lake ontario waterfront development program
watershed plan

the metropolitan toronto and region conservation authority
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2. Background</td>
<td>2</td>
</tr>
<tr>
<td>2.1 Progress</td>
<td>2</td>
</tr>
<tr>
<td>2.1.1 Humber Bay</td>
<td>2</td>
</tr>
<tr>
<td>2.1.2 Ashbridge's Bay</td>
<td>2</td>
</tr>
<tr>
<td>2.1.3 Bluffer's Park</td>
<td>3</td>
</tr>
<tr>
<td>2.1.4 Petticoat Creek</td>
<td>3</td>
</tr>
<tr>
<td>2.1.5 Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>2.2 Waterfront Characteristics</td>
<td>3</td>
</tr>
<tr>
<td>2.2.1 Etobicoke Sector</td>
<td>4</td>
</tr>
<tr>
<td>2.2.2 City of Toronto Sector</td>
<td>5</td>
</tr>
<tr>
<td>2.2.3 Scarborough Sector</td>
<td>7</td>
</tr>
<tr>
<td>2.2.4 Pickering/Ajax Sector</td>
<td>9</td>
</tr>
<tr>
<td>2.3 Other Waterfront Planning Initiatives</td>
<td>11</td>
</tr>
<tr>
<td>2.3.1 City of Toronto Central Waterfront Planning</td>
<td>11</td>
</tr>
<tr>
<td>2.3.2 Harbourfront</td>
<td>12</td>
</tr>
<tr>
<td>2.3.3 Ajax Waterfront Study</td>
<td>13</td>
</tr>
<tr>
<td>3. PROBLEMS AND IMPLICATIONS</td>
<td>14</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>14</td>
</tr>
<tr>
<td>3.2 Accessibility Of The Waterfront</td>
<td>15</td>
</tr>
<tr>
<td>3.3 Factors Affecting The Use Of The Waterfront</td>
<td>17</td>
</tr>
<tr>
<td>3.3.1 Population Concentration</td>
<td>17</td>
</tr>
<tr>
<td>3.3.2 Changes In Leisure Time</td>
<td>17</td>
</tr>
<tr>
<td>3.3.3 Proximity To Recreational Opportunities</td>
<td>18</td>
</tr>
<tr>
<td>3.3.4 Alternative Recreational Resources</td>
<td>18</td>
</tr>
<tr>
<td>3.3.5 Suitability Of Lake Ontario To Water-Oriented Recreational Activities</td>
<td>18</td>
</tr>
<tr>
<td>3.3.6 Other</td>
<td>19</td>
</tr>
<tr>
<td>3.4 Participation, Supply and Demand</td>
<td>20</td>
</tr>
<tr>
<td>3.4.1 Introduction</td>
<td>20</td>
</tr>
<tr>
<td>3.4.2 Boating</td>
<td>21</td>
</tr>
<tr>
<td>3.4.3 Fishing</td>
<td>25</td>
</tr>
<tr>
<td>3.4.4 Swimming</td>
<td>26</td>
</tr>
<tr>
<td>3.4.5 Open Space</td>
<td>28</td>
</tr>
<tr>
<td>3.4.6 Latent Demand (General)</td>
<td>28</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

(PAGE 2)

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>POLICY</td>
<td>29</td>
</tr>
<tr>
<td>5.</td>
<td>PROGRAM DETAILS</td>
<td>33</td>
</tr>
<tr>
<td>5.1</td>
<td>Direction</td>
<td>33</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Open Space</td>
<td>33</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Natural and Historic Areas</td>
<td>33</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Boating Facilities</td>
<td>33</td>
</tr>
<tr>
<td>5.1.4</td>
<td>Fishing</td>
<td>34</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Swimming</td>
<td>34</td>
</tr>
<tr>
<td>5.2</td>
<td>Sector and Site Descriptions</td>
<td>34</td>
</tr>
<tr>
<td>5.2.1</td>
<td>Etobicoke Sector</td>
<td>35</td>
</tr>
<tr>
<td>5.2.2</td>
<td>City of Toronto Sector</td>
<td>37</td>
</tr>
<tr>
<td>5.2.3</td>
<td>Scarborough Sector</td>
<td>40</td>
</tr>
<tr>
<td>5.2.4</td>
<td>Pickering/Ajax Sector</td>
<td>43</td>
</tr>
<tr>
<td>5.3</td>
<td>Fisheries Enhancement</td>
<td>46</td>
</tr>
<tr>
<td>5.3.1</td>
<td>Nearshore Species</td>
<td>47</td>
</tr>
<tr>
<td>5.3.2</td>
<td>Offshore Species</td>
<td>48</td>
</tr>
<tr>
<td>5.4</td>
<td>Priorities and Phasing</td>
<td>49</td>
</tr>
<tr>
<td>5.5</td>
<td>Environmental Monitoring and Assessment</td>
<td>50</td>
</tr>
<tr>
<td>5.6</td>
<td>Implementation and Management</td>
<td>51</td>
</tr>
<tr>
<td>6.</td>
<td>COSTS AND FINANCIAL IMPLICATIONS</td>
<td>53</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

1 Waterfront Development Completed 1972-1979 4
2 Marie Curtis W. A. 53
3 Colonel Samuel Bois Smith W. A. 53
4 Humber Bay West W. A. 53
5 Humber Bay East W. A. 53
6 A,B Western Beaches W. A. 53
7 Aquatic Park W. A. 53
8 Ashbridge's Bay W. A. 53
9 Bluffs West W. A. 53
10 Bluffs Park W. A. 53
11 Cudia/Sylvan W. A. 53
12 Guild Inn W. A. 53
13 East Point W. A. 53
14 Lower Rouge W. A. 53
15 Petticoat Creek W. A. 53
16 Frenchman's Bay W. A. 53
17 Duffin Creek W. A. 53
18 A,B Ajax W. A. 53

LIST OF TABLES

1 Waterfront Use 15
2 Activities in which more participation is desired 28

LIST OF PHOTOGRAPHS

1 Humber Bay W. A. 2
2 Ashbridge's Bay W. A. 2
3 Bluffs Park W. A. 4
4 Petticoat Creek W. A. 4
5 Boat Wet Mooring 30
6 Boat Launching 30
7 Dry Sailing 30
8 Swimming Beach 30
9 Artificial Swimming Lake 30
10 Fishing 30
11 Pathways/Cycling 30
12 Picnicking 30
13 Bluff Area 30
14 Marsh Area 30
15 Marie Curtis W. A. 36
16 Colonel Samuel Bois Smith W. A. 36
17 Humber Bay W. A. 36
18 Western Beaches W. A. 38
19 Aquatic Park W. A. 38
20 Ashbridge's Bay W. A. 38
21 Bluffs West W. A. 42
22 Bluffs Park W. A. 42
23 Cudia/Sylvan W. A. 42
24 Guild Inn W. A. 42
25 East Point W. A. 42
26 Lower Rouge W. A. 42
27 Frenchman's Bay W. A. 44
28 Duffin Creek W. A. 44
29 Ajax W. A. 44
1. INTRODUCTION

The Metropolitan Toronto region is characterized by four distinct natural features: the river valleys which traverse the area from north to south, the Oak Ridges Interlobate Moraine and Niagara Escarpment where the rivers rise, and the Lake Ontario shoreline to which the rivers flow. In Toronto, the waterfront is also more than just a significant natural feature; it is the place where urban Toronto began. Toronto is where it is and what it is because of its waterfront.

In 1965 the Metropolitan Toronto Planning Board commissioned a study to prepare a Waterfront Plan for the Metropolitan Toronto planning region. This Plan, 3 years in preparation, was presented in late 1967 and provided the basis for most waterfront development which has gone on since. It was a document with vision which projected a return to the lake, back to the vast park and recreational opportunities which lay at the doorstep of a bustling and expanding metropolitan region.

Subsequent to the presentation of the 1967 Waterfront Plan and its approval in principle by the Council of Metropolitan Toronto, the Ministry of the Environment, on November 23, 1970, designated The Metropolitan Toronto and Region Conservation Authority as the implementing agency for the Waterfront Plan for all sectors in which it had jurisdiction except the central harbour area. The designation of the Authority was consistent with the resource management role which the Authority had performed in the Metropolitan Toronto region since 1957.

A decade of important waterfront development work has been carried out by the Authority since 1970. Forty-four million dollars has been spent; much in acquiring remaining undeveloped waterfront lands, and the balance in developing a land base through landfill. Four major waterfront areas have been opened, one in each sector; however, much remains to be done in establishing facilities on the land base acquired over the last 10 years. The future will place greater demands on the waterfront and its water related opportunities. The cost of travel will encourage park users to visit facilities closer to home. Lake access programs of the Ministry of Natural Resources and the increasing priority of waterfront parks to the waterfront municipalities make the need for continued, orderly development of the waterfront a necessity.

The description in the following chapters outlines the direction for waterfront park development in the foreseeable future. Approval of this Program as part of the Authority's Watershed Plan will be followed by a Project which allocates funds to waterfront work over a specified term, the allocation being dependent on levels of funding available from participating municipalities and the Province of Ontario.
2. BACKGROUND

2.1 PROGRESS

The 1967 Waterfront Plan, undertaken by the Metropolitan Toronto Planning Board, set the stage for much of the waterfront development which has occurred and will continue in the future. From that Plan, which contained a vision of the waterfront for many years into the future, the Metropolitan Toronto and Region Conservation Authority, when it became an implementing agency, developed a Ten Year Plan implementable in two Five Year Projects. These projects provided the specific objectives for development over a five year period and most importantly, upon approval, provided the funding from the participating municipalities and the Government of Ontario on a 50/50 basis, necessary to carry out the work. These two projects, the first for the years 1972-1976 and the second for the years 1977-1981, provided funding of $20 million and $24 million respectively.

Following is a synopsis of the major achievements of the past ten years of Authority Waterfront Development.

2.1.1 Humber Bay

The Humber Bay Waterfront Area is a combination of one of the largest small craft harbours on Lake Ontario and an attractive new open space park. Landfilling operations over the period of 1971 to 1979 created a total of 45.0 ha of land with an additional 21.0 ha of protected water for harbour use. Two double launching ramps with supporting parking areas, washroom facilities and day mooring docks were constructed. The Humber Bay Boating Federation, its members and the Authority were combined to create 500 wet mooring berths and 250 dry sailing spaces within a landscaped perimeter of public open space. The easterly part of the project contains a pond system for summer use by model boating enthusiasts and other groups, as well as providing ice skating opportunities. The pond and waterway system is located within 19.0 ha of landscaped open space designed for picnicking, strolling, cycling and viewing the lake and city skylines.

