special places. The archipelago contains a spectrum of islands of differing sizes at varying distances from the mainland. Because the islands remain relatively undisturbed, the influences of size and isolation are reflected in the types and numbers of plants and animals found there. The study of the effects caused by size and isolation is called island biogeography; it has provided important insights into the functioning of the more complex mainland ecosystems.

Research on these plant and wildlife communities has shown that each island shelters a unique assemblage of species. Islands are prone to more rapid loss, and slower replacement of species than the mainland, and so should be monitored closely to provide information that will differentiate between natural processes and the effects of human interference.



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The Natural Environment

Fathom Five National Marine Park Management Plan

The islands also preserve a number of attractive but sensitive geological features, such as caves, cliffs, and flowerpots, which clearly illustrate the natural processes of sedimentation, uplift, and solution. These features should also be protected from human impact, and natural geomorphological processes should be allowed to continue without interference.

Objective:

 To preserve Fathom Five's islands in an undisturbed state.

Guidelines:

- Island biogeography will be studied, including plant communities and wildlife distributions, populations, and interactions.
- Interference with the natural processes of the islands, both biological and geological (the formation and erosion of caves, cliffs, and flowerpots), will be minimized. Particular care will be taken to avoid accidental introductions of plants and animals.
- Public access to the caves will be controlled for reasons of both safety and resource protection. The public will be limited to the boardwalk cave mouth experience on Flowerpot Island.
- Alteration of lake-bottom bedrock to provide minimum water depths for public access will not be undertaken or permitted.
- Areas containing important species, habitats, or features will receive a high degree of protection.
 Restrictions may be necessary to ensure their populations remain viable.

8.5 Aesthetic Resources and Natural Areas

Fathom Five National Marine Park contains a wide range of aesthetic resources, which are one of the primary attractions for visitors to the Upper Bruce Peninsula. These resources include unusual geological structures such as the flowerpots, cliffs, and caves, as well as uninterrupted vistas of the lake and island mosaic. The islands and unaltered shorelines on the mainland also provide some of the last remaining undisturbed natural areas within the Lake Huron basin.

Aesthetic resources — that is, the natural scenery or the appearance of facilities and structures — are often over-

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looked during the assessment of developments within parks.

Protecting natural areas is at the very core of Parks Canada's mandate. Furthermore, natural areas of any description are becoming increasingly rare in Southern Ontario, adding increased emphasis to initiatives such as the designation of Fathom Five as a Core Area of the Niagara Escarpment Biosphere Reserve.

Objective:

 To preserve the natural shorelines of Fathom Five for both their aesthetic and their ecological qualities.

Guidelines:

Unaltered shoreline is increasingly rare in the Great Lakes, and all efforts will be made to preserve the natural shoreline remaining in Fathom Five. Aesthetic resources are an essential component of Fathom Five's natural resource base and will be given the required recognition and protection in any future development.

8.6 Rehabilitation

There are a number of previously disturbed ecosystems and sites within the Park. Efforts will be made to minimize the consequences of existing or proposed facilities and uses, and to restore previously disturbed ecosystems and sites to a natural state.

To date, no formal rehabilitation program for disturbed sites has been developed. As a result, impacts on the terrestrial ecosystems are accumulating. An assessment to establish the scope of the problem will be undertaken. Following this, a phased program will be established to offset the disturbance and rehabilitate damaged sites.

Re-establishment of fish species that previously existed within Fathom Five is dealt with in Section 8.3.

Objective:

 To rehabilitate disturbed ecosystem components and processes, and to restore them as closely as possible to their natural state.

Guidelines:

 Future disturbance to natural lands and ecosystems arising from human activity will be minimized to the

The Natural Environment

Fathom Five National Marine Park Management Plan

extent possible. No initiatives that result in disturbance will be undertaken until all necessary rehabilitation plans have been prepared and approved.

Parks Canada will determine the need for (and establish priorities for) rehabilitation of currently disturbed ecosystems and sites.

8.7 Environmental Impact Assessment

Parks Canada is committed to doing an environmental assessment before any development or action is undertaken on federal lands, or carried out using federal funds. Parks Canada, along with all other federal government departments and agencies, will adhere to the new Canadian Environmental Assessment Act and the Environmental Assessment Process for Policy and Program Proposals.

All operational, maintenance, and development activities within a national marine conservation area must be assessed to ensure that the nature and significance of environmental impacts is known. If a project has significant negative impacts, then mitigating strategies must be developed. Significant residual impacts might result in a decision to abandon or modify the proposed development. Likewise, all plans must be assessed to identify any environmental impacts associated with their implementation, as well as potential cumulative impacts and mitigating measures.

The shoreline classification scheme (as refined; see Aquatic Ecosystem Integrity guidelines, Section 8.2) will be used as a basis to minimize impacts on aesthetic values and biological resources.

Objective:

 To minimize the incremental degradation of natural ecosystems and cultural resources in an exemplary fashion, in part by adhering to the mandatory requirements of the Canadian Environmental Assessment Act (CEAA), the Environmental Assessment Process for Policy and Program Proposals, and other environmental assessment requirements as identified in National Directives.

Guidelines:

Before they are approved, all activities, developments, or planning-processes-will-be-subject-to-the appropriate level of environmental assessment

- required in order to protect existing vulnerable habitats, species, landforms, aesthetics, and cultural resources from human impact.
- To ensure long-term resource protection, a shoreline classification system and operational guidelines have been developed. This classification system will be refined and used in conjunction with CEAA to regulate near-shore developments, private encroachments, and encroachments related to Park activity.

8.8 Monitoring Impacts of Use

The effects of visitor use are gradual and cumulative, and may ultimately have a serious impact on natural ecosystems. The degradation can be quite visible, such as loss of understory vegetation around heavily used campsites, or less visible, such as increasing levels of aquatic bacteria due to grey-water discharge from boats in harbours.

A monitoring program is necessary to determine the effects of use on both natural and cultural resources. Details of the monitoring program will be established following a review of current visitor activities and Park operations, and their possible impacts. The results of this monitoring will be summarized regularly and made available to the public through State of the Parks reports, operational reports, and the review of the management plan scheduled to take place five years after the plan is approved.

Objective:

 To determine the effects of visitor use, activities, and Park operations on Park resources, and to record the impacts in order to provide information that is valuable in determining appropriate management actions.

Guidelines:

- Parks Canada will systematically monitor and record the impacts of visitor use, activities, and Park operations. Water quality, cumulative impacts, ecosystem degradation, and aesthetic concerns will all be monitored.
- Gathering and monitoring information on resources within Sensitive Sites and Zone I areas will be a priority.



The Natural Environment

Fathom Five National Marine Park Management Plan

- To demonstrate environmental leadership through example, Parks Canada will ensure that its own operations reflect the principles of stewardship. Daily operations and maintenance activities will be carried out in the most environmentally sound manner possible. Programs to reduce, re-use, repair, and recycle will be instituted, the last in co-operation with the Township of St. Edmunds.
- A "pack in, pack out" policy will be instituted for the islands.

8.9 Natural Resource Information Base

Information on the natural resources of Fathom Five is available from a number of sources. These include historical accounts, local sources such as fishermen, and specific studies conducted by various agencies and groups. To be able to use this information effectively and to minimize the duplication of efforts, it must be organized and made readily accessible to resource planners and managers. Considerable additional information is required to supplement existing data, so that decisions can be made on the basis of sound knowledge.

Where possible, information will be encoded in the Geographical Information System (GIS) used in the Park. Other information (reports, non-geographic data, etc.) will be organized in a comprehensive system so as to be readily accessible. New data should be collected in a way that is compatible with the GIS currently in use.

Objective:

• To develop and maintain a comprehensive resource information base at the Park.

Guidelines:

- Parks Canada will complete a basic resource inventory for Fathom Five.
- A geographically based information system on the resources of the marine conservation area, and the Georgian Bay/Lake Huron ecosystem within which it is located, will be developed and maintained.
- A resource monitoring program will be established to provide information for assessing the success of resource management efforts.

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8.10 Ecosystem Analysis

To date, considerable information has been collected on the natural resources of the islands and the water quality within Fathom Five National Marine Park. This existing material has been reviewed and, consequently, those resource areas that require further investigation have been identified.

When the missing information is acquired, the entire resource base will be analyzed to establish the importance of various resources. This step will form part of the Resource Description and Analysis stage of the Natural Resource Management Process.

In addition to providing valuable input to management planning, periodic summaries of this resource information will be used in the State of the Park and State of the Environment reports, which must be prepared at regular intervals for Parliament. Natural resource data will also play an important role in assisting Parks Canada's staff to communicate Fathom Five's stories to the public.

Objective:

To incorporate up-to-date information on the ecosystem components and processes into the planning process for the Fathom Five ecosystem.