2.1.2 Ashbridge's Bay

The Ashbridge's Bay Waterfront Area provides an attractive addition and western terminus for the popular Eastern Beaches area. Landfilling operations between 1972 and 1975 created 17.0 ha of new park area and 7.3 ha of protected water area. The Ashbridge's Bay Yacht Club developed a portion of the land and water area to provide 220 wet mooring slips and 100 dry sailing spaces with appropriate supporting parking and clubhouse facilities. The Authority landscaped the remainder of the site and constructed a well used 6 lane launching ramp facility as well as 200 m of day mooring tie up areas and parking facilities. The popular boardwalk was extended around the perimeter of 500 metres of new beach and a washroom/changehouse was constructed.
HUMBER BAY W.A: LANDFILLING CREATED A TOTAL OF 45 HA OF LAND AND 25 HA OF PROTECTED WATER. HUMBER BAY WEST IS UTILIZED FOR A VARIETY OF BOATING; HUMBER BAY EAST IS UTILIZED FOR A VARIETY OF OPEN SPACE ACTIVITIES (PHOTO 1)

ASHBRIDGE'S BAY W.A: 17 HA OF NEW PARK AREA AND 7.3 HA OF PROTECTED WATER HAVE BEEN CREATED. FACILITIES INCLUDE 6 BOAT RAMPS, DAY MOORING TIE UP AREAS, EXTENSION OF THE BOARDWALK AND SAND BEACH AREA (PHOTO 2)
2.1.3 Bluffers Park

Bluffers Park provides a new focal point on the lakeshore for the Borough of Scarborough and surrounding region. The park area was established by the acquisition of 57.5 ha of bluff topland combined with the creation of 32.4 ha by landfilling over the period 1971 to 1981. Bluffers Park is similar to Humber Bay in that it provides a combination of a large, small craft harbour and landscaped public open space. Facilities available include 2 double launching ramps, day mooring docks, parking areas, washrooms, picnic areas, pathways and lookouts. The efforts of the Authority and the Bluffers Park Boating Federation were combined to develop the 20.2 ha protected harbour area to accommodate 500 wet mooring slips and 250 day sailing spaces. The range of facilities available, coupled with the spectacular scenic features of this site, has made Bluffers a very popular park.

2.1.4 Petticoat Creek

The Petticoat Creek Conservation Area in Pickering is a 72.0 ha site which was developed by the Authority over the period 1973 to 1975. This attractive area includes a path system through the Petticoat Creek valley and along the shoreline. The open space areas are divided by vegetation into several large picnic areas served by shelters, washrooms and parking areas. One of the most popular facilities in the park is the large artificial swimming lake which is well used by summer day camp participants and picnickers.

2.1.5 Acquisition

The Authority acquired several significant parcels of open space along the waterfront during the first 10 years of the program including:

- Garton and West property
- St. Augustine Seminary Property
- Guild Inn
- 42.0 ha of waterfront property in Pickering and Ajax
- Duffin Creek marsh

The locations of these park areas are shown on Figure 1 and illustrated in the photos attached.

2.2 WATERFRONT CHARACTERISTICS

The limits of the waterfront under the jurisdiction of the Authority are based on watershed boundaries: on the west, they divide between the Etobicoke Creek and the Credit River, and on the east, they divide between the Carruthers Creek and the Lynde Creek. Within that 59.5 km stretch the shoreline has widely varying characteristics.
2.2.1 Etobicoke Sector

The Etobicoke Sector is the most westerly of the waterfront sectors. It has 9.7 km of lake frontage covering all of the waterfront lands in the Borough of Etobicoke. The westerly limit of the sector is Marie Curtis Park where the Etobicoke Creek enters Lake Ontario, while the easterly limit is the mouth of the Humber River. The Mimico Creek enters Lake Ontario approximately 1.6 km west of the mouth of the Humber River.

Along this section of the waterfront, the shore cliff is comparatively uniform with variations from sandy sloping beaches to 6 metre bluffs consisting of sand, silt and clay. In the nearshore zone, the bottom is composed mainly of shale and has essentially been 'scraped clean' of material by currents and wave action.

The Etobicoke Sector is characterized by urban development which has neither taken advantage of the lakeside setting, nor provided adequate public access to the lake. As a result, the waterfront community is strongly oriented to Lake Shore Boulevard, a commercial street, while the lakefront, with a potential for beaches and walkways, is just a backdoor view for the lakeshore development. Advantage of the lakefront location has been taken largely by single family residences fronting on the lake, however, their number is less than 200.

The area between the Humber River and the Mimico Creek along the waterfront is known as the 'Motel Strip'. It is characterized mainly by highway commercial uses fronting on Lake Shore Boulevard. These include two gas stations, 17 motels, a dozen single family dwellings and the Palace Pier residential tower. The land use to the west of Mimico Creek is a combination of medium to high density residential and some commercial; while the Royal York area consists largely of low density residential. The stretch from Royal York to the Etobicoke Creek is primarily single family residential with some higher density at the foot of Dwight Avenue and in the Long Branch area, at the foot of 33rd Street.

Where redevelopment has occurred, or is proposed to occur, the lake has been envisioned as an area to create more land. Uncoordinated landfilling has taken place according to an irregular pattern of privately owned waterlots, and in some cases on Crown Lands. The resultant shoreline is severely serrated and unstable. In an attempt to achieve stability, many owners have dumped masses of material along the water's edge, adding to the already unattractive aspect of the shoreline.

Across Etobicoke at the present time there exist only two waterfront areas of regional significance: one is Marie Curtis Park on the western boundary at the mouth of the Etobicoke Creek, and the other is the site developed by the Authority at Humber Bay.

There is a deficiency of local parks within the waterfront communities of Etobicoke, there being only four other areas where the public can gain access to the lake: Long Branch Park, Rotary Park, Prince of Wales Park and Amos

SITE WAS DEVELOPED BY THE AUTHORITY OVER THE PERIOD 1973 - 1975. MAJOR FACILITIES INCLUDE PICNIC AREAS, SHELTERS, WASHROOMS, PATHWAYS AND A LARGE ARTIFICIAL SWIMMING LAKE.
Waites Park. Both Long Branch and Prince of Wales Parks were stabilized as part of the Shoreline Management Program of the Authority during the 1972 - 1976 Project.

Public transit in this sector as it relates to lakefront development, is reasonably adequate. A streetcar service runs along Lake Shore Boulevard right across Etobicoke and links all existing and potential waterfront park developments.

2.2.2 City of Toronto Sector

The City of Toronto Sector extends from the Humber River, in the west, to Nursewood Avenue in the east, a distance of approximately 16.9 km. The primary focus in this sector is the central waterfront: the harbour, the islands and Ontario Place. On either side of this central area are the two areas coming under the direct responsibility of the Authority.

The Western Beaches comprises the area south of the Gardiner Expressway between the Humber River and the projection of Dufferin Street at the Canadian National Exhibition. This section of the waterfront is entirely within Humber Bay and, as a result, is protected from major storms from the east by the Toronto Islands. Immediately adjacent to the shoreline a sand bottom is predominant, but beyond this the bottom material consists of silty clay deposited by the Humber River. The Humber River is at the western edge of this site and carries an appreciable sediment load during the flood season. The silty clay material is deposited in the vicinity of the mouth and farther east. For beach maintenance and recreation purposes, this entire area has been protected by a 4.0 km chain of offshore breakwaters.

The Western Beaches provide an impressive lakeshore parkway approach to the City core via either the Gardiner Expressway or Lake Shore Boulevard, with the curve of Humber Bay affording a magnificent view of the skyline of downtown Toronto across an expanse of water. The 4.0 km park strip is fairly narrow, measuring less than 121.9 m for most of its length between the south lane of Lake Shore Boulevard and the lake. This limited width restricts the facilities which the Western Beaches can accommodate.

The Western Beaches are valuable parkland of regional significance, offering unique facilities for the Metropolitan region's population and providing contact with the lake for the residents of the western part of the City. The area also serves a local park function for the Parkdale community, although access from south Parkdale over the separating roads and rail lines is awkward.

This site is attractive for picnicking, strolling and sunning, and provides two playgrounds for children. Sunnyside Pool affords an opportunity to swim near the lake and its decks provide a lake view. This is the only adequate swimming facility as the water quality off the Western Beaches is not consistently fit for swimming, although the City of Toronto's sewer separation program promises improvement.
The offshore breakwater and protected waterway make the area attractive for rowing, paddling and mooring. However, the narrow width of the protected waterway limits the facilities which can be accommodated. At the western end, silt deposited by the Humber River has built up to the point that the waterway is almost impassable.

Three boat-oriented clubs, the Argonaut Rowing Club, the Toronto Sailing and Canoe Club, and the Boulevard Club, are found in close proximity to each other towards the eastern portion of the Western Beaches. More mooring spaces are needed but further expansion would result in blockage of the protected waterway. The right angle ends of the breakwater further reduce the effective width of the waterway.

Motorists have easy access to Lake Shore Boulevard from the streets crossing the Gardiner Expressway, between Parkside Drive and Humber River, and at Jameson Avenue. From the Expressway itself, there is direct access to Lake Shore Boulevard from Park Lawn Avenue for traffic from the west and there is direct access for expressway traffic from both directions at the Jameson Avenue intersection. The Queen Street streetcar, although somewhat removed, is the major public transit route to the Western Beaches.

The ownership of most of the Western Beaches was originally transferred from the Toronto Harbour Commissioners to the City of Toronto and by City resolution will be transferred to the Authority. Most of the lands which are leased to private clubs are on a long term lease with conditions governing renewal. The Metropolitan Toronto Parks Department has considerable ownership in the east end of the Western Beaches. The breakwater is presently owned by the Government of Canada.

The Eastern Beaches, covers a 2.4 km shoreline distance south of Queen Street between Ashbridge's Bay and the eastern City limit at Nursewood Road. It consists of a gently sloping backshore, and a gradually sloping bottom comprised of fine sand. The beach material in this area is continually shifted by wave action and lake currents, but is replenished by eroded material from the Scarborough Bluffs. Although the western part of the Eastern Beaches is accreting, the narrow eastern and central areas are in need of shore protection as this area is low-lying and suffers during high water cycles and during bad storms.

On this stretch of lake frontage, the City of Toronto is endowed with a fine beach. The portion between Ashbridge's Bay and Woodbine Avenue is an attractive, lively public beach; while the portion between Woodbine Avenue and the eastern boundary of Kew Gardens has a narrower beach strip with a broad grassed and treed park area, accommodating tennis courts, lawn bowling, and a skating rink. The beach to the east of Kew Gardens consists of a narrower grass and sand strip which, although intimately connected to the adjacent Beaches neighbourhood, is a public beach area. East of the Balmy Beach Club to the eastern City limit, the park is narrower with some of the residences having steps directly to the beach. A wide boardwalk runs from Woodbine Beach to the Balmy Beach Club.
Swimming, sunbathing, picnicking and strolling are accommodated on the Eastern Beaches as well as tennis, lawn bowling and various boating clubs. The Summerville Pool provides excellent swimming facilities. The Greenwood Racetrack is another point of attraction in this part of the City of Toronto.

Part of the charm of the Eastern Beaches is the contrast of the lively, open, often crowded Woodbine Beach with the more varied activities and the park area between Woodbine Avenue and Lee Avenue, and with the quiet, more intimate beach area to the east of Lee Avenue.

The water quality off the Eastern Beaches is relatively good and compares with the water quality off the Toronto Island beaches. The beach has been open for swimming every year since 1959, while other City beaches have been periodically placarded to warn against polluted waters.

The water in Coatsworth Cut is significantly contaminated after a storm when the interceptor sewers are overburdened and discharge storm water into the bay. The polluted water of Coatsworth Cut is deflected away from Woodbine Beach by the Authority's existing landfill development.

Immediately west of Ashbridge's Bay, the Metropolitan Toronto Works Department operates the Main Pollution Control Centre. This facility handles the largest volume of wastes in the Metropolitan area and is scheduled for expansion.