Guidelines:

- A Resource Description and Analysis report will be prepared, upon completion of basic resource inventory, and updated relative to the management plan review schedule.
- Periodic updated summaries of resource information regarding ecological integrity will be prepared and used in the State of the Parks report to provide management and the public with pertinent information on the condition of Fathom Five's resources.
- A Park Ecosystem Conservation Plan will be completed and implemented, which will establish a comprehensive assessment and resolution process for resources. This process will define problems, assess solutions, define necessary financial resources, and set implementation priorities.

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The Natural Environment

Fathom Five National Marine Park Management Plan

8.11 Research on Benchmark Ecosystems

Fathom Five represents the Great Lakes generally, and the Georgian Bay Marine Region specifically, within the national marine parks system.

Our understanding of Fathom Five, its component parts, and its surroundings can be furthered through research. The marine conservation area can also contribute to an improved understanding of similar aquatic ecosystems. By maintaining Fathom Five in a natural state as a "benchmark" or reference level through conservation and protection, insights into the effects of ecosystem degradation in other locations on the Great Lakes can be better understood.

The maintenance of Fathom Five National Marine Park under stable and consistent management will make the Park attractive to outside groups involved in long-term research.

Objective:

To maintain Fathom Five as a protected ecosystem
where nondestructive research is encouraged, to
increase knowledge of the area, and to assist in managing the marine conservation area through co-operation with outside agencies and experts.

- Parks Canada encourages nondestructive research within Fathom Five, both by staff and through cooperation with outside agencies and groups.
- Parks Canada will assist in research endeavours and partnership initiatives by exploring options for the use of existing Park structures as research facilities.



The Cultural Environment

Fathom Five National Marine Park Management Plan

9.0 THE CULTURAL ENVIRONMENT

Fathom Five National Marine Park contains significant examples of both archaeological and historical resources. Important resources are found both under water and on land; some possess considerable potential for interpretation. Removal of cultural resources from the Park is prohibited.

General Objective:

 To protect and manage those significant cultural resources associated with both the terrestrial and submerged components of Fathom Five.

Objectives:

- To implement the comprehensive Cultural Resources Management Plan for the inventory, assessment, protection, and monitoring of Fathom Five's cultural resources.
- To minimize the degradation of cultural resources through a program of archaeological assessments.
- To ensure that protection of significant cultural resource sites is given high priority in both development and operations within Fathom Five.
- To conserve, when appropriate, cultural artifacts of major significance.
- To repatriate, whenever possible, significant marinerelated artifacts that have already been removed from Fathom Five.
- To consult with local First Nations on all issues relating to aboriginal history and cultural artifacts.

Guidelines:

- A comprehensive Cultural Resource Management Plan has been prepared to outline detailed techniques and strategies for cultural resource protection, to direct future inventory programs, to rate the significance of known sites, and to determine interpretive potential.
- An inventory program will be established to maintain an accurate and on-going record of cultural resource sites and the condition of these sites.
- A monitoring program will be established to assess regularly the condition of cultural resources.

A Park Collections Management Plan will be developed. The collections will be housed in Park facilities within St. Edmunds Township, and portions of the collection may be used for display and public interpretation purposes. The Vail Collection of local marine heritage artifacts, assembled by the late Orrie Vail, and transferred to the federal government as part of the Federal-Provincial Agreement establishing Fathom Five as a national marine park, will be managed under this guideline.

9.1 Pre-European Contact Period

There is evidence of an extensive Pre-European Contact First Nations culture throughout the islands and mainland of Fathom Five National Marine Park. Several significant campsites and ceremonial sites have been located to date.

Guideline:

 Local First Nations authorities will be consulted in the development of any management strategy related to Pre-European Contact First Nations culture.

9.2 Post-European Contact Period

The Post-European Contact resources in Fathom Five occur in both the terrestrial and submerged aquatic components of the Park. They will be dealt with separately due to the complexities and uncertainties associated with the management of submerged cultural resources.

9.2.1 Terrestrial Components

Cultural resources found on the islands and the land base of Fathom Five include those related to First Nations occupation and use, pioneer settlement, economic development (fishing and lumbering), Great Lakes navigation (lightstations), and Great Lakes shipping and boating (shipwrecks and associated artifacts).

As part of the Cultural Resource Management Plan, a strategy for the management of the artifact collection will be established in order to honour the commitments agreed to when the Vail Collection was turned over to Parks Canada by the Province.

A log cabin is located on the leased Kimball cottage property adjacent to the Fathom Five land base. This property will be transferred from the Ministry of Natural Resources to Parks Canada and the Park boundary will

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The Cultural Environment

Fathom Five National Marine Park Management Plan

be adjusted accordingly. Once the land transfer occurs, Parks Canada will be responsible for protecting and maintaining this cultural resource.

The three Canadian Coast Guard lightstations — Cove Island (erected 1856), Big Tub (erected 1885), and Flowerpot Island (erected 1897) — are of major historical importance and have a direct link to the interpretive themes associated with navigation. A Memorandum of Understanding with Transport Canada (1989) states that the Canadian Coast Guard will respect the historical importance of these structures and their associated buildings, and will not undertake any changes to their function or appearance without first consulting Parks Canada.

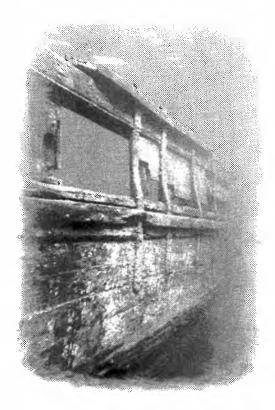
Guidelines:

- All structures in the Park over 40 years old will be assessed by the Federal Heritage Building Review Office (FHBRO) to determine their significance, as required under federal government policy.
- Conservation requirements associated with the pioneer log cabin will be determined, once it is transferred to Parks Canada.
- Parks Canada will establish more detailed agreements with Transport Canada (Canadian Coast Guard) for the protection of, access to, and interpretation of lightstations within and adjacent to the Park (refer to guideline on page 68 regarding possible transfer of surplus lands).
- Parks Canada will consult with First Nations on all matters relating to aboriginal history, sites in Fathom Five associated with aboriginal culture, the interpretation of First Nations' history, and the appropriate use of cultural artifacts. First Nations' burial sites will not be disturbed. The location of aboriginal cultural sites, including burials, will not be made public.
- The Kimball cabin will be transferred from the Ministry of Natural Resources to Parks Canada, and the Park boundaries will be adjusted accordingly.

9.2.2 Submerged Aquatic Components

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Shipwrecks form the major cultural resource associated with the submerged component of the Park: there are more than 20 known historical wrecks within the boundaries of Pathom Pive. The shipwrecks are extensively used for recreational sport diving and, in some cases, for



viewing by non-divers. In addition, other cultural resources may exist throughout the submerged area.

The Collections Management Plan prepared for the Park will describe procedures for the handling of marine artifacts and their storage, use, and protection. Operational plans will be developed to ensure adequate protection, provide guidelines for recreational use, and outline the visual inspections and scientific program that will be put in place to monitor the condition of the shipwrecks. If funding is available and where deemed appropriate, reinforcement and stabilization of deteriorated wrecks may be undertaken for reasons of both cultural resource protection and public safety.

Ongoing research and resource inventories will continue. The side-scan sonar survey, the shipwreck conservation study, and the wreck site mapping projects will be completed and, in some cases, may continue on a regular schedule as part of monitoring requirements. These efforts will document the present condition and rate of deterioration of the wrecks, will locate and evaluate any additional wreck sites, and may also document other submerged cultural features.

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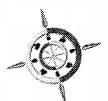
Fathom Five National Marine Park Management Plan

Where required for public safety, wreck protection, or other resource protection, the Boating Restriction Regulations will continue to be used. Other pertinent controls and legislation may also be used if required.

Guidelines:

- The detailed histories of shipwrecks will be researched and the historical significance of each determined.
- In keeping with the spirit of the National Marine Conservation Areas Policy's prohibition on ocean dumping, the deliberate sinking of vessels is prohibited in Fathom Five National Marine Park.
- Conservation requirements will be met before allowing recreational diving on any newly discovered wrecks.
- Boating Restriction Regulations or other applicable legislation will be used to control vessel traffic and activities in the vicinity of submerged cultural sites, or for reasons of public safety or protection of natural resources.
- A wreck-monitoring program will be established to assess impacts on these cultural resources and identify resource protection needs.

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Fathom Five National Marine Park Management Plan

10.0 ENJOYING FATHOM FIVE

Parks Canada encourages public understanding, appreciation, and enjoyment of marine heritage through opportunities to experience Fathom Five National Marine Park in ways that are appropriate to its natural values. A satisfying, high-quality experience is not the ultimate objective, however. Parks Canada recognizes that attitudes towards environmental issues range along a continuum from awareness, understanding, and valuing to taking action. By providing satisfying experiences of Fathom Five, Parks Canada hopes that visitors will come to understand and value their environment, and will be inspired to take action themselves for its protection.

In pursuing the objective of environmental citizenship, Parks Canada will provide visitors with opportunities to enjoy a variety of experiences that are appropriate to national marine conservation area values, are not harmful to the natural or cultural resources on which these experiences are based, and respond to the needs of visitors. In order to do this, Parks Canada has developed the Visitor Activity Management Process (VAMP), which was followed in the development of the visitor-related initiatives of this management plan. The management plan does not, however, address in detail how those visitor opportunities will be provided. This information will be contained in a more comprehensive Park Service Plan, to be prepared following approval of the management plan.

Fathom Five National Marine Park and Bruce Peninsula National Park are only part of the package of opportunities that draw visitors to the Upper Bruce Peninsula. Accordingly, it is important for all interests concerned with tourism on a regional scale to co-operate in making potential visitors aware of the Upper Bruce Peninsula and its attractions. Resource protection and visitor opportunities are linked: not only will satisfying experiences encourage people to be responsible for the environment, but opportunities that can be sustained over the long term without a serious impact on resources will provide stability for the tourism-based economy of the region.

10.1 Objectives

To foster-pride in Fathom-Five's valuable heritage resources among visitors, local residents and Parks

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Canada staff, and to engender a sense that all Canadians have a role to play in the protection of these resources.

- To ensure that all visitors are aware that they are in a national marine conservation area, and to build a broader base of support for Fathom Five and the entire Parks Canada system of protected areas.
- To provide, and to work with others to develop, communications programs that reveal meaning and create understanding about the natural and cultural heritage of Fathom Five National Marine Park.
- To reach all visitors with at least basic interpretive messages, targeting in-Park communication services to each visitor group according to its stated priority and needs.
- To actively seek partners in the private and public sectors who share environmental stewardship and national park values, to provide services to visitors, and to enhance Parks Canada's communications programs when appropriate.

10.2 Themes and Interpretation

If the public is to understand, appreciate, and fully enjoy Fathom Five, the Park's resources, their significance, and their relationship to our lives must be conveyed to them. Parks Canada does this by providing information on specific themes related to the natural and cultural heritage resources of the marine conservation area.

The overall theme for Fathom Five National Marine Park is:

"Legacy in a Sweetwater Sea".

"Sweetwater Sea" is one translation of the phrase used by Samuel de Champlain in his description of Georgian Bay. The explorer likened the Bruce Peninsula to his native Brittany and indicated that it was almost surrounded on all sides by "la mer douce" — a sea of freshwater or "sweetwater."

The communications messages for Fathom Five National Marine Park can be organized according to the following themes:

- 1. Regional Ecosystems
- 2. The Fathom Five Story





Fathom Five National Marine Park Management Plan

- 3. Taking Action for the Environment
- 4. Global Environmental Issues
- 5. Departmental Messages

For a more detailed review of Park themes and messages, see Appendix A.

Guidelines:

- The approved Park themes will form the basis of the communications program for Fathom Five National Marine Park. This program will attempt to create an understanding of Park themes.
- Parks Canada will collect information related to Park themes on an ongoing basis in order to make its communications program more accurate and more interesting.
- Information on resource protection, public safety, and emergency procedures will be made available to all visitors and will be emphasized for the leaders of educational and other youth groups.

10.3 Appropriate Activities

Many activities undertaken by visitors to the Park relate well to the Park's mandate. Other activities run contrary to it. Parks Canada has undertaken an analysis of each of the major activities and determined which are acceptable and which are not.

- 1. The following activities are appropriate in the Park and may be supported by facilities and services:
- · day hiking
- picnicking
- nature study, birding, photography, painting
- sightseeing
- interpretation program use
- scuba diving /snorkelling
- cross-country skiing (on the land base)

- overnight cruising and sailing (power and sail)
- day cruising and sailing
- special groups touring
- semi-primitive camping

- · swimming, wading, and sunbathing
- · sport fishing
- · organized touring
- · sea kayaking
- · canoeing
- · windsurfing
- · sledding/tobogganing
- · snowshoeing
- ice skating.
- 2. The following activities will be discouraged, controlled, or restricted for reasons of public safety or resource conservation:
- snowmobiling on the ice of Georgian Bay/Lake Huron only
- · personal water craft use.
- 3. The following activities will be prohibited in the Park for reasons of public safety, user conflict, or resource conservation:
- bicycling on hiking trails
- hang-gliding
- · horseback riding
- · all-terrain vehicle use
- · winter camping
- · rock climbing
- caving (until the approval of the Cave Management Plan)
- snowmobiling, except on the ice of Georgian Bay/Lake Huron.

10.4 User Groups

As part of the Visitor Activity Management Process, Parks Canada divided visitors into groups based on the experiences they seek. It is recognized, however, that a single individual may be part of more than one of these groups at different times.

For Fathom Five, the visitor groups are:

Scenic Sightseers



Fathom Five National Marine Park Management Plan

- · Private Boaters
- · Shoreline Users
- · Tour-Boat Patrons
- Scuba Divers
- Ferry Users
- Organized Groups
- · Educational Users
- · Local and Regional Residents.

As part of the management planning process, an analysis of the Fathom Five visitor groups was carried out. Parks Canada recognizes that each visitor group has different requirements for reception, orientation, information on interpretive themes and recreational opportunities, and support services and facilities. The following section summarizes the results of this analysis, and provides guidelines for meeting visitors' needs.

10.4.1 Scenic Sightseers

All local residents (plus visitors to the northern Bruce Peninsula) fit into this group, including campers at Bruce Peninsula National Park and at private campgrounds, motel users, and cottagers. There are approximately 350,000 visitors in this group. Tobermory is the local point of origin or "jumping off" point for all other visitor groups, such as ferry users, tour-boat users, or shoreline users.

Three-quarters of all visitors to Tobermory use the ferry at some point in their journey, either leaving on the northbound ferry or arriving by the southbound one. This group has historically been limited in numbers by the availability of local accommodation and by the capacity of the ferry service. Increasing public awareness of Fathom Five National Marine Park and Bruce Peninsula National Park in the Tobermory area will be a contributing factor in a growth trend projected for this visitor group.

The Experience:

 For this group, the harbour village of Tobermory is itself a major reason for visiting the area; the activities these visitors undertake are part of an overall experience of Tobermory and the surrounding area.

- Fathom Five is part of the overall Tobermory experience, but Scenic Sightseers do not have to take advantage of it to enjoy their visit to Tobermory.
- Unless these visitors choose to become members of one of the other groups, their experience of Fathom Five will be limited to a vicarious one.
- The main opportunity for visitors is that of a diversity of village, commercial, and domestic experiences, including visiting shops and restaurants, strolling around the harbour, and watching the boats and divers.

Guidelines:

- Parks Canada will encourage Scenic Sightseers to experience Fathom Five first-hand by becoming part of one of the other user groups, e.g., tour-boat patrons or shoreline users.
- Orientation and interpretation opportunities will be offered by Parks Canada primarily at a Visitor Centre near Tobermory, serving both Fathom Five National Marine Park and Bruce Peninsula National Park.
- Interpretive programming for this group will be concentrated near Tobermory, as this is the focus of their activities.

10.4.2 Private Boaters

Private boaters, including commercial and sports fishermen, use Tobermory as a base from which to visit Fathom Five's waters and islands, as well as points beyond the boundaries of the marine conservation area. Since they control their own transport, private boaters have nearly unlimited opportunities to travel in and to experience all of the surface waters of Fathom Five.

The types of watercraft used by this group vary from cruisers, runabouts, and sailboats to sea kayaks and canoes. For nearly every mariner in this group, Tobermory is the launching point or destination of a cruise; it is also a harbour of refuge in emergencies or bad weather.

The growth of boating as a recreational activity is closely linked to the state of the economy. Current trends in North America show a steady growth in the number of power boats, especially larger yachts. Fathom Five affers this group seemic navigation on clear Great Lakes waters among undeveloped and protected islands adja-

Fathom Five National Marine Park Management Plan

cent to a significant port of call. Hence its popularity: approximately 10,000 boaters per year pass through Fathom Five.

Some boaters are also divers and require convenient access to the Diver Registration Centre in Tobermory for both diving and boating permits.

The Experience:

- Private boaters are seeking an unstructured marine experience. They want the freedom to chose their own activities, course, landfall, and time frame.
- Private boaters can choose to explore the entire water surface of Fathom Five and to experience the view of the islands and the shoreline from the water. They are free to go wherever navigation is safe.
- · Personal seamanship skills are required.
- There is a broad range of preferred experience, including seclusion, the enjoyment of natural values, social interaction, and the boat itself.