Aquatic Park, in the central waterfront, is an area where the Authority has become involved at the request of the Province of Ontario and the Municipality of Metropolitan Toronto. It consists of a spit of land extending south and west from the foot of Leslie Street, constructed from trucked fill and rubble. On the north side, as part of the Outer Harbour Dredging Project, sand dredged was deposited to form a series of peninsulas and protected water areas. The total area of the land created is 103 ha with another 42.5 ha of protected water. The land is low-lying and varies in extent with water level. The dredged and has provided good habitat for several large colonies of shore birds including Caspian and common terns, herring and ring-billed gulls, as well as geese and other species which are present in less significant numbers. The habitat itself is continually changing due to natural succession, and will likely affect the nature of the bird colonies in the future if management is not carried out.

2.2.3 Scarborough Sector

The Scarborough Sector includes the whole of the lake frontage of the Borough of Scarborough, extending from Victoria Park Avenue to the Rouge River, a distance of approximately 20.1 km.

This sector is characterized by the Scarborough Bluffs which range up to 91.4 m in height, rising to the spectacular Needles and Cathedral Bluffs in the vicinity of Brimley Road. The Bluffs are a unique natural feature of the Metropolitan Toronto region. They are known and studied throughout the world as one of the most interesting records of the Wisconsin stage of the Pleistocene geologic era.
The characteristics of the Scarborough shoreline are the result of erosion. The process of erosion has many facets: wave action, wind action, groundwater seepage, surface runoff and ice action. The nature of the Bluffs themselves heavily contributes to their present form. The rate of erosion varies from one location to another but is approximately 0.5 m to 0.7 m per year.

Development policies of the Borough of Scarborough have brought into public ownership large segments of Bluff area; however, due to the physical characteristics of the Bluffs, there is virtually no public access to the water's edge except to the Bluffers Waterfront Area.

The R. C. Harris Water Filtration Plant is located at the western extremity of the sector. Limited access is available to the lake here, but there is no direct access to the water's edge.

The area stretching from this Plant to the Scarborough Water Filtration Plant is completely developed for single family residential purposes, with the exception of The Toronto Hunt Club, and as a result there is no public access to the waterfront. The Toronto Hunt Club is an important parcel of open space that has a frontage of 442.0 m on Lake Ontario and, in addition, a frontage of 396.2 m on Kingston Road. The Club has successfully undertaken erosion control measures consisting of groynes, internal drainage, regrading and revegetating the slopes. Serious consideration should be given to retaining The Hunt Club as open space.

To the west of the Scarborough Water Filtration Plant is Rosetta McClain Gardens, a Scarborough Park. At Rosetta McClain, as at the nearby Water Filtration Plant, there is limited public access to the bluff top, but no access to the water's edge. The Authority has acquired two key parcels of land adjacent to Rosetta McClain Gardens in the area of Lakehurst Drive and Kingston Road. These properties will be invaluable in the future as open space links between major arterial access routes and the waterfront. East of the Plant, to Scarborough Bluffs Park, the edge of the Bluffs is completely developed for single family residential purposes. Bluff erosion, characteristic of the entire sector, is particularly active in this area.

Prior to the Waterfront Project, 1972 - 1976, Scarborough Bluffs Park, east of Midland Avenue and south of Undercliff Drive, was the only piece of publicly owned land along the top of the Needles Bluffs. As part of that Project, the Authority acquired the rear 14 ha of the St. Augustine Seminary property between Scarborough Bluffs Park and Brimley Road. Lying below the recently acquired Seminary land is Bluffers Waterfront Area.

East of Brimley Road to the Guild Inn, land adjacent to the Bluffs have been developed for residential purposes, with some public open space being available at Cudia and Sylvan Parks. Severe bluff erosion is a characteristic of this section.
The Guild Inn Waterfront Area is a key open space area within the Scarborough Sector. The property on which the Guild Inn itself is located consists of approximately 32.0 ha with a frontage of 960.1 m on Lake Ontario. Erosion control and private access to the lake were carried out by means of a lakefront fill program. The Inn is accessible to Kingston Road via Guildwood Parkway and Galloway Road, and is served by the TTC and Go Transit.

East of the Guild Inn to Manse Road, the area adjacent to the Bluffs has been developed for single family residential purposes with limited public open space but no public access to the water's edge. As well, some industrial development has occurred in the eastern portion of the area.

East of Manse Road, south of the CNR tracks and extending to the mouth of the Highland Creek is East Point Waterfront Area. The 48.0 ha of open space, with a lake frontage of 1920.2 m, is now owned by the Authority. At the western end of this property the Easterly Water Filtration Plant is presently being developed. A small section near the mouth of the Highland Creek is being developed for the expansion of the Highland Creek Pollution Control Centre. Access to this waterfront area is presently inadequate but will be improved by the construction of a new access along the Scarborough Expressway right-of-way by the Borough of Scarborough. These public lands on the waterfront provide an opportunity to develop an important recreation area offering a wide variety of facilities linking with the public open spaces of the Highland Creek valley.

East of Highland Creek, the CNR tracks parallel the lake with adjacent land to the north being utilized for a mixture of industrial and commercial uses. Farther east, extending almost to the Scarborough boundary at the Rouge River, there is a narrow residential strip south of the CNR tracks known as Chesterton Shores. The Authority has acquired several properties in this area which will ultimately allow a shoreline link between the valleys of the Highland Creek and the Rouge River. The Lower Rouge area, owned by the Authority, is an attractive area for wildlife. Along the shoreline of this site a fine natural beach has been established by the deposition of littoral drift material.

The Kingston Road bus service is the public transit mode linking the waterfront across the entire Scarborough Sector. In several locations, bus service penetrates south of Kingston Road servicing local neighbourhoods; these have the potential of being extended to link directly to the various waterfront areas.

2.2.4 Pickering/Ajax Sector

The Pickering/Ajax Sector is the most easterly of the waterfront sectors. It has 12.8 km of lake frontage covering all of the waterfront lands in the Towns of Pickering and Ajax, excluding the interior shoreline of Frenchman's Bay, which covers an additional 5.3 km.

Beginning at the Rouge River on the west and extending almost to the Ajax-Whitby town line on the east, this sector consists of 6.1 to 22.9 m bluffs interspersed with flat sand beach areas. In some sections waves act directly on the toe of
the bluff. In front of some of the bays along this sector, notably Frenchman's Bay, Duffin Creek, and just west of Carruthers Creek, there are sizeable areas of coarse sand providing good recreational beaches.

The present combined population of the Towns of Pickering and Ajax is approximately 43,500 persons. This section of the waterfront is slated for intensive development, particularly residential, in the near future, placing heavy demand for public park areas. It is this potential growth along the lakefront together with the growth of the entire region, which underlines the need to ensure that the development of the waterfront satisfies the many and competing interests, both of a local and regional nature.

In the west, the CNR tracks cross the Rouge River at its mouth, then swing northeast leaving, to the south, the South Rosebank area and the Petticoat Creek Conservation Area.

Between Petticoat Creek and Frenchman's Bay the shoreline is primarily single family residential, some of which has been purchased in order to provide a waterfront link between Petticoat Creek and Frenchman's Bay. Frenchman's Bay itself, with approximately 72.8 ha of protected water, is the key physiographic feature of this sector. To the east of Frenchman's Bay lies the Pickering Nuclear Generating Station. This installation, the largest of its kind in Canada, sits on 202.3 ha of land. A considerable portion of this property is used for buffer purposes, and as a result the Authority has entered into an agreement with Ontario Hydro for the use and management of part of this open space reserve by the Town of Pickering.

East of the Generating Station is the site of the Duffin Creek Pollution Control Centre which extends to the Authority's lands on the west side of Duffin Creek. This installation covers approximately 117.4 ha leaving a public waterfront strip 121.9 m in width on the south side. The valley of the Duffin Creek and some adjacent land have also been acquired by the Authority.

The Ajax waterfront represents the only substantial undeveloped lake frontage in the vicinity of Metropolitan Toronto. Unlike other sectors, large sections of its lake frontage have been acquired by the Authority and can be developed for parks and recreation uses without disrupting established development patterns. The existing combination of sandy beaches and adjoining undeveloped lakefront lands provide this area with a natural recreational potential unequalled along the entire waterfront. In addition, the Authority has acquired almost all of the residential shoreline area between Pickering Beach Road and Carruthers Creek, making a publicly owned shoreline strip approximately 3.2 km in length. This strip will ultimately serve as a link between the Duffin Creek, Harwood Avenue and Carruthers Creek nodes.

In this sector, it is not intended to develop extensive offshore islands to produce protected water. Instead, it is proposed that marina facilities will be concentrated in the already existing protected waters of Frenchman's Bay, with the creation of some additional protected water and boat launching at the
foot of Harwood Avenue in Ajax. Minor mooring facilities will be provided for
day mooring use by 'harbour hoppers' and boating picnickers, in appropriate
locations across the sector where feasible.

2.3. OTHER WATERFRONT PLANNING INITIATIVES

The Authority has been involved primarily with planning water-related open space
uses over much of the waterfront which either had no available park land, had
access restrictions, or where high park use requirements demanded an expansion of
existing areas. There have been over the last few years, however, several other
planning initiatives by various government agencies to plan for and implement
waterfront development. Although some of these do not directly affect the
Authority's work, most indirectly do and, therefore, should be noted.

2.3.1 City of Toronto
Central Waterfront Planning

In mid 1972, recognizing the need for resumed planning for the central waterfront
in order to realize the opportunities created by recent changes in land use and
ownership in the area and in order to promote coordinated planning leading to a
Part II Official Plan for the Central Waterfront, the City initiated meetings
with other major planning agencies in the area. Agreements on the approach to
these Official Planning Studies led to the establishment of the Central
Waterfront Planning Committee which first met in July 1973.

The Central Waterfront Planning Committee was given the following terms of
reference by City Council in May, 1973:

"[a] To make recommendations to participating agencies,
and the City of Toronto and Metropolitan Councils
through their Planning Boards, on all Central
Waterfront Planning matters, including:

[i] Definition of the structure and content of
the Central Waterfront study;

[ii] General long-term public strategies and plans
for the whole of the Central Waterfront and,
in particular, Official Plan studies;

[iii] The encouragement of detailed proposals for
developments within the area and the establish-
ment of objectives and criteria whereby all
proposals for development may be evaluated;

[iv] Immediate needs and opportunities for public
action, including interim uses.

[b] To recommend appropriate procedures for the implemen-
tation of plans and policies, and the regular review,
refinement and amendment of those plans and policies.
(c) To provide coordination between the various planning and implementation agencies involved in the Central Waterfront.

(d) To obtain the continuing involvement of the public in Central Waterfront Planning, including:

[i] Publishing relevant information and giving it wide circulation;

[ii] Encouraging the involvement of inner-city residents in the work of the Planning Committee, because they will be particularly affected by any policies for the area.

(e) To work by consensus as far as possible, and where that is not possible, to submit the different viewpoints expressed.

(f) To hold all its meetings in public."

The work of the Committee has continued since then and has resulted in the production of several significant base study reports. These led to the production of Draft I policy statements for the central waterfront circulated early in 1979 and are currently under consideration by the City Planning Board.

The result of this planning work is important to the Authority as it relates to the future of Aquatic Park, in particular, and Outer Harbour activities in general.

2.3.2. Harbourfront

In October 1972 the Federal Government announced that it would acquire a 34.8 ha Harbourfront site within the Port and Harbour of Toronto between York Street and Stadium Road. Since that time planning and development for the park has proceeded initially under the guidance of the Intergovernmental Waterfront Park Committee which consists of four levels of government, Federal, Provincial, Metropolitan Toronto and City; and more recently, under the direction of the Harbourfront Corporation. The development has consisted of several improvements which have made it a popular attraction. Harbourfront has established several criteria to guide development:

1. Harbourfront may become a mixed use area, but recreational and leisure time activities must predominate; the mix may include residential, commercial, industrial, institutional and transportation uses.