Guidelines:

- An Operational Plan for mooring and docking will be developed to provide additional day and overnight opportunities appropriate to the needs of private boaters. Mooring and docking facilities may be provided where desired experiences can be offered without compromising Park resources. One such location is Laronde's Harbour, where mooring will be developed.
- Camping and hiking will continue to be offered on Flowerpot Island. The camping area will remain in its current location, with tent pads and washrooms provided. An Area Development Plan will be prepared to provide direction for management of operations and activities on the island.
- Interpretation for private boaters will focus on their need for information as mariners, including use of Tobermory as a harbour. Information will be provided at the Diver Registration Centre adjacent to the harbour.
- Vessels in the waters of Fathom Five will be managed through the application of Boating Restriction Regulations or other appropriate legislation. Boating

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- permits will be available at the Diver Registration Centre.
- Parks Canada will not provide basic services for private boaters (food, fuel, boat launch, supplies, pumpout) as these are available in Tobermory.

10.4.3 Shoreline Users

Although it is difficult to estimate the number of visitors in this group, there are about 20,000 day-use visitors, perhaps 10,000 Bruce Trail users (on the mainland), and several hundred adjacent residents who would be included as shoreline users. These visitors have access to Fathom Five only at a limited number of mainland public shoreline access points. In very inclement weather, the shoreline experience is one of the few Park experiences available to the public.

The limited amount of shoreline access now available for the public is a constraint on the quality and variety of the visitor experience. Demand for public shoreline access points will grow as visitation to the Tobermory area continues to increase. Parks Canada has co-operated with the local community to provide washrooms for shoreline users and divers at the Big Tub Light and "Tugs" access points.

The Experience:

- Shoreline users enjoy exploring the water's edge and taking in views of Fathom Five's waters, islands, boats, and scuba divers.
- The range of sights and experiences sought is broad;
 visitors in this group are not seeking a specific experience, but simply wish to enjoy the natural scenery.
- This activity is unstructured, does not require a large investment of time, and requires no specialized equipment or skill.

- Working in co-operation with the local community, Parks Canada may support opportunities for additional public shoreline access points outside of Park boundaries. The provision of public access to the shoreline does not necessarily imply extensive facility development, such as docks, etc.
- On-site interpretation of Fathorn Five will be provided at key shoreline access sites, and in other locations in Tobermory.

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Enjoying Fathom Five

Fathom Five National Marine Park Management Plan

The primary orientation and interpretation opportunities will be offered by Parks Canada at the Visitor Centre in or near Tobermory. The Visitor Centre will serve Bruce Peninsula National Park as well as Fathom Five.

10.4.4 Tour-Boat Patrons

Approximately 40,000 visitors per year enjoy tour-boat excursions provided by the private sector in Fathom Five National Marine Park. Tour-boats offer the principal means of access to Park waters and to Flowerpot Island for those Park visitors who do not have their own boat. The tour-boats, along with the charter and dive boats based in Tobermory, are a major tourist attraction on the Bruce Peninsula, offering excursions that vary in length and destination.

The growth of the tour-boat market is tied to general trends in tourism in southern Ontario. Over the past ten years, tour-boat activity has enjoyed a marked increase, which is expected to continue. For these visitors, Fathom Five offers a unique experience of boat travel over historical shipwrecks among scenic Great Lakes waters and islands, and a chance to go ashore on Flowerpot Island for a hike or to camp overnight.

The Experience:

- The tour-boat experience is structured: the routes through the Park, destinations, and length of time are predetermined. Because there are a number of tourboat operators with different schedules and itineraries, the visitor can select the experience desired.
- For many of these visitors, the opportunity to be on the water is the primary attraction. For a smaller proportion of visitors, the tour-boats simply provide access to Flowerpot Island.
- Visitor experiences on Flowerpot Island can range from a high degree of social interaction to solitude.
- Tour-boat patrons enjoy a visual, open-air experience of shipwrecks, natural Great Lakes shorelines, and views of undeveloped islands.
- Flowerpot Island provides the prime island experience within Fathom Five. Visitors can walk, hike, picnic, camp, view a cave, visit the lightstation or the flowerpots, or simply laze on the shore.

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- Tour-boat services, including access to Flowerpot Island, will continue to be provided by the private sector.
- Parks Canada will co-operate with tour-boat operators to assist in the development and provision of onboard interpretation of Fathom Five's themes for tour-boat patrons.
- Parks Canada will continue to provide information to visitors on the tour- boat services available. At the Visitor Centre, visitors will be encouraged to take a boat tour as a key way to experience the marine environment.
- Flowerpot Island will continue to be the main island destination within Fathom Five, offering a range of activities for visitors. Hiking, camping (at the existing location), and interpretation will continue to be provided. An Area Development Plan will be prepared to provide detailed direction for the management of visitor activities on the island. Appropriate levels of visitor use will be determined through an assessment of the resource capabilities and social carrying capacity of island. The impacts of visitor use will be monitored.
- Parks Canada will discuss possible public access to the Cove Island Lightstation with the Canadian Coast Guard. This would provide an alternative island experience in the Park — one based on enjoyment of the lightstation's historic resources. Public access to the lightstation must take into consideration the condition of the dock and occasionally unsafe boating conditions. Potential requirements for facilities for visitors will be considered during discussions with the Canadian Coast Guard.

10.4.5 Scuba Divers

Seven to eight thousand people scuba dive in Fathom Five annually, for a total of approximately 30,000 dives. Although the size of this visitor group is comparatively small, it receives one of the prime experiences provided in the Park. Divers are the only visitor group who fully experience the three-dimensional quality of the aquatic environment.

A variety of scuba diving opportunities is available within the Park. Some dive sites, for example the "Tugs" and Lighthouse Point, are accessible from the shoreline. Some sites are shallow and more appropriate

Fathom Five National Marine Park Management Plan

for novice divers, including "Sweepstakes," "Tugs,"
"Wetmore," and "Minch." At the other end of the spectrum, Fathom Five also offers some deep dive sites, which provide a greater challenge and demand considerably more experience and skill. In addition, the dive sites offer a range of heritage resources to view, from relatively intact historic shipwrecks to the dramatic underwater geology of the submerged Niagara Escarpment.

In consideration of the potential risk involved in scuba diving, Parks Canada will continue diver registration and the other safety and support programs initiated when Fathom Five was a provincial park. Parks Canada wishes to acknowledge the invaluable assistance of the volunteers of the Ontario Underwater Council in developing and operating the diver registration program.

After many years of expanding popularity, diving (along with other risk sports) seems to be levelling off in growth. Diver registrations for Fathom Five have likewise stabilized over the last few years. Among divers, Fathom Five is known worldwide for its superb freshwater diving in clear waters over fascinating shipwrecks and other interesting features. The experience is enhanced by the quality of the services, such as dive charters, air refills, equipment rentals, emergency medical care, etc., that are available in Tobermory to sport divers.

The Experience:

- Scuba divers experience the full three-dimensional possibilities of the aquatic environment. Enjoyment of the experience requires an investment of time, highly developed personal skills, official certification, and specialized equipment.
- Some of the divers who come to Fathom Five are using the marine conservation area for skill development (e.g., check-out dives and other training programs).
- A range of dive opportunities is available, from the very deep to the extremely shallow, from protected waters to the most exposed, from sites with shore access to those requiring a boat for access. The extremely hardy even explore under the ice-covered waters in winter.

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 Most diving is associated with the historic shipwrecks, although some natural sites are used as well.

Guidelines:

- In order to ensure that divers continue to enjoy
 Fathom Five's underwater resources as safely as possible, the mandatory diver registration program will
 continue at the Diver Registration Centre in Little
 Tub Harbour. The continued assistance of the Ontario
 Underwater Council (OUC), whose volunteer efforts
 augment the Park's own resources in the delivery of
 the diver registration program, will be sought. OUC
 volunteers have contributed significantly to improved
 diver safety over a number of years.
- With the co-operation of the local community and other partners, Parks Canada has provided washrooms, change rooms, and parking for divers at the "Tugs" (Little Tub Harbour) and Big Tub Light diver access points.
- Enhanced interpretive opportunities will be provided for scuba divers. This may include co-operative arrangements with other agencies to provide services. Orientation and interpretation opportunities for scuba divers will be offered by Parks Canada at both the Visitor Centre and, on a more limited scale, at the Diver Registration Centre. Information provided to divers will include a reminder to respect private property adjacent to the dive sites.
- As warranted, Parks Canada will develop and implement management policies regarding diving at shipwrecks or other sites to prevent conflicts with other user groups, such as cottagers and tour-boaters. Such a policy is now in effect at the "Sweepstakes" site in Big Tub Harbour.
- Parks Canada has developed a management policy for winter diving under the ice. The number, size, and location of holes cut through the ice will be controlled. Holes must be clearly marked for the safety of both divers and other Park users.