2. Uses which require or benefit from a Harbourfront location must be given priority.

3. The Harbourfront site must be developed to maximize year round use and where possible, all elements should be designed so that they can be used year round, possibly for a variety of purposes; where a building or a facility is not appropriate for year round use, a sound rationale must be provided to justify this.
4. The site must be developed so as to provide activities or interests which are usable by and accessible to all age, social, income and ethnic groups, as well as to the handicapped.

5. The site must be developed in the context of facilities being provided in Metropolitan Toronto.

6. Facilities which can be readily adapted to a defined range of uses and which can accommodate new uses, must be given priority.

7. Harbourfront uses must be compatible with existing or anticipated surrounding development and vice versa.

8. In developing uses, programs and facilities for the Harbourfront site, every effort must be made to experiment with new and innovative ideas.

9. Maximum public access to and along the water's edge must be provided."

This development pattern is further guided by the fact that the area must be operationally self-sustaining and must use major on-site real property value to finance all developments after the initial capitalization.

Development which has been carried out includes many interesting features including park areas, development of a public water's edge, a flea market, some boat mooring, arts and crafts programs, mixed purpose commercial areas like the Pier Four restaurant and the potential for an enlarged marina adjacent to the Western Gap.

2.3.3 Ajax Waterfront Study

In September 1977 the Town of Ajax established a Waterfront Needs Committee to determine the desires and needs of the Town's residents as they relate to waterfront development. The main focus of the Committee was the high density node at the foot of Harwood Avenue, but their interest extended across the entire Ajax waterfront from Duffin Creek to Carruthers Creek. The Committee used as their base for discussion the concept plan prepared by the Authority.

The process involved study and examination of current Authority proposals for the waterfront and to prepare planning guidelines and development criteria for any undertaking; in particular, the 4.0 ha high density residential, commercial and marina site which is to be developed by private enterprise. The work is still underway but will provide useful direction for waterfront work in that sector in the future.
3. PROBLEMS AND IMPLICATIONS

3.1 INTRODUCTION

The Greater Metropolitan Toronto area (the Regions of Peel, York and Durham, and Metropolitan Toronto) is presently inhabited by approximately three million people. This population base represents 13% of Canada's entire population and approximately 35% of Ontario's populace. This population concentration creates a large demand for recreational land and facilities.

Although Lake Ontario serves many purposes for the Metropolitan Toronto region, perhaps the one the general population is most cognizant of is the role that the Lake plays in recreation. However, it is only in the last fifteen years that the true significance and potential of the Lake Ontario waterfront has been recognized and long term planning for its future initiated.

The waterfront is both regionally and provincially significant from a parks and open space viewpoint. This is best exemplified by the joint involvement of the area municipalities and the Ministry of Natural Resources through the Authority in the funding, planning and development of the Metropolitan Toronto Region waterfront.

The impetus for opening up the waterfront for public use was the 1967 Waterfront Plan. From that Plan the Authority was designated as the implementing agency and has since prepared and carried out a Ten Year Waterfront Plan containing two Five Year Projects. Over the past several years, other studies and reports have also recognized the significance of the waterfront for parks and open space; they include: the Metropolitan Toronto and Region Transportation Study (MTARTS), Design for Development: The Toronto Centred Region, the Central Ontario Lakeshore Urban Complex (COLUC) Task Force Report, MetroPlan background paper — Public Open Space, and a number of Official Plan statements including the Durham Official Plan and MetroPlan.

Within the Authority's jurisdiction, there are very few alternative areas to Lake Ontario for the provision of water-oriented parks, open space, and recreational opportunities. Approximately ten major inland lakes and two man-made reservoirs exist to provide water-oriented opportunities. Irrespective of the fact that a number of the lakes are privately owned or not open to the general public, the lakes are only able to supply limited opportunities for small craft boating, fishing and swimming. The closest viable alternatives to the Lake Ontario waterfront are Lake Simcoe and Lake Scugog.

The Metropolitan Toronto Region waterfront has the potential to offer the residents within the Authority's jurisdiction a variety of outdoor, water-oriented recreational experiences within the context of an urban environment. With this potential, in conjunction with the population concentration in the Metropolitan Toronto region and changes in leisure time,
the significance of the waterfront for parks, open space, and recreation will become even more evident in the future.

3.2 ACCESSIBILITY OF THE WATERFRONT

The Metropolitan Toronto region, centred about the Lake Ontario waterfront, is situated in a manner that enables the vast majority of the region's residents to reach the waterfront in less than one hour's travelling time. Although the waterfront is highly accessible from a travel standpoint, the same cannot be said for physical access to the land/water interface of the waterfront.

Recognition of the significance of the waterfront and the opening up of the waterfront to the general public has been relatively recent. The Authority's involvement in waterfront development, for example, was largely initiated in 1972, only nine years ago. Development in Metropolitan Toronto historically commenced along the waterfront and then northward. As a result, some sections of the waterfront are privately owned or are of such a land use that public access to the water's edge is generally prohibitive.

Table 1

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>PARK/OPEN SPACE</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etobicoke</td>
<td>1.6</td>
<td>8.1</td>
<td>9.7</td>
</tr>
<tr>
<td>City of Toronto</td>
<td>10.5</td>
<td>6.4</td>
<td>16.9</td>
</tr>
<tr>
<td>Scarborough</td>
<td>8.0</td>
<td>12.1</td>
<td>20.1</td>
</tr>
<tr>
<td>Pickering/Ajax</td>
<td>6.4</td>
<td>6.4</td>
<td>12.8</td>
</tr>
<tr>
<td>TOTAL LENGTH</td>
<td>26.5</td>
<td>33.0</td>
<td>59.5</td>
</tr>
</tbody>
</table>

As the above table illustrates, in total, 44.5% of the waterfront is in 'park/open space' use and the remaining 55.5% in 'other'. However, on a sector basis, the 'park/open space' use varies from a low of 16.5% for Etobicoke to a high of 62.1% for the City of Toronto.

In addition to privately owned waterfront, physical constraints such as the Scarborough Bluffs also limit the accessibility of the land/water interface to the general public. Approximately 25 km of the Metropolitan Toronto region waterfront is not easily accessible due to the existence of bluffs. Along the Scarborough waterfront, for example, only one major access to the base of the bluffs exists, that being the Authority's Bluffers Waterfront Area.
Therefore, based on the access constraints described above, it has been necessary in part, particularly for the Metropolitan Toronto waterfront, for the Authority to create land bases for park and open space purposes, either where no land base exists, as in the case of the Scarborough Bluffs, or where limited existing public waterfront exists as in the case of Etobicoke. In areas where development did not precede the Authority's involvement in waterfront development, such as portions of the Ajax waterfront, the Authority was able to acquire the existing waterfront for public use.

In examining the accessibility of the waterfront, consideration must also include a review of policy. Implicit in the Authority’s overall goal for this Program is the requirement not to use local traffic systems as access routes to waterfront parks. Waterfront parks are regional in nature and therefore must serve and be accessible to all people within the Authority’s jurisdiction at large. Major access routes and not local streets are then required to service regional waterfront parks. Major access routes, or the potential for them, are not readily available in all areas. As a consequence, the number and location of waterfront areas can be limited by the lack of acceptable access routes.

Therefore, based on the foregoing discussion on access, the following is a listing of readily developable areas for waterfront parks:

**Etobicoke Sector:**
- Lake Shore Boulevard West at the Etobicoke Creek (Marie Curtis Waterfront Area)
- Kipling Avenue at Lake Shore Boulevard West (Colonel Samuel Bolis Smith Waterfront Area)
- Lake Shore Boulevard West at the Mimico Creek (Humber Bay Waterfront Area)

**City of Toronto Sector:**
- due to the extent of existing park/open space lands, the lack of physical constraints such as bluffs, and the availability of major access routes, few constraints exist with respect to use of the waterfront by the general public.

**Scarborough Sector:**
- Kingston Road at Lakehurst Crescent (Bluffers West Waterfront Area)
- Brimley Road (Bluffers Waterfront Area)
- Guildwood Parkway (Guild Inn Waterfront Area)
- Beechgrove Drive at the C.N.R. line (East Point Waterfront Area)
- Rouge Hills Drive (Lower Rouge Waterfront Area)

**Pickering Sector:**
- Whites Road (Petticoat Creek Waterfront Area)
- Liverpool Road (Frenchman's Bay)
- McKay Road (Duffin Creek Waterfront Area)
3.3 FACTORS AFFECTING THE USE OF THE WATERFRONT

A variety of factors including population concentration, changes in leisure time, proximity to recreational opportunities, availability of alternative areas, suitability of Lake Ontario to provide recreational opportunities, increasing attractiveness of the waterfront, income, cost increases and energy conservation will impact the extent to which the Metropolitan Toronto region waterfront is utilized to provide park/open space opportunities.

3.3.1 Population Concentration

A concentration of approximately three million people in the Greater Metropolitan Toronto area creates the single largest demand and the largest spatial demand for recreational facilities. Continued growth, particularly in the Regions of Peel, York and Durham, will add to this demand. Projections indicate that the combined population base of the three regions will increase some 57% by the year 2001.

With the continuing concentration of people in urban centres, the types of residential dwellings being constructed have changed. The overall trend for detached residential dwellings is downward, whereas for multiples such as apartments, condominiums and stacked townhouses, it is upward. Also with rising housing costs the trend is towards smaller lot sizes for residential units. The end result is an increasing dependence on public parks and open space areas for recreational pursuits.

3.3.2 Changes in Leisure Time

There has been a continuous increase in leisure time available to the average citizen in the 1900's. In the 1960's the average work week was 38 to 48 hours; this was reduced to 35 to 42 hours during the 1970's. Further increases in leisure time may result from the institution of a four day work week in the future.

About 46% of the average Canadian's time is devoted to leisure activities of various sorts (Woods, Gorden and Company). Of the leisure time spent on recreational activities, studies such as the Tourism and Outdoor Recreation Planning Study (T.O.R.P.S.) — Ontario Recreation Survey, identified outdoor recreational activities as being the most popular. The popularity of outdoor recreational activities should continue to increase as part of the growing concern for individual physical and mental well being.
3.3.3 Proximity to Recreational Opportunities

Generally, distance to a recreational area is an important factor for involvement in a specific recreational activity. In pursuing an activity, the average citizen is faced with two constraints; time and income. Those living the farthest away from a recreational area will have higher travel costs and use more time getting there. This, then, would result in lower use rates for outlying areas.

As stated previously, the Metropolitan Toronto region is situated such that the vast majority of the region's residents can reach the Lake Ontario waterfront in less than one hour's travelling time. This is possible by the existence of Highways 401 and 427, the Don Valley Parkway and the Queen Elizabeth Way/Gardiner Expressway. Also, various public transit routes come within close proximity to the waterfront.

3.3.4 Alternative Recreational Resources

Historically the lake's and cottage areas north and east of the Metropolitan Toronto region have been the major recreation centres. However, the continued development of such cottage areas has produced such use-associated problems as pollution, traffic jams and increased travel time.

For some time now the cottage lakes within one to two and a half hour travel time have been largely 'developed'. Cottage lakes that are now being opened up involve much greater time, effort and money to reach. Depending on personal preferences, at some point these may become undesirable.

Also, the Ministry of Natural Resources is now carrying out environmental examinations of many potential cottage lakes to determine their natural carrying capacities and to limit the sale of cottage lots to within these capacities.

As an alternative to a fixed cottage, more people are acquiring campers or trailers of all types. There is also a trend for some to acquire a 'floating cottage', usually a sailboat, as an alternative.

With the physical limitation of alternative recreational areas, more Metropolitan Toronto region residents will be recreating closer to home.

3.3.5 Suitability of Lake Ontario to Water-Oriented Recreational Activities

In developing the Lake Ontario waterfront for public use the emphasis should be on recreational activities that require a waterfront setting or those which can maximize the waterfront location.

Perhaps the most visible activity to utilize the waterfront is boating. Lake Ontario is excellent for sailing, particularly for keel boats. There is no depth problem, no major currents affecting sailing, and generally good prevailing
northwest winds in the summer. The one disadvantage to boating is due to the large surface area of the Lake which can generate a fairly high wave in a short period of time. Under these conditions keel boats are better able to cope than are power boats, or sailing dinghies.

The Lake itself can spatially accommodate a vast number of boats. The limitation, however, is the availability of safe harboursages for boat mooring.

The urbanization of the Lake Ontario shoreline in conjunction with a number of other factors has over the years resulted in the decline in the diversity of indigenous fish stock. However, recent experiments by the Ministry of Natural Resources have clearly demonstrated that water quality along the Metropolitan Toronto region waterfront is sufficient to support a variety of fish species and with appropriate management fish numbers and species diversity can be further increased. Also, the Ministry has recently initiated a stocking program for the enhancement of sport fishery. Coho salmon, chinook salmon, lake trout and rainbow trout have been stocked on an experimental basis with the intent of establishing of a self-sustaining population for at least some of these species.

Perhaps the one major water-oriented activity that Lake Ontario is the least conducive to is swimming. Although localized water quality problems can exist, the major reason for the lack of participation is water temperature. Over the summer it is only for a two to three week period that water temperatures rise above the 16°C considered to be the minimum desirable temperature for swimming. Although semi-sheltered beaches or sand beaches with gentle slopes could have water temperature readings above the average, the Metropolitan Toronto region waterfront does not possess an overabundance of fine sand beaches. Nevertheless, beach areas continue to be heavily used for sunbathing and, to a lesser extent, for wading.

Since the waterfront offers a distinct setting, many open space activities can take on a different perspective. Activities such as picnicking, viewing, walking, cycling, etc., are often enjoyed at waterfront parks/open space areas because of this different perspective or as a result of the existence of water-oriented activities such as boating or fishing.

3.3.6 Other

As housing, food, fuel and other costs continue to increase, the amount of disposable income to spend on leisure time and particularly recreational activities may decline. The resulting trend would be to cut down on distance travelling and recreate closer to home.

With the concern for energy conservation, many North American-made cars are being substantially downsized. Not only do smaller cars not have the same passenger and luggage space, but engine sizes are smaller. Smaller engines have less power required to haul trailers, campers or boats.
As the Metropolitan Toronto region waterfront is increasingly opened up to the general public, its increased attractiveness will itself generate awareness and thus demand to utilize the waterfront. The development of such sites as Humber Bay Waterfront Area, Ontario Place, Harbourfront, Ashbridge's Bay Waterfront Area, and Bluffers Waterfront Area have increased the attractiveness of the waterfront.

3.4 PARTICIPATION, SUPPLY AND DEMAND

3.4.1 Introduction

The Metropolitan Toronto region waterfront has the ability to offer the general public outdoor recreational experiences within the context of an urban environment previously available only at near-urban or rural areas. Recent trends continue to indicate a renewed interest in outdoor activities.

For major outdoor recreational activities, a shortage of opportunities can exist due to high levels of participation in such activities. This can have severe implications for a person's demand and participation in an outdoor activity. A deficit in the opportunity to participate can lead to crowded conditions, and consequently, a participant's enjoyment of that activity is reduced. Therefore, although a participant may not consciously withdraw from that activity, rate of participation may be reduced. The cumulative effect of all participants in a specific activity who share this crowded feeling when recreating could cause a lower participation and demand for that activity.

If a shortage of opportunities goes unchecked, any growth in the demand for outdoor recreational activities could effectively be reduced despite a greater desire by the general public to participate in outdoor activities.

It has also been suggested that whenever the opportunity or supply of a recreational opportunity is expanded, then the demand for that activity could be increased. For example, the creation of a small craft boating harbour could increase demand because supply (the boat harbour) has been made more accessible to the general public. Therefore, supply can create demand because the opportunity is there and available.

The following subsections specifically address participation, supply and demand for boating, fishing, swimming and open space uses. Frequent mention will be made to the Tourism and Outdoor Recreation Plan Study (T.O.R.P.S.) — Ontario Recreation Survey. This extensive study of Ontario's residents attempted to identify the recreational patterns of the Province's population over twelve years of age during 1973 and 1974.

To infer the results of this survey, the data had to be broken down to the Metropolitan Toronto region stratum and then applied to the population of that stratum twelve years and older. If at the time the population base of 2.6 million had 80% of the people twelve years of age or older, then the survey population applicable to the Ontario Recreation Survey would be 2,080,000.
3.4.2 Boating

(a) Supply/Participation Ratio

Data presented by T.O.R.P.S. indicates that 38% of the sample in Metropolitan Toronto participated in boating in the twelve month period prior to their interview. For the Metropolitan Toronto region this implies that 790,400 (2,080,000 x .38) people participated in boating. T.O.R.P.S. data also indicates an average participation rate of sixteen times per year. For the Metropolitan Toronto region this would mean that 12,646,400 (790,400 x 16) boating occasions per year would be generated. Metropolitan Toronto residents further indicated that 41% of their boating was on a day use basis. This implies then that 5,184,860 (12,646,400 x .41) boating occasions per year would be spent at an area within a relatively short distance from home.

T.O.R.P.S. asked boaters where they spent their most recent venture. The Metropolitan Toronto sample indicated that less than 10% were in the area. Since Lake Ontario is the only major boating resource, it can be inferred that 1,264,640 (12,646,400 x .10) boating occasions would be spent on the waterfront.

As may be noted, a large number of home based Metropolitan Toronto boating occasions, 3,920,220 (5,184,860 - 1,264,640), use facilities outside of the Metropolitan Toronto region. Such a pattern of use is the inverse of any recreational travel patterns that may be predicted using such models as a gravity model or distance decay function.

Therefore, it would appear that for some reason Metropolitan Toronto region boaters are discouraged from boating on their waterfront.

In terms of supply, opportunity to Lake Ontario's boating resources is afforded in three basic ways: the launching ramp, seasonal mooring spaces, and dry sailed (dinghy) spaces. The public launch ramp is used primarily by boats under 18 feet in length, while seasonal mooring and dry sailed spaces are associated with marinas and boating clubs.

On the Metropolitan Toronto region waterfront 16 public launching ramps exist. Taking into account a daily capacity per ramp, boating season length, average capacity per boat, and institutional constraints, it has been determined that the accessible supply of boating opportunities presented by launching ramps is 62,400.

A 1976 boating study by the Authority, in conjunction with the Metropolitan Toronto Parks Department, identified a fleet of 5,272 wet and dry sailed boats along the waterfront. Of this about 1,414 boats were dry sailed and the remainder (3,858) wet moored. Taking into account the same factors identified for launching ramps, it has been determined that the accessible supply of boating opportunities presented by clubs and marinas is 960,943.
Combining all the accessible boating opportunities along the waterfront (launching ramps, wet mooring spaces and dry sailed spaces) a total of 1,023,343 opportunities exist.

Based on the foregoing, a ratio of supply (1,023,343) to participation (1,264,640) can be calculated. The supply/participation ratio then for boating is .81 (1,023,343 ÷ 1,264,640). Since this ratio is less than 1.0, it can be inferred that a deficit in boating opportunities exists for the Metropolitan Toronto region waterfront. Boaters, therefore, are not realizing the maximum satisfaction that the recreational opportunity affords; in effect the facilities are too crowded.

What this ratio fails to examine is the real demand for boating facilities. No indication can be gained as to the extent of boaters using facilities outside of the Metropolitan Toronto region waterfront who would like to boat within the area. Nor can any indication be gained as to the latent demand for boating by the public whose recreational boating interests are stifled by inadequate opportunities to participate in the activity.

(b) Anticipated Supply and Demand for Wet and Dry Sailed Boat Mooring Spaces

As identified in the report entitled: The Metropolitan Toronto Region Boating Study, 1976, attempts were made to calculate supply and demand for boating along the waterfront for a 15 year period. As time did not permit an in-depth study in 1976 of factors contributing to average annual demand growth rates, or a specific investigation into the expansion/realignment possibilities of existing boating facilities, this information was based on a 1975 study on small craft harbours in the Metropolitan Toronto region by the firm of Johnson, Sustronk, Weinstein and Associates Limited, for the Federal Department of the Environment.

As identified in the 1975 study, the average annual demand growth rate included the following factors: population growth rates, income, education, proximity to recreational opportunity, leisure time and other factors (availability of cottage areas, cost of gasoline and travel time, and suitability of Lake Ontario to boating).

Based on the average annual demand growth rates identified in the 1975 study and anticipated supply identified in the 1976 study, the following predictions were made:

1976

5272 existing wet/dry mooring spots (Port Credit to Ajax)
824 waiting lists

Therefore: total demand for - 6096 spaces
deficit (unsatisfied demand) - 824
1977-1981

Demand
Period ending 1981 - total demand (wet/dry spaces) is projected to be approximately 9,021.

Supply
1900 spaces - increased supply due to creation of new facilities
500 spaces - expansion/realignment existing clubs
940 spaces - expansion/realignment existing marinas \{ 1975-1980

Supply (1977-1981) 1900 + 1440 = 3340
Total supply 3340 + 5272 = 8612
Deficit (unsatisfied demand)
9,021 - 8,612 = 409 boat spaces

By 1981
8,612 existing
\underline{409} waiting lists
9,021 total demand

1982-1986

Demand
Period ending 1986 - total demand (wet/dry spaces) is projected to be approximately 12,015.

Supply
2350 spaces - increased supply due to creation of new facilities
325 spaces - expansion/realignment existing clubs
325 spaces - expansion/realignment existing marinas \} 1980-1985

Supply (1982-1986) 2350 + 650 = 3000
Total supply 3000 + 8612 = 11,612
Deficit (unsatisfied demand)
12,015 - 11,612 = 403

By 1986
11,612 existing
\underline{403} waiting list
12,015 total demand

1987-1991

Demand
Period ending 1991 - total demand (wet/dry spaces) is projected to be approximately 15,703.

Supply
2600 spaces - increased supply due to creation of new facilities
No foreseeable expansion/realignment existing clubs/marinas.
Supply (1987-1991) 2600  
Total supply 2600 + 11,612 = 14,212  
Deficit (unsatisfied demand)  
15,703 - 14,212 = 1,491  
By 1991  
14,212 existing  
1,491 waiting list  
15,703 total demand  

NOTE: The above calculations excluded community clubs, instructional schools and specialized groups such as sea scouts or Navy League groups, as ownership of boats rested with the organization as opposed to the individual.

As identified, there would still appear to be an unsatisfied demand for boating facilities during the 15 year period from 1977 to 1991.

Although this 1976 study may be somewhat outdated and consequently modification to the average annual demand growth rates required, by the same token it should be identified that ancipated increased supplies have not been realized.