10.4.6 Ferry Users

Approximately 250,000 people use the ferry service between Tobermory and South Baymouth on Manitoulin Island annually. Since the ferry passes directly through the Park without stopping, this group of visitors experi-

ence the Park in a structured and scheduled manner.

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Enjoying Fathom Five

Fathom Five National Marine Park Management Plan

through Park waters, northbound and southbound passengers enjoy very different experiences of the Park. Northbound travellers have time to leave their cars and come on deck before departure. Unfortunately, southbound travellers must return to their cars during the last part of the voyage into Tobermory and therefore cannot view most of the Park. Walk-on passengers can spend the entire trip on deck.

In the past, growth in the use of the ferry has been limited by the capacity of the ship itself. In 1989, Ontario Northland added a second ship, nearly doubling their capacity. This additional capacity resulted in a 10 per cent increase in use during the inaugural season. However, the second ferry has not operated since the 1993 season.

For the ferry passenger, Fathom Five provides views of scenic Great Lakes waters and islands which are, and will be, protected for the future.

The Experience:

- The experience is structured and scheduled; some sailings may be reserved in advance. Due to departure schedules, most passengers are required to wait at the point of departure (Tobermory or South Baymouth) for up to four hours.
- One primary attraction for ferry users is that of being on a large and unusual vessel, which provides a convenient and novel form of transportation. This experience of the ship itself competes with the experience of the natural environment of Fathom Five for the visitor.

Guidelines:

- Orientation and interpretation opportunities will be offered by Parks Canada, primarily at the Visitor Centre at or near Tobermory.
- Parks Canada will co-operate with Ontario Northland to provide interpretation for ferry passengers on the ferries, at the terminals, or both. This could range from exhibits to personal services.

10.4.7 Educational Users

Because of Parks Canada's objective of fostering environmental advocacy, educational users are a high-priority-visitor group. Fathom-Five National-Marine Park provides an outstanding on-site experience in environmen-

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tal education, which reinforces the lessons learned in the classroom. The three group tenting sites in the Cyprus Lake campground in Bruce Peninsula National Park provide overnight opportunities for schools and other youth groups, and are heavily used. Special interpretive programs focusing on specific themes and resources are available to groups, although some teachers also use their own programs. A modest amount of in-school interpretation (extension) is provided in the nearby area.

Although the on-site experience cannot be surpassed, Fathom Five has no group orientation facility for year-round or all-weather use. Because the majority of educational users visit in the shoulder seasons, coinciding with school year, the Park needs to provide significant staffing levels in spring and fall to meet the existing demand for interpretive programs for these groups.

- Parks Canada will actively promote its services for educational groups. Personal services (as opposed to publications or exhibits) are the most effective means of communicating with this group. Accordingly, staffing levels and operating procedures will be adjusted to provide this service, particularly during the shoulder seasons, when most school groups visit the Park. An information package will be developed and provided to teachers so that they can prepare students for the on-site experience. This package will also explain what programs and facilities the Park offers for educational groups and provide information on resource impacts, public safety, and recommended emergency procedures. The on-site program will concentrate on the interpretation of the Park (in conjunction with the program for the Upper Bruce Peninsula Ecosystem and the Niagara Escarpment Biosphere Reserve) to assist young people in becoming good environmental citizens.
- The Visitor Centre will be the focal point for educational users. It will provide introductory information and unique educational experiences related to the Park's resources, as well as space that can be used year-round and during inclement weather.
- Parks Canada will work with the educational community, and in particular with the Grey and Bruce
 Boards of Education, both public and separate, to provide interpretation for school groups. Such pro



Fathom Five National Marine Park Management Plan

gramming will be curriculum-based, but will focus on the resources of the Park. It may include a range of on-site interpretive programs, in-class programs, and/or a prepackaged set of lessons with supporting resources that teachers can use themselves. Personal interpretation is most effective with this group and will be emphasized in program development.

10.4.8 Organized Groups

Organized bus tours make up the bulk of this group. They currently make some use of the Upper Bruce Peninsula, including Bruce Peninsula National Park, but a minimum level of infrastructure is required to respond adequately to the needs of this group. This infrastructure (attractions, large washrooms, inside gathering space) does not currently exist in the Park, so the number of organized groups is now limited.

The experience for group tours is very structured, with a predetermined itinerary and time frame. Participants in these tours tend to have a higher degree of interest in learning about their destination than those in many other visitor groups. This group has recently become much more interested in natural and cultural history than ever before. They also seek a more in-depth experience than in the past. Organizers of group tours prefer a package of attractions and services capable of handling a minimum of 47 people efficiently at one time. The group tour market is very competitive; it requires a substantial effort in organization, promotion, and marketing to take advantage of it.

There has been a rapid growth in group motor-coach tours in southern Canada. Much of this growth has been in the seniors market, a trend that is expected to continue as the Canadian population ages. The potential for growth in organized group tours in the Upper Bruce Peninsula is high, since Tobermory lies on the route of the scenic Georgian Bay circle tour. For this group, at present, Fathom Five offers the opportunity to view Canada's first national marine conservation area.

The Experience:

 The experience is structured with a predetermined itinerary and time frame. Organized group opportunities tend to emphasize the special features of the area.

Participants in organized groups have a higher degree of interest in learning about their destination (in this

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case, Fathom Five National Marine Park) than those in other visitor groups.

Guidelines:

- Parks Canada will work with the tourism business community and other interested allies in the Upper Bruce Peninsula to develop and promote a package of attractions and services geared to the organized group-tour market.
- Orientation and interpretation opportunities will be offered by Parks Canada, primarily at the Visitor Centre at or near Tobermory.

10.4.9 Local and Regional Residents

Fathom Five National Marine Park and Bruce Peninsula National Park are part of St. Edmunds Township in the County of Bruce. Residents (both permanent and seasonal) are key partners in the effort to conserve the ecosystem of the area. The management of the Park, and the opportunities it provides, are of more direct interest to residents than to other user groups. They also have a lot to offer other user groups as part of the total package of facilities and services supporting the tourism industry. They therefore have a stake in the protection of the Park's resources, both for their contribution to the tourism economy of the area, and as part of their own lifestyle.

- Parks Canada will work with local and regional residents as partners in the tourism economy of the area.
 The Park can provide experiences to tourists based on natural and cultural resources. The community can provide the necessary infrastructure, accommodation, groceries, restaurants, and other services and activities.
- Parks Canada will provide regional residents with programming to help them understand and celebrate the resources of the area. This programming will complement the residents' working rhythms, the summer being the busy season for most, and will be ongoing and long-term in nature.
- Parks Canada will provide local and regional residents with opportunities to become involved in the Park, including membership on the Park Advisory Committee.



Facilities and Services

Fathom Five National Marine Park Management Plan

11.0 FACILITIES AND SERVICES

A variety of facilities and services need to be in place to operate a national marine conservation area. Many of these are needed to support the initiatives outlined in this plan. Others are needed to support staff in carrying out their daily functions.

11.1 The Visitor Centre

It has been noted that a key part of Parks Canada's mandate is to provide visitors with opportunities to understand and appreciate the importance of nationally significant heritage resources and, in the context of the Niagara Escarpment Biosphere Reserve, to promote sustainable living. In order to do this most effectively, a centrally located orientation to the Park is needed.

This orientation should provide all visitors, and especially nondivers, with an opportunity to gain experience and insight into the resources of Fathom Five. Only divers can fully experience the reality of Fathom Five as a three-dimensional aquatic environment, thus the importance of a vicarious experience which communicates the marine environment effectively to visitors. An in-depth presentation of all Park themes, and those of Bruce Peninsula National Park, is needed for all user groups, including those with disabilities. This presentation must allow for a longer tourist season and for the longer contact visitors may have with the Park each time they come. It must be capable of supporting a range of effective media approaches, such as personal contact, exhibits, and audio-visual presentations. It needs to be an all-weather attraction to gain the interest of potential visitors. Given these requirements, the complexity of the interpretive themes, and the results of an assessment of visitor needs, Parks Canada has determined that a Visitor Centre is required.

In order to make the most effective use of financial and staff resources, and considering the proximity of Bruce Peninsula National Park to Fathom Five National Marine Park, Parks Canada has chosen to consolidate the primary visitor services for both parks at one location.

In 1988, in partial response to these factors, and to establish a presence in the area, Parks Canada opened an interim Visitor Information Centre at the head of I ittle Tub Harbour in Tobermory. The building stands on

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leased land; whether it will continue to be available is subject to successful negotiation of the lease renewal. The building also contravenes local planning bylaws, and is too small to accommodate public washrooms. The small size also limits staff to providing basic information and to introducing Parks Canada's role on the Bruce Peninsula. Nevertheless, the interim Visitor Information Centre attracts some 40,000 visitors during the two months each year that it is open.