Perhaps with the supply that has been created within the 1977 to 1981 period, notably Humber Bay Waterfront Area and Bluffers Waterfront Area, an implied demand can be demonstrated. By the boating season of 1979, effectively all the land base and protected water for boat mooring at Humber Bay West had been completed. The Humber Bay Boating Federation, with its two major component clubs, increased from approximately 115 wet moored boat spaces in 1978 to 460 spaces in 1979, only 40 short of their allocated quota. Today, both component boating clubs are compiling waiting lists. In the case of the Bluffers Waterfront Area, the creation of land and protected water for boating is still in progress. Nevertheless, in 1979 the Bluffers Park Boating Federation had 114 boats wet moored with a planned expansion to 250 spaces in 1980. The limiting factor to further expansion is the lack of a land and water base at this time.

(c) Latent Demand

Again using data gathered by T.O.R.P.S., latent demand for the activity of boating may be approached. The study asked respondents: (a) if they wanted to participate in the activity more often, and (b) if they did want to participate more, what was the reason for their lack of participation.

Seven percent of the respondents from Metropolitan Toronto indicated that they would like to participate in the activity of motor boating more often, while 14% of the sample indicated that they would like to sail more often. Almost half (49%) of these boaters felt lack of opportunity was the primary reason they had not participated in the activity more often. The major reason cited by these respondents was a lack of opportunities near their homes.
Finally, with the expansion of a recreational activity such as boating, safety
must also be considered. The increase in supply of boating opportunities is the
result of the increase in boat basins along the waterfront. With an increase in
the number of boat basins, the number of safe harboursages during sudden storms
is also increased.

3.4.3 Fishing

The report entitled: Operation Doorstep Angling prepared by the Authority and
the Ministry of Natural Resources, identified the existence of some 66 species of
fish within the jurisdiction of the Authority. Twenty-seven of these fish
species were considered to be 'recreational fish' in that they would take normal
bait and provide the angler with a good fight when hooked.

(a) Supply/Participation Ratio

T.O.R.P.S. date indicates that 30.6% of the sample in Metropolitan Toronto
participated in fishing in the 12 month period prior to their interview. For
Metropolitan Toronto region residents, this implies that 636,480 (2,080,000 x .306)
people participate in fishing. T.O.R.P.S. identified a participation rate of 9
times per season per angler. Therefore, for the Metropolitan Toronto region,
approximately 5,728,320 (636,480 x 9) fishing occasions per year would be
generated. Further, 31.9% of the Metropolitan Toronto respondents indicated that
they fished on a day use basis. As such, 1,827,334 (5,728,320 x .319) fishing
occasions per year would be spent at an area within a relatively short distances
from home.

Despite a fairly high day use participation rate by the Metropolitan Toronto
sample, only 4.6% of their fishing occurred within the area. This means that
263,503 (5,728,320 x .046) occasions would occur within the Metropolitan Toronto
region. If it is assumed that anglers would prefer to fish closer to home on a
day use basis, then an unsatisfied demand of 1,563,831 (1,827,334 - 263,503)
occasions per year would exist for the Metropolitan Toronto region.

In terms of supply, Operation Doorstep Angling calculated that a total of
57,502 accessible angling opportunities exist within the Metropolitan Toronto
region (exclusive of the Toronto Islands and Grenadier Pond). Approximately one-
half of these annual opportunities (27,579) exist along the waterfront.

Therefore, given an annual accessible supply of 57,502 fishing opportunities
within the jurisdiction of the Authority, and a participation of 263,503 angling
opportunities per year, then the supply/participation ratio of .22 (57,502 ÷
263,503) exists for the Metropolitan Toronto region. With this being the case,
it is not difficult to understand why so many day use fishing trips are spent
outside of the Metropolitan Toronto region.
(b) **Implied Latent Demand**

Of the T.O.R.P.S. sample from Metropolitan Toronto who were active fishermen, 19% indicated that they would like to participate in the activity of fishing more often. This would imply then, that from the Metropolitan Toronto region some 120,931 (636,480 x .19) people would like to participate more often. In addition, 4% of the Metropolitan Toronto sample who were not fishermen indicated that they would like to participate in the activity. As such, this would imply that some 57,741 [(2,080,000 - 636,480) x .04] additional people would like to participate in fishing.

Therefore, it could be suggested that an implied latent demand of more than 178,672 (120,931 + 57,741) fishing opportunities would exist for the Metropolitan Toronto region.

Approximately one-half of the reasons cited by active fishermen as to why they did not participate more often centred on either a lack of opportunities close to home or the poor quality of the fishing facilities within the Metropolitan Toronto region. Reasons for non-involvement in fishing by the non fishermen sampled stemmed from a lack of opportunities close to home.

3.4.4 **Swimming**

Despite being well suited for a variety of outdoor recreational activities, the Lake Ontario waterfront can only be considered marginally suited for swimming. Most swimmers are deterred from swimming in the Lake as water temperatures are only suitable during short periods throughout the summer months.

Although the Lake has limitations for swimming, Authority park use surveys have identified that waterfront parks which provide good sand beach areas have a higher incidence of sunbathing and swimming than other waterfront parks.

(a) **Participation**

According to T.O.R.P.S. data, 65.3% of the sample residing in Metropolitan Toronto were active participants in swimming activity. For the Metropolitan Toronto region population then, 1,358,240 (2,080,000 x .653) people would be involved in swimming. The average rate of participation identified by T.O.R.P.S. is 31.9 times per year, giving a total of 43,327,856 (1,358,240 x 31.9) swimming occasions being generated by Metropolitan Toronto region residents.

T.O.R.P.S. data identified that 62.6% of the occasions generated by Metropolitan Toronto residents were done on a day use basis. This would then mean that 27,123,238 (43,327,856 x .626) swimming occasions would be spent within a reasonable drive from the participant's home. It was further identified that 40.8% of the swimming occasions by the Metropolitan Toronto respondents were undertaken in the area. This would then create a demand for 17,677,765
(43,327,856 x .408) swimming opportunities for the Metropolitan Toronto region each year. It can be expected that the majority of these occasions would be spent at both public and private swimming pools.

As can be noted, a large number of home based swimming occasions, 9,445,473 (27,123,238 - 17,677,765), would occur outside the Metropolitan Toronto region. Undoubtedly many of these occasions are spent seeking a natural or waterfront setting. It is unlikely that many participants would travel outside the region seeking a 'pool' type facility which could easily be found within the area.

Using the assumption that home based, day use participants would like to engage in the activity close to their homes, a significant portion of the 9,445,473 occasions going outside of the Metropolitan Toronto region may be taken as an indication of latent demand for enjoyable, natural or waterfront settings for swimming opportunities within the Metropolitan Toronto region.

(b) **Implied Demand**

Twenty-four percent of the T.O.R.P.S. respondents from Metropolitan Toronto indicated that they wanted to swim more often. Of these, 42% identified a 'lack of opportunity' as the main reason for not participating more often. This lack of opportunity centred around no opportunity being provided close to home or a feeling that facilities were too crowded.

In addition, 13% of the sample which had not participated in swimming during the 12 months prior to their interview, indicated that they would like to participate. The major reasons for the lack of involvement were either a lack of opportunity to swim close to home or the cost of a swimming venture.

(c) **Artificial Swimming Lakes**

Many outdoor recreation reports identify swimming as being significantly associated with a variety of other outdoor activities such as boating, hiking, picnicking and fishing. Sunbathing is also a major part of a swimming experience in many instances.

The provision of man-made artificial swimming lakes along the waterfront would not only enhance an outdoor recreational outing, but would also provide a more controlled alternative to swimming in Lake Ontario. Such artificial lakes should be designed to serve a range of interests (swimming, wading), a range of age groups and should be shaped and designed to reflect beach conditions as opposed to pool conditions. In this latter regard, the lake should have a perimeter depth of inches with the maximum depth in the centre. As well, a sizeable back up or dry beach area would be required for relaxing, sunbathing and other compatible activities.
At this point in time, one such artificial swimming lake can be found along the waterfront as part of the Petticoat Creek Waterfront Area. Visual observations from the Petticoat Creek Waterfront Area indicate that an artificial swimming lake can be considered as a viable alternative to family oriented beach swimming in a more controlled and therefore hospitable environment.

3.4.5 **Open Space**

An open space area represents a resource that can be used by a variety of types of activities concurrently or throughout the day. Depending upon the activity, the amount of open space required will vary as will the length of time that the land base is monopolized.

Generally, the greatest amount of recreational time is spent on activities requiring the least preparation or special equipment. This is borne out by the T.O.R.P.S. data in that such open space associated uses as recreational walking, ranked 2nd in terms of popularity by the Metropolitan Toronto residents sampled, picnicking ranked 3rd, recreational driving ranked 5th, bicycling ranked 11th, hiking ranked 13th and nature appreciation ranked 16th.

As the data illustrates, open space, as an entity, is in demand for a variety of recreational interests. As open space areas are not confined to one activity but can and will be used for a variety of experiences, if all the activities demanding open space areas were compounded the real demand for open space as a recreational facility would be higher than for any other single recreational facility.

The existence of a water body adjacent to an open space area serves to provide the user with a broader range of recreational alternatives. Water then becomes a part of the green space and extends the open space area beyond the limits of the land base. A waterfront park affords the user the opportunity to round out the outdoor recreational venture with the land base recreational activities being complimented by water-oriented activities.

3.4.6 **Latent Demand (General)**

As part of the T.O.R.P.S. survey, respondents were asked in which of their current activities (participation within the last 12 months) and in which past activities (no participation within the last 12 months) they desired to increase their participation. Respondents were also asked to identify any activities which they had not yet participated in but would like to do so. It should be noted that activities analyzed were of a resource base nature only.

As identified in Table 2, swimming, fishing, tennis and all boating are the four current activities in which respondents, would like to participate more. In terms of past activities, tennis, all boating, and swimming were mentioned most often. Unspecified skiing, all boating and tennis were identified most frequently as activities respondents would like to try for the first time. In total then, activities in which more participation is desired would rank swimming, tennis, all boating and fishing as the most preferred activities.
1. Respondents Have Participated In Past 12 Months But Desire More Participation
2. Respondents Have Participated Prior To, But Not In Past 12 Months And Desire To Participate In Again
3. Respondents Have Never Participated But Desire To Participate

<table>
<thead>
<tr>
<th>RANK</th>
<th>Activity</th>
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<tr>
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<td>Tennis</td>
<td>Unspecified Skiing</td>
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<td>2.</td>
<td>Fishing</td>
<td>All Boating</td>
<td>All Boating</td>
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<td>3.</td>
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<tr>
<td>4.</td>
<td>All Boating</td>
<td>Ice-Skating *</td>
<td>Sailing</td>
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<tr>
<td>5.</td>
<td>Golfing</td>
<td>Horseback Riding *</td>
<td>Golfing</td>
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<td>6.</td>
<td>Camping</td>
<td>Fishing</td>
<td>Downhill Skiing</td>
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<tr>
<td>7.</td>
<td>Picnicking</td>
<td>Camping</td>
<td>Horseback Riding</td>
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<tr>
<td>8.</td>
<td>Ice Skating</td>
<td>Unspecified Skiing</td>
<td>X-Country Skiing</td>
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<td>9.</td>
<td>Horseback Riding</td>
<td>Bicycling</td>
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<tr>
<td>10.</td>
<td>Bicycling</td>
<td>Sailing</td>
<td>Swimming</td>
</tr>
</tbody>
</table>

* Activities which have the same rank

OVERALL RANKING

Swimming
Tennis
All Boating
Sailing
Fishing
Golfing
Downhill Skiing
Horseback Riding
Unspecified Skiing
Camping
Downhill Skiing
Sailing
Bicycling
Picnicking
X-Country Skiing
Snowmobiling
4. **POLICY**

The Lake Ontario Waterfront Development Program is based on the 'Waterfront Plan for the Metro Toronto Planning Area' prepared by the Metropolitan Toronto Planning Board in 1967. The administrative and planning procedures of the Authority recognize the vital role that municipal planning and land use control have in achieving a handsome and accessible waterfront, therefore continued close cooperation with appropriate levels of government will be a priority with the Authority.

All of the planning for the Metropolitan Toronto region, provincial, municipal and Authority, has recognized the Lake Ontario shoreline as one of the major natural resources of the region. The waterfront work proposed by the Authority will be concerned with works and acquisition to further the conservation, restoration, development and management of the natural resources of the Lake Ontario waterfront. Implicit in this task is the development of suitable public access to the waterfront, and the provision of water-oriented recreational opportunities. Water-oriented recreational opportunities are considered to include: boating, fishing, swimming, open space uses in conjunction with the waterfront, and, the preservation of significant natural and historical areas along the waterfront.

Accordingly, the goal of the Authority as it relates to the waterfront is as it was stated in the original Waterfront Plan:

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TO CREATE A HANDSOME WATERFRONT, BALANCED IN ITS LAND USES, WHICH WILL COMPLEMENT ADJACENT AREAS, TAKING COGNIZANCE OF EXISTING RESIDENTIAL DEVELOPMENT AND MAKING ACCESSIBLE, WHEREVER POSSIBLE, FEATURES WHICH WARRANT PUBLIC USE.
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This is consistent with the policy of the Government of Ontario which sets out as one of its goals the preservation of unique attributes of the regional landscape and to link the waterfront recreational resource areas with the regional valley systems, providing natural corridors reaching into the heart of the region.

In order to achieve its goal, the Authority has established the following objectives:

(a) to acquire or create open space areas at regular intervals across the waterfront which can provide for a range of passive activities for the people of the region;
(b) to seek opportunities to incorporate public recreational uses on public and quasi public lands where such uses would not conflict with their present use. Should such lands cease to be used for their present public purposes, the Authority will, when appropriate, seek to retain them for waterfront purposes;

(c) to encourage the linking of waterfront open space corridors with those of the river valleys;

(d) to develop diverse sport fishing opportunities through habitat improvement and improved access in conjunction with the Ministry of Natural Resources' fisheries management program.

(e) to create, at regular intervals along the Lake Ontario shoreline, small craft areas which will provide safe harbourage for the boating public, as well as day and seasonal mooring facilities;

(f) to encourage the preservation of the remaining lower valley marsh areas by discouraging further intrusion of intensive recreational uses like power boating facilities in the lower valleys;

(g) to cooperate with other agencies and particularly adjacent Conservation Authorities, who are undertaking waterfront planning and development;

(h) to augment the present state of knowledge of lake processes by further research, data collection and analysis, including the assessment of the effect of developments undertaken in the area under the jurisdiction of the Authority

(i) to cooperate with all agencies concerned with improving the water quality of Lake Ontario in the area under the jurisdiction of the Authority.

The implementation of the Lake Ontario Waterfront Development Program will recognize the principles and policies of procedure, planning and review established by the Province of Ontario and the member municipalities.

The major areas of concern for the Authority in this Program will be the conservation, restoration, development and management of the waterfront resources; the protection and management of important natural habitats; the design and development of recreational areas and to interpret to the municipalities and to the public the policies of this Program.

In this regard, the Authority has established certain principles which will govern the direction of waterfront development.
THE SUITABILITY OF LAKE ONTARIO FOR RECREATIONAL BOATING HAS GIVEN RISE TO THE DEMAND FOR INCREASED FACILITIES INCLUDING; SEASONAL MOORING, DRY SAILING, DAY MOORING AND BOAT LAUNCHING ALONG THE METROPOLITAN TORONTO AND REGION WATERFRONT. (PHOTOS 5, 6, AND 7)

THERE ARE MANY AREAS ALONG THE WATERFRONT WHERE BEACHES WILL BE EITHER IMPROVED OR CREATED. SEVERAL ARTIFICIAL SWIMMING FACILITIES WILL ALSO BE CONSTRUCTED TO GIVE THE BENEFIT OF SWIMMING CLOSE TO THE LAKE IN WATER OF CONTROLLED TEMPERATURE AND QUALITY. (PHOTOS 8 AND 9)
SPORT FISHING IS A RECREATIONAL RESOURCE THAT IS BEING ENHANCED BY THE JOINT EFFORTS OF THE MINISTRY OF NATURAL RESOURCES AND THE AUTHORITY. THERE IS A NEED TO IMPROVE AND ENCOURAGE HABITAT AREAS AND TO DEVELOP APPROPRIATE ACCESS TO THEM. (PHOTO 10)

AN IMPORTANT ASPECT OF THE AUTHORITY'S WORK ALONG THE WATERFRONT IS PROMOTING OPEN SPACE USES SUCH AS CYCLING, WALKING, PICNICKING AND UNORGANIZED FIELD SPORTS. (PHOTOS 11 & 12)

THE PRESERVATION OF SENSITIVE AND SIGNIFICANT NATURAL AREAS WILL BE OF MAJOR CONCERN TO THE AUTHORITY. HOWEVER, ACCESS WILL BE DEVELOPED TO SUCH AREAS SO THEY CAN BE ENJOYED BY THE PUBLIC. (PHOTOS 13 & 14)
Recreational Use

(a) The Authority recognizes that the Lake Ontario shoreline is a prime recreational resource for the region, and has established priorities reflected in this Program, which will provide water-oriented recreational opportunities to serve regional rather than just local needs.

(b) Recreational facilities, both of an active and passive nature, will be provided in accordance with approved Master Plans, making every attempt to provide winter as well as summer use of the public land base which has been established.

(c) The Authority recognizes the suitability of the Lake Ontario shoreline for recreational boating and the increasing demand for boating facilities to serve community, club and individual needs. This Program makes provision for boating facilities serving these needs in the safe harbour areas to be created along the Lake Ontario shoreline.

(d) The Authority has cooperated with the Ministry of Natural Resources in a Sport Fishery Study for the region's streams and the Lake Ontario shoreline. The Authority recognizes the importance of improving the sport fishery along the Lake Ontario shoreline and will cooperate to provide feasible habitats for a variety of fishing opportunities in keeping with the results of this study. Of major concern is the improvement of accessibility to the lake for fishing.

(e) The Authority recognizes that many parts of the waterfront are of considerable historical significance, it being the location for many of the historical events of early Toronto and its surrounding area. Proposed development will be cognizant of points of historical interest and will endeavour to preserve and enhance them in cooperation with other agencies.

Land

(a) Where works are to be carried out on municipally or Crown owned lands, it is the policy of the Authority to request the municipality concerned, or the Province, to place the lands required for development in the title of the Authority.

(b) Within the Municipality of Metropolitan Toronto, the Authority has entered into an agreement with Metropolitan Toronto for the management of lands deemed by the Metropolitan Corporation to have a park potential. In addition, the management of boat clubs, both leases and operation, will be part of this agreement.
(c) Where lands are required for local park purposes within Metropolitan Toronto, the required lands may be made available to the local municipality concerned by a three party agreement, at the request of Metropolitan Toronto.

(d) Where waterfront recreational lands outside Metropolitan Toronto are required for local park purposes, the Authority may enter into an agreement with the municipality concerned for the use, development and management of the required lands by the local municipality.

(e) Where waterfront lands are not managed by agreement with a municipality, regional or local, waterfront recreational lands will be managed by the Authority's Land Management Division.

Access

The Lake Ontario shoreline is a major natural resource affording recreational opportunities to residents of the entire region. Implicit in the overall goal of the Authority's waterfront development is the provision of access to the shoreline by routes having direct connections with the regional transportation system, thereby making the shoreline accessible, to most of the residents in the region served by the Authority, in one hour or less. The provision of access to the shoreline has recognized the constraint also implicit in the overall goal of the Program, that is; not interfering with the local traffic systems of waterfront neighbourhoods.

The sites selected for intensive waterfront development: Marie Curtis, Colonel Samuel Bois Smith and Humber Bay in Etobicoke; Western Beaches, Aquatic Park and Ashbridge's Bay in the City of Toronto; Bluffers and East Point in Scarborough; Petticoat Creek and Frenchman's Bay in Pickering; and the Ajax Waterfront, have been selected primarily because they meet the access criteria. Provision for all or some of the following modes of access have been made at the various sites:

(a) Public transit will be encouraged to provide service into waterfront areas, wherever possible.

(b) Boat access will be encouraged by the provision of boating facilities at all appropriate waterfront areas.

(c) Pedestrian/bicycle path systems will be encouraged.

(d) Automobile access will be established to provide scenic access to, and links between, waterfront areas, where appropriate.

(e) The Authority will encourage the local municipalities to retain in public ownership as many waterfront terminating road allowances as possible in order that they can be used as public access points to the waterfront.
5. PROGRAM DETAILS

5.1 DIRECTION

The primary focus of the Authority's waterfront work is to enhance the public's opportunity to have access to water-oriented open space activities. The overall direction of future Authority waterfront programs will be to expand the land base on which these opportunities occur and to provide primary development of the land base in order that the public can make use of it. There are several major areas where, in accordance with policy, the Authority has and will play a key role in providing public opportunities. These provide some overall direction for waterfront work, and it is useful to discuss their general implications:

5.1.1 Open Space

The provision of waterfront open space is one of the most important aspects of the Authority's work. With Lake Ontario as a backdrop the parkland takes on a completely different character than inland park areas, the sounds of wind and wave predominate not to mention the seagulls. The Authority intends to retain, acquire or create open space at many locations across the waterfront, of varying size to open up the waterfront and its amenities for as many people as possible. These areas will vary in size but will provide a variety of passive experiences. The Authority recognizes that it is important to vary the character of the individual waterfront areas by a variety of landscape techniques where natural differences are not apparent, this enables a new experience for returning users.

5.1.2 Natural and Historic Areas

In the urbanized waterfront area over which the Authority has jurisdiction, very few significant natural areas remain; this makes the ones that do remain all the more important. In its past work the Authority has acquired many of these areas, the river mouth marshes and certain remaining undeveloped open spaces particularly along the Scarborough Bluffs. Authority direction in the future will be to preserve the natural attributes of these areas by careful management and, where necessary, by limiting access. Where areas of historic significance exist it is the intention of the Authority to recognize this in any development proposals.

5.1.3 Boating Facilities

There are many different kinds of boating facilities: launching ramps, day mooring areas, dry sailing facilities, and wet mooring. The Authority in conjunction with Metropolitan Toronto has established those facilities required for non-organized boating activities such as launching ramps and some basic day mooring areas will be constructed by the Authority. Management of these facilities, as for the park lands, is the responsibility of the management agency and it is their prerogative to determine the extent of user charges. Where there are facilities required for organized boating activities, such as clubs or
federations, the Authority will only provide a stable land base; the clubs themselves must pay for any development on those lands including docks, clubhouses, parking areas and landscaping. The management agency is responsible for establishing lease rates for these activities and they should generally be compatible with facilities provided by the private sector.