During the preparation of the management plan for Fathom Five, it became evident that the location of permanent Park facilities was an issue of considerable interest and, indeed, controversy among local residents. In an effort to arrive at a solution that best met the requirements of the community and of Parks Canada, a working group was established to analyze and make recommendations on the location of the Visitor Centre, Marine Operations Base, Diver Registration Centre, and Park Administrative Offices (which serve both Fathom Five and Bruce Peninsula National Park). The working group was established as a subcommittee of the Park Advisory Committee, and reported to Parks Canada and



to the Township of St. Edmunds through it. Both local residents and Parks Canada employees served on the working group, which also sought the views of the general public at two open houses. The recommendation of the working group for a site on the land base at Burnt Point was endorsed by the Advisory Committee.

On receiving the recommendation, Parks Canada assessed the resources of the area with a view to the types of impacts that a road, building, and parking lot would likely make. Parks Canada then determined that these impacts were too severe to continue planning the

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Facilities and Services

Fathom Five National Marine Park Management Plan

facility at that site. The Burnt Point area on the Fathom Five land base will now be considered for hiking trails.

The Visitor Centre remains an important part of the visitor program for Fathom Five National Marine Park, along with Bruce Peninsula National Park. The climate of fiscal constraint means that the Park may have to find some nongovernment funding sources.

Guidelines:

- Parks Canada makes a commitment to the development of a Visitor Centre to carry out a range of informational and educational service functions, including interpreting the themes of Fathom Five and Bruce Peninsula National Park. A small property adjacent to the Fathom Five land base has been purchased for the Visitor Centre. Parks Canada will continue planning for the Visitor Centre with due regard to the environmental impacts and the requirements of the users. Now that a site for the Visitor Centre has been chosen, more detailed planning for the facility can begin.
- Parks Canada will actively seek the involvement of sponsors and other partners to assist in planning and building the Visitor Centre.
- Like the interim Visitor Information Centre, the permanent facility will provide interpretation and visitor services for both Fathom Five National Marine Park and Bruce Peninsula National Park. Since very few visitors can experience the underwater environment of Fathom Five first-hand, the Visitor Centre will be designed to provide an accurate and inspiring alternative experience. For Bruce Peninsula National Park, which provides a wide range of opportunities for the visitor, the Visitor Centre should encourage direct, first-hand exploration of the Park and its experiences.
- The interim Visitor Information Centre in Tobermory will continue to be used until the permanent Visitor Centre can be built, subject to the continued success of the leasing negotiations. Timing of the construction of the new Visitor Centre will depend upon the availability of funding.

11.2 Marine Operations Base

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Warden Services are temporarily based in rented facilities in Tobermory, but space is limited and access to rescue equipment is disjointed and inefficient.

Guideline:

 A permanent Marine Park Operations Base is being established, as a joint development with the Canadian Coast Guard. Easy and efficient access to Fathom Five's waters is a major operational requirement for both agencies, and a shared facility will provide more effective use of tax dollars.

11.3 Diver Registration

Parks Canada needs to ensure that this safety program is successful. Therefore, the diver registration program needs to be located conveniently for the client group.

Guideline

A permanent diver registration facility will be established in downtown Tobermory. The temporary arrangement will continue to be used until a permanent facility is established.

11.4 Park Offices

Park management and administrative staff are currently housed in a small, temporary administration building on leased land opposite St. Edmunds Public School. Space here is inadequate to house the number of staff.

- Parks Canada will continue to co-operate with the Bruce Trail Association to provide hiking opportunities and to determine the preferred routing, given concerns about the effect on the environment.
- Parks Canada will remove the snowmobile trail from the land base, as an alternate route already exists.

11.5 Staff Housing

Because of the remoteness of the Park, Parks Canada offers housing for certain staff.

Guideline:

 Staff housing close to the Park will be provided for certain permanent staff, as well as some accommodation for seasonal employees. Further assessment of the most appropriate means of providing suitable accommodation at appropriate locations will be undertaken.



The Fathom Five Land Base

Fathom Five National Marine Park Management Plan

12.0 THE FATHOM FIVE LAND BASE

The property generally referred to as the Fathom Five land base is 133 hectares (329 acres) in size. It is located east of Tobermory in an area largely covered in forest, with extensive shoreline views overlooking the Tobermory archipelago.

Although originally acquired by the Province of Ontario to provide a mainland base for Fathom Five, (and considered by Parks Canada for such a facility until an environmental assessment recommended against it), the property has more in common with Bruce Peninsula National Park in terms of its resource characteristics.

In Bruce Peninsula National Park, snowmobiling is restricted to a route located on Park roads, unopened municipal road allowances, and other trails created before the Park was established. This trail also traverses the land base. Snowmobiling is known to cause significant impacts including disruption of predator/prey relationships and wildlife movement.

Guidelines:

Parks Canada will undertake a comprehensive plan for the land base. This plan will consider the needs of the ecosystem, of the Bruce Trail and its users, and of other user groups.

Parks Canada will continue to co-operate with the Bruce Trail Association to provide hiking opportunities and to determine the preferred routing, given concerns about the effect on the environment.

Parks Canada will remove the snowmobile trail from the land base, as an alternate route already exists.



Additional Public Services

Fathom Five National Marine Park Management Plan

13.0 ADDITIONAL PUBLIC SERVICES

13.1 Public Safety

Fathom Five National Marine Park provides a variety of recreational opportunities, some of which inherently involve a degree of hazard to the visiting public. It may be a natural hazard (i.e., related to the environment), or a subjective hazard (i.e., related to the behaviour of the visitor). Parks Canada is committed to providing effective public safety services.

A Hazard Assessment and Evaluation has been undertaken to identify, assess, and evaluate all hazards that may face the visitor to the Park. The assessment has identified some activities, such as scuba diving, snorkelling, rock climbing, caving, and boating, that involve a degree of risk. High-risk natural hazards, such as bears, rattlesnakes, and a high incidence of the rabies virus, have also been identified. Based on the Hazard Assessment, a Public Safety Plan has been developed to provide direction and guidance to regional and Park staff on the provision of public safety services within the Park. The Public Safety Plan indicates priority actions that should be undertaken.

A specific element of visitor safety concerns the Diver Registration Program. Sport divers must register once annually, on their first visit of the season; at this time, they receive information on safety, as well as on resource protection and other services available in the community. This takes place at the Diver Registration Office, operated by Parks Canada in the harbour near the boat docks with the assistance of volunteers from the Ontario Underwater Council. Given the importance of this program to public safety, it will be continued.

Objective:

 To respond quickly and effectively to threats posed by environmental emergencies, and to minimize threats to life, the natural environment, and property.

Guidelines:

The Diver Registration Program will be continued, with the continuing assistance of volunteers from the Ontario Underwater Council. The Diver Registration Office will continue to be located in the vicinity of
 Little Tub Harbour, both as a convenience to divers and to ensure that all divers receive essential public

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safety messages. Boating permits are also issued from the Diver Registration Office.

- Parks Canada will implement the Public Safety Plan for Fathom Five.
- Parks management will work co-operatively to apply the following guiding principles in developing and implementing a comprehensive program to prevent and respond to emergency events:
- Emphasis in the management of the Public Safety/Emergency Services Program will be on rationalized, mandate-driven accident prevention and response programming.
- Program delivery will be based on a comprehensive approach to identifying hazards and managing risks.
- Highest priority will be given to accident prevention programs.
- The health and safety of visitors will be considered in the planning, design, and operation of the facilities and activities the Park offers or promotes.
- Parks Canada and Park visitors will both share responsibility for the safe use of the Park.
- Within the context of local circumstances, the Park will develop appropriate levels of service based on a nationally consistent approach and accepted standards.
- An information program that includes appropriate public safety information for visitors will be put in place.
- Nationally developed training and equipment standards for response personnel will be met and maintained.
- The principles and practices of visitor risk management will be applied in an effort to minimize the impact on both the quality of visitor experience and the natural and cultural environments.
- Where necessary, existing agreements will be refined, and new memoranda of understanding will be developed with relevant agencies to manage public safety in a co-ordinated fashion.

13.2 Services for Disabled Persons

Parks Canada will provide a reasonable level of access to Fathom Five for persons with disabilities. Specialized



Additional Public Services

Fathom Five National Marine Park Management Plan

services and facilities will be provided as appropriate. Planning will be undertaken with the support and partnership of advocacy groups that represent the needs of persons with disabilities.

- An Access Plan has been prepared and implemented with the assistance and partnership of groups interested in the needs of persons with disabilities.
- The Park Service Plan will take into account the direction provided by the Access Plan in developing a long-term strategy for the needs of disabled persons. This will ensure that the Park will provide individuals who have mobility, hearing, or visual impairments with opportunities to experience the Park's key themes and a cross section of the Park's recreational and educational experiences. This will be done through a set of integrated, accessible packages of services and facilities.



Regional Integration

Fathom Five National Marine Park Management Plan

14.0 REGIONAL INTEGRATION

Parks Canada recognizes that national parks and the communities or regions surrounding them, influence each other in a variety of ways. Parks Canada is committed to managing and operating its sites in the context of the surrounding region. Such a commitment requires that Parks Canada be sensitive to local concerns and work in collaboration with other public agencies and organizations to achieve mutually compatible objectives. Parks Canada believes that by working together, both the local region and the Park will benefit.

Fathom Five National Marine Park has been designated a Core Area of the Niagara Escarpment Biosphere Reserve, which was established in February 1990. As a consequence, Parks Canada has an international responsibility, as well as national and regional ones, to conserve and protect the heritage resources of the marine conservation area. As a Core Area, Fathom Five contributes to regional sustainable conservation strategies and supports ecotourism to the area. In addition, recreational and interpretive opportunities are available to local residents. Further economic benefits accrue to the region from employment, purchases, and a variety of operational requirements. The expertise, equipment, and facilities of Parks Canada are also available to assist in resolving issues of mutual concern to the community and to Parks Canada.

Fathom Five also affects, and is affected by, the surrounding region through natural processes. The resources of the marine conservation area are affected by development actions and natural processes occurring outside its boundaries, and vice versa. For example, transboundary resource issues assume greater prominence because of the nature of the marine conservation area.

Fathom Five National Marine Park contributes a number of unique assets to the region in which it is located. These include:

- nationally significant natural resources
- · nationally significant cultural resources

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- unexcelled opportunities for scuba diving and other marine-related activities
- specialized interpretive expertise available for presentation of Fethom Five's significant resources

- an emphasis on preservation and on providing visitors with opportunities to develop a better appreciation and understanding of the marine environment
- a relatively natural setting conducive to visitors gaining an appreciation of the marine conservation area.

Regional integration involves continuing co-operation and liaison with other federal agencies, the Province, local and regional governments, business and tourism associations, nongovernment organizations, First Nations, and local residents. The marine conservation area must maintain a variety of relationships in the region in which it is located.

Parks Canada co-operates with individuals and groups through a variety of partnership arrangements, including co-operating associations, volunteer agreements, and co-operating agreements.

Co-operating associations are groups dedicated to assisting Parks Canada in fulfilling objectives and to enhancing its programs, most often in ways the public can experience first-hand. The Friends of Bruce District Co-operating Association has been an active contributor since it was established in 1983 as a co-operating association for Fathom Five Provincial Park. Parks Canada wishes to continue this mutually beneficial arrangement and foresees this positive situation will continue.

Volunteers also play a part in enhancing Parks Canada's programs. Fathom Five has a long-standing volunteer agreement with the Ontario Underwater Council to provide volunteer assistance in the Diver Registration and Safety Programs, as well as other projects.

Parks Canada has a variety of formal and informal agreements with outside agencies. For example, an informal working arrangement has existed for years with the Bruce Trail Association for providing and managing hiking opportunities on the Bruce Trail. This arrangement has recently been formalized through a Memorandum of Understanding.

Objectives:

To co-operate with relevant federal, provincial, regional, and local agencies to achieve shared objectives and resolve matters of mutual concern.



Regional Integration

Fathom Five National Marine Park Management Plan

- To ensure that Parks Canada's operations, and those of other agencies in the surrounding region, complement each other.
- To establish partnership arrangements, where appropriate, that augment and enhance Fathom Five's programs.
- To improve local and regional residents' understanding of, and appreciation for, Fathom Five and its purpose, objectives, and management strategies by providing opportunities to become involved in the planning and ongoing management and operation of the marine conservation area.

Guidelines:

- An Advisory Committee has been established to advise the Park Management Team on issues relating to planning, operations, and management for both Bruce Peninsula National Park and Fathom Five National Marine Park. The Advisory Committee will continue to serve in this capacity.
- Parks Canada will work towards the management of Fathom Five National Marine Park, as a designated Core Area of the Niagara Escarpment Biosphere Reserve, and will seek the participation of Park representatives on appropriate advisory committees.
- Parks Canada will continue its liaison with the Niagara Escarpment Commission and the Ministry of Natural Resources regarding the links between the Niagara Escarpment park system and Fathom Five.
- Memoranda of Understanding (MOUs) have been signed with Transport Canada (Canadian Coast Guard) regarding marine navigation and with the Ministry of Natural Resources regarding fisheries management respectively. Parks Canada will implement these memoranda through ongoing Park operations. Additional MOUs and other formal and informal arrangements for co-operation will be established as required.
- Discussions between Parks Canada and Transport
 Canada will be promoted regarding a possible transfer
 to Parks Canada of lands surplus to Coast Guard
 requirements at the Flowerpot Island and Cove Island
 Lightstations, and possibly other lands.

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- Parks Canada will continue to encourage and support the partnership arrangement with the Friends of Bruce District Parks Co-operating Association in accomplishing their mandate.
- Appropriate opportunities will be provided for volunteer groups and individuals, such as the Ontario
 Underwater Council, which has provided volunteer services for many years, to contribute to the fulfilment of Fathom Five's objectives.
- Parks Canada will explore with the First Nations the feasibility of borrowing cultural artifacts for interpretive purposes.

Local Co-operation

- Parks Canada will continue to encourage the private sector to provide those facilities and services that are in harmony with Fathom Five's objectives and enhance the visitor's experience. Parks Canada will work cooperatively with tour-boat and charter-boat operators to provide relevant and accurate information to the public.
- Parks Canada will co-operate with adjacent landowners and will educate visitors to the Park to ensure that
 the rights of private landowners are respected.

Increased Understanding

 Programs will be offered within the region to enhance local understanding and appreciation of Park values.
 Parks Canada will participate in regional community events whenever appropriate.

Co-operative Activities





Property Management

Fathom Five National Marine Park Management Plan

15.0 PROPERTY MANAGEMENT

The boundaries of Fathom Five National Marine Park are similar to those of its predecessor, Fathom Five Provincial Park, except that the islands that were part of Georgian Bay Islands National Park are now part of Fathom Five. The agreement establishing the marine conservation area states that the Province will transfer the lands and lakebed of the provincial park to the federal government. Some islands within Fathom Five are privately owned and may remain so. In addition, some properties are subject to claims arising from unextinguished First Nations interests.

- In accordance with the federal-provincial agreement, private lands within Fathom Five will be acquired on a willing buyer/willing seller basis.
- No lands with outstanding third-party interests will be acquired by Parks Canada. Parks Canada will encourage direct negotiations between those involved in third-party interest claims.
- The boundaries of the Fathom Five land base will be revised to include the leased Kimball cottage property and its pioneer log cabin, which are to be transferred from the Ministry of Natural Resources to Parks Canada.
- A policy of "no new leases" will be adopted within Fathom Five to allow for consolidation and effective management of public lands.





Facility Appearance

Fathom Five National Marine Park Management Plan

16.0 FACILITY APPEARANCE

Guidelines

- The design of all structures will be given careful attention to ensure that they have a minimum impact on the natural appearance of the marine conservation area and that, where appropriate, they fit with the character of the local community.
- Facilities will be located and designed to minimize negative visual impact, especially from the shoreline.

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Revenue



Fathom Five National Marine Park Management Plan

17.0 REVENUE

As with most other government agencies, Parks Canada is faced with severe budget restrictions. In order to recover a higher proportion of the costs of providing Park services, Parks Canada will charge fees to the users of some services. In doing so, Parks Canada will ensure that fees are fair and appropriate. Funds from these fees will be used to help support the Parks Canada program.

Some services in the Park are clearly for the public good. Resource protection, for example, is carried out for all Canadians, not just for Park visitors. Other services, such as the use of a campsite, serve a private or personal interest. These latter services will be handled in a way that achieves cost recovery. In doing so, Parks Canada will ensure that fees are fair and appropriate.

Any businesses that operate within national parks operate under the authority of business licences. This policy will be implemented in Fathom Five National Marine Park.

- In line with National Parks Policy, user fees will be collected for certain Park services.
- Operational guidelines will be developed to manage commercial activities within Fathom Five. The capacity of key visitor sites (Flowerpot Island and certain shipwrecks, for example) and potential impacts on the environment of the Park will be considered in the development of these guidelines.
- Business licences will be used to manage commercial operations in the Park.



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Environmental Impact Assessment

Fathom Five National Marine Park Management Plan

18.0 ENVIRONMENTAL IMPACT ASSESS-MENT

As required by both Parks Canada Policy, the Environmental Assessment and Review Process and by the nonlegislated Environmental Assessment Process for Policy and Program Proposals submitted for Cabinet consideration, the proposals contained in this park management plan have been reviewed to determine their environmental impact. The purpose of environmental impact assessment is to ensure that possible environmental implications are considered as early in the planning process as possible, and that the initiatives resulting from park management planning are environmentally acceptable.