5.1.4 Fishing

Lake Ontario is a tremendous resource for fishing opportunity. This statement is supported by the Ministry of Natural Resources, which is actively stocking the lake to revitalize the Lake Trout population. Joint studies by the Ministry of Natural Resources and the Authority indicated a large demand for fishing opportunities along the shoreline. Along the waterfront the Authority can play a vital role not only by improving access to the water but also by improving the habitat for desirable species and by providing artificial spawning areas where required. The Authority has already had several discussions with the Ministry of Natural Resources regarding design modifications to armoured headlands in order that they can provide better habitat. The design of Authority waterfront developments will take into account the potential angler opportunities and strive to improve the aquatic environment over the long term. Although the Authority does not intend to become involved in management activities such as stocking, it must work closely with the Ministry of Natural Resources to achieve a desirable fisheries product.

5.1.5 Swimming

Most people think of swimming when waterfront activities are mentioned. The Authority has reservations regarding the demand for swimming in the open lake; primarily due to water temperature. However, it is not easy to re-create the sand beach environment at a backyard pool, thus the provision of beaches for sunbathing, walking, skipping stones and even swimming for the hardy ones is an important component of the Authority's waterfront proposals. The Authority has adopted the use of the 'headland and bay' landfill construction technique; this system of land creation maximizes the area of beach shoreline which allows user interaction with the water's edge and the other activities that can occur on the beach shore area. Wherever reasonable, in terms of coastal design, water quality and safety, beaches will be incorporated into waterfront site development; they may not be designated as swimming beaches but they will be provided for the range of other uses than can occur in a beach environment.

5.2 SECTOR AND SITE DESCRIPTIONS

In order to provide the range of water-oriented activities described previously consideration must be given to the opportunities and constraints that exist at the potential sites across the waterfront. As a general strategy the Authority is committed to providing smaller facilities in a number of areas rather than a few large facilities. This approach will first of all make the waterfront resource more accessible to the people of the region as a whole and the
developments will have less impact on their surroundings. The limitations primarily center around potential access points. Following is a description, sector by sector, and site by site within each sector, of the direction that Authority waterfront development will take.

5.2.1 Etobicoke Sector

Within the Etobicoke Sector there are only three locations which have the access required for regional waterfront development. They are, from west to east: Marie Curtis Park at the mouth of the Etobicoke Creek, Colonel Samuel Bois Smith Waterfront Area between the Westerly Filtration Plant and the Lakeshore Psychiatric Hospital, and Humber Bay Waterfront Area at the mouth of the Mimico Creek. Each of these has access potential from Lake Shore Boulevard without using residential streets. There is one other location where regional access is very close, at the foot of Royal York Road however, there is no surrounding public land base to supplement the access availability and, therefore, this location can only be considered as a very long term option.

Along the Etobicoke shoreline it is possible to achieve most of the objectives of the Lake Ontario Waterfront Development Program, the only exception being the lack of significant natural areas, either aquatic or terrestrial. In order to decentralize waterfront use opportunity in this sector, Authority planning will take the following direction:

- major open space facilities have been or will be developed at Humber Bay East (20 ha) and at Marie Curtis Park (34 ha). These areas can provide for a range of winter and summer activities: pathways, waterways, skating, picnic areas, model boating, and so on.

- major boat launching and day mooring facilities at Humber Bay West and Marie Curtis Park; in the case of the former, to provide quick access to the attractions of the central waterfront since no other similar facilities exist between Humber Bay and Ashbridge's Bay, and in the case of the latter, to provide not only for recreational small boat access, but also to take advantage of angling opportunities off the mouth of the Credit River nearby.

major boat mooring and dry sailing activities are at Humber Bay West and Colonel Samuel Bois Smith. The Marie Curtis site has major constraints for a small craft harbour because of the proximity of major sewage treatment plant outfalls and the dynamics of the mouth of the Etobicoke Creek. In addition, the Credit Valley Conservation Authority is constructing a boating facility at Crookes Park, only 2 km west of Marie Curtis Park. The boating facility at Colonel Samuel Bois Smith will also permit extensive use by Humber College's marine programs.
the provision for swimming beach facilities will remain at Marie Curtis and be supplemented by an artificial lake at Colonel Samuel Bois Smith, which is an ideal central location within the community for such a facility.

The proposals for the specific waterfront areas in the Etobicoke Sectors are:

(a) **Marie Curtis Waterfront Area** (Fig. 2)

Marie Curtis Waterfront Area is an existing Metropolitan Toronto Park centred on the Etobicoke Creek in the Borough of Etobicoke. This 34 ha site has 650 m of shoreline abutting Lake Ontario, and presently provides facilities for picnicking, boat launching, boat mooring, bathing (a beach on Lake Ontario) and a children’s play area. This site is bounded on the north by Lake Shore Boulevard, on the east by 42nd Street which is adjacent to a single family residential area, and on the west by lands owned by the Department of National Defence and the Ministry of the Environment.

Present access to the western portion of the site is gained from Lake Shore Boulevard, and in the eastern portion from Lake Shore Boulevard and 42nd Street.

It is the intention of the Authority to extend the Marie Curtis Waterfront Area land base on the west side of the Etobicoke Creek through the acquisition of a portion of the lands presently owned by the Department of National Defence. This additional land contains an excellent woodlot and will ensure a suitable buffer between Marie Curtis and adjacent industrial areas. As well, the Authority intends to negotiate a lease arrangement with the Ministry of the Environment for the use of part of the Lakeview Pollution Control Centre property for passive purposes such as pathways and picnicking.

In addition, the Authority intends either to construct washroom facilities to serve the west side of this site or connect it to the east side via a footbridge. This will satisfy the immediate requirements for the area. Long term development will see a realignment of access to make more open space available between the road and the creek or river, and significant landscape improvements to make for a more attractive facility.

(b) **Colonel Samuel Bois Smith Waterfront Area** (Fig. 3)

Waterfront development at this site is dependent upon developing a suitable regional access route to the waterfront. At the present time this is one of only three key areas in the Etobicoke Sector which has the potential accessibility requirement for regional waterfront development. It is essential that a corridor of land be developed from Lake Shore Boulevard, in the vicinity of Kipling Avenue, down to the water's edge. Presently, land ownership consists of Humber College, Lakeshore Psychiatric Hospital and the Metropolitan Works Department.
MARIE CURTIS WATERFRONT AREA
(PHOTO 15)

COLONEL SAMUEL BOIS
SMITH WATERFRONT AREA
(PHOTO 16)

HUMBER BAY WATERFRONT AREA
(PHOTO 17)
The shoreline in this area is publicly owned for a total length of about 600 m. Adjacent to the site are single family residential areas on the west and medium density residential areas to the east. The shoreline fronting the Metropolitan Toronto Works property has been extended by fill and is well armoured.

This concept proposes that a public access route be constructed, flanked on both sides by publicly owned lands, to the shoreline. At the waterfront, a landfill program would be carried out to increase the land base in order to provide space for a regional artificial swimming facility, seasonal and day mooring, and ancillary open space activities such as picnicking and viewing.

In planning this site, the Authority has worked closely with the staff and consultants for the Lakeshore Campus of Humber College. The development of this waterfront area will assist Humber College in the provision of facilities for certain programs; in addition, the proximity of the Lakeshore Campus will enable joint use of parking areas, beneficial to the Authority due to a subsequent reduction in landfill required.

(c) **Humber Bay Waterfront Area** (Figs. 4 & 5)

Over the period of 1971 to 1979, a total of 45.0 ha of land and 21.0 ha of protected water for harbour use were created at the Humber Bay Waterfront Area.

The creation of shoreline connecting links to the east and west of Humber Bay is proposed for future development. The western shoreline connection would link the Norris Crescent parkette, Amos Waites Park, the Superior Avenue parkette and the proposed Beauporte Village to Humber Bay West. The eastern shoreline connection would link Humber Bay East to the Humber River. At the Humber River provisions could be made to link the waterfront to the Humber Valley trail system to the north and the Western Beaches Waterfront Area to the east.

5.2.2 **City of Toronto Sector**

This sector has a wide range of agencies involved in waterfront planning and development. The Authority's mandate here is restricted to the Western Beaches, Aquatic Park and the Eastern Beaches. The Authority is interested in proposals affecting the rest of this sector, because of the impact it can have on its own planning and development.

In this sector the required public land base exists as a result of fifty years of work carried out by the Toronto Harbour Commissioners. The challenge is to make the best possible use of what exists. Therefore, along the Western Beaches every effort will be made to decentralize activities to the east and west of the old Sunnyside area, accenting the historical importance and the changes that have occurred at this site as well as making the existing boating, swimming and open space activities more satisfactory. At the Eastern Beaches the Authority has already expanded the land base to provide for a major boating facility including day mooring, launching ramps and seasonal mooring areas. This complements the open space activities to the east which consist of one of
the finest swimming beaches in Toronto and a famous boardwalk. Again, improvement of the existing open space features through landscaping and shoreline work is the direction of the Authority's Program.

Perhaps the most challenging area of Authority involvement in this sector is Aquatic Park. This site, because of its size and accessibility, is unlike any other along the waterfront. It has the potential of providing a range of opportunities which must be tuned to the requirements of the people of the region, taking into account the other major waterfront developments taking place in this sector.

Following are descriptions of site development planned for this sector:

(a) Western Beaches Waterfront Area (Fig. 6 A, B)

This site, extending from the Humber River to the projection of Dufferin Street, is proposed for major development. Development is constrained by the major transportation corridor which serves as the north boundary to this waterfront area.

The area is an existing park owned primarily by the City of Toronto. Its present development includes several playgrounds, swimming pools, picnic areas, washrooms and parking. At the east end of the site are several boating clubs and public tennis courts. The Sunnyside Bathing Pavilion, a structure of historical significance now being renovated by the City of Toronto, is centrally located within the site.

The approved Master Plan intends to maximize the use of the limited land resource in this area for regional park purposes. The means proposed for doing this is to decentralize the main Sunnyside activity area into three nodes: the Humber Mouth, Sunnyside itself, and the boating area. Between these would be subnodes of activity. Gzowski Monument, the Palais Royale and the Aquatic Drive area.

Within the three major nodes, the Master Plan proposes the following development:

At the Humber Mouth, the construction of hydraulic improvements would improve water quality behind the breakwater and reduce siltation, while at the same time maintaining the continuous protected water link to the Humber River. In addition, a historical display would be constructed in conjunction with the Lion Monument and adjacent day mooring. Development of fishing piers, fish habitat areas and other amenities will intensify the use of this section.

At Sunnyside, the pavilion would be restored and an artificial swimming facility would be built to complement the existing pool. Day mooring would be provided nearby and parking facilities would be relocated allowing increased waterfront park space.

Part of the protected water between the Boulevard Club and the Toronto Sail and Canoe Club would be developed for seasonal mooring in order to keep the channel as free from moorings as possible.
AQUATIC PARK
(PHOTO 19)

WESTERN BEACHES
(PHOTO 18)

ASHBRIDGE'S BAY
(PHOTO 20)
At the Aquatic Drive subnode, the area would be developed with washrooms and viewing areas and provision for playground facilities would be made.

All along the site, landscaping, such as berming and planting, as well as beach improvements, would be carried out. In general, all development will be undertaken in such a way that it enhances this attractive entrance to the City core.

(b) **Aquatic Park Waterfront Area** (Fig. 7)

The Aquatic Park is a man-made peninsula of land at the east end of the Toronto Harbour which juts out 4.8 km into the lake, an equivalent distance from say, City Hall to St. Clair Avenue. It is comprised of about 103 ha of land containing three large sheltered bays and will be a unique waterfront park for visitors of all ages and with diverse interests.

The site is almost one third the size of the Toronto Islands