It should be noted that this environmental assessment was initiated prior to the enactment of the Canadian Environmental Assessment Act, and therefore this assessment was required in accordance with the Environmental Assessment and Review Process Guidelines Order. It should also be noted that all initiatives which satisfy the requirements of the Canadian Environmental Assessment Act will undergo project-specific environmental assessments once preliminary plans become available.

The planning initiatives outlined in this document were assessed by an environmental consulting firm. The first evaluation was undertaken at the screening level. Screening is intended to document the significance of potential environmental implications which may arise from a project or initiative, identify the need to mitigate impacts, modify the proposal, or carry out further investigations. Of the 49 concepts/initiatives, 6 were considered to have the potential for more serious negative environmental consequences. These six concepts/initiatives were further evaluated in a second level of environmental screening; these were:

- Conducting a basic aquatic resources inventory including special studies;
- Collecting resource information within environmentally and culturally sensitive sites, including island biogeography studies on sensitive islands;
- Reviewing Park boundaries;
- Preparing and implementing a mooring and docking plan for the Park;

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- Providing interpretation at shoreline public access points; and,
- Finalizing and implementing the Fisheries
 Management Plan (Aquatic Management Guidelines).

The proposals/initiatives dealing with conducting the basic aquatic resource inventory and collecting resource information within environmentally and culturally sensitive sites, have been identified as the highest priorities in order that the Fisheries Management Plan initiative and any land-use decisions can be prepared using quality baseline information. Without such an inventory, any interim management decisions relating to development and use will have the potential to impact unknown resources.

The two proposals/initiatives dealing with preparing a mooring and docking plan for the Park and providing interpretation at shoreline public access points may adversely impact Park resources given the lack of proper baseline information. More information is required on the terrestrial and aquatic environments before docking and mooring developments are initiated or expanded. Similarly, increasing interpretive opportunities should be viewed in light of resource protection priorities and visitor demand.

The final concept/initiative dealing with reviewing Park boundaries illustrates the fact that existing boundaries reflect cultural and political priorities rather than those associated with maintaining ecological integrity. It is also evident that present boundaries provide more protection for terrestrial habitat areas than for aquatic habitat. Development and use activities outside of existing Park boundaries may negatively impact valued ecosystem components which cross Park boundaries.

The development of the Marine Operations Base and Visitor Information Centre was assessed as part of the Bruce Peninsula National Park management plan and can be mitigated through (1) careful siting of facilities, (2) the use of standard environmentally sound construction and engineering practices, (3) the control of timing of construction to minimize disturbance to wildlife, (4) rehabilitation of reclaimed areas to a natural state, and (5) visitor management and education. Each will also require a project-specific environmental assessment in accordance with the Canadian Environmental Assessment Act.



Environmental Impact Assessment

Fathom Five National Marine Park Management Plan

The environmental screening determined that, based on available information, few significant environmental impacts are associated with the plan. However, the available information database is insufficient to completely assess the environmental implications of the various plan initiatives. More information on the resources of Fathom Five National Marine Park will be required prior to developing specific management plans and implementing the initiatives to ensure that they do not conflict with Park objectives.

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Page 48



Fathom Five National Marine Park Management Plan

APPENDIX A

Fathom Five National Marine Park Messages

1. Regional Ecosystems:

St. Lawrence Lowlands/Great Lakes Ecosystem: including isolation due to the geography of the peninsula and its impact on natural history and human occupation; natural and human history; shoreline development; conflicts in use

Upper Bruce Peninsula Ecosystem: the basis for protection of Bruce Peninsula National Park; the structure and function of the ecosystem from Tobermory to Swan Lake; regional partnerships to protect it

2. The Fathom Five Story:

- · Great Lakes navigation and shipwrecks
- · Islands at the mouth of Georgian Bay
- · Waterscape at the mouth of Georgian Bay
- First Nations and the Saugeen Peninsula

3. Taking Action for the Environment:

- The principles of ecosystem management
- Environmental stewardship: government action
- · Environmental citizenship: public action
- Opportunities for involvement
- Concerns of living in a natural environment: bears, rattlesnakes, forest fires, poison ivy, and other hazards

4. Global Environmental Issues:

· The Great Lakes, past and future Habitat loss

5. Departmental Messages:

- · Canadian Heritage
- National Identity
- · Parks Canada and its mandate
- · National Parks: their purpose
- Fathom Five National Marine Park and Bruce Peninsula National Park as Core Areas of the Niagara Escarpment Biosphere Reserve.

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Fathom Five National Marine Park Management Plan

APPENDIX B

Plans To Be Completed on Approval of the Management Plan

- 1. Park Service Plan
- 2. Park Ecosystem Conservation Plan
- 3. Park Collections Management Plan

- 4. Operational Plan for mooring and docking
- 5. Area Development Plan for Flowerpot Island
- 6. Area Development Plan for the Fathom Five land



Fathom Five National Marine Park Management Plan

APPENDIX C

Membership on the Bruce Peninsula National Park and Fathom Five National Marine Park Advisory Committee

The advisory committee is intended to comprise representatives of groups with an interest in the two parks. As such, it is not representative of the general public, but of the interests of the individual groups. Members on the committee are selected to represent the groups' interests and are chosen by the groups. Representation on the committee can change as needs and public interest change.

In the past the following groups have been represented:

Bruce Trail Association

Bruce Peninsula Sportsmen's Association

Bruce Peninsula Tourist Association

Canadian Parks and Wilderness Society

Chippewas of Nawash First Nation

County of Bruce

Friends of Bruce District Parks

Niagara Escarpment Commission

Ontario Underwater Council

St. Edmunds Property Owners Association

Saugeen First Nation

Tobermory Chamber of Commerce

Township of St. Edmunds

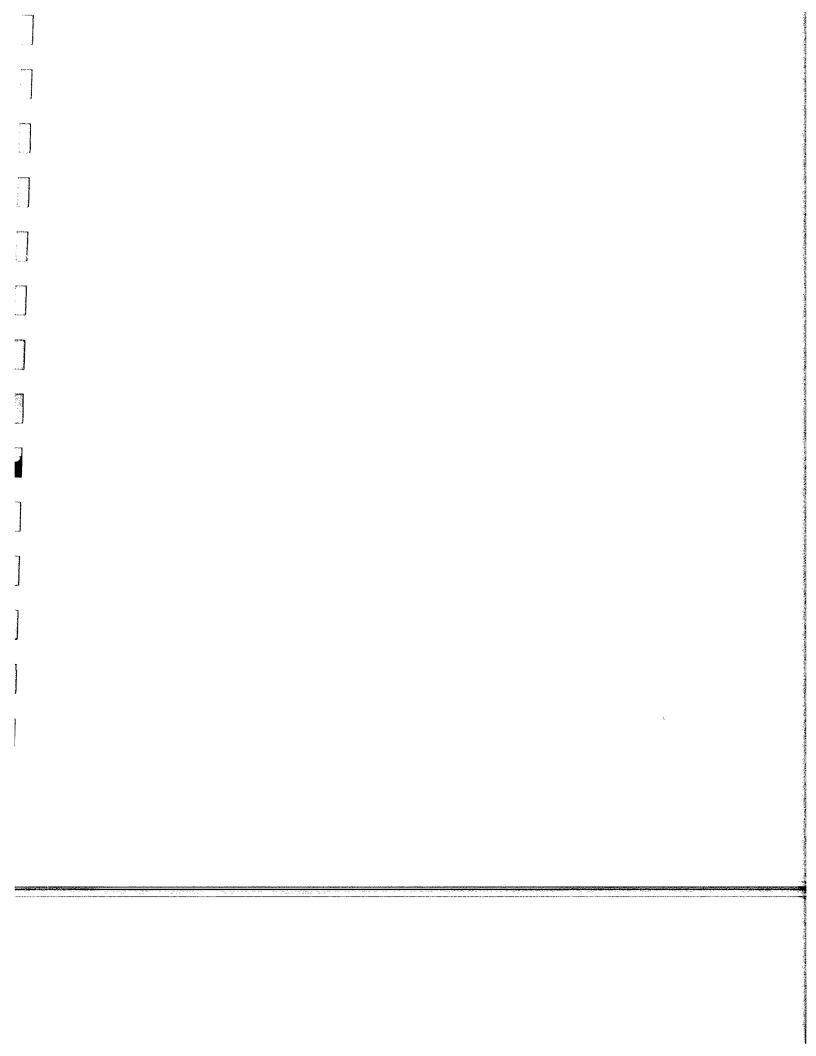
Upper Bruce Peninsula Sportsmen's Association

Parks Canada.

In addition, there is a chairperson and a secretary.

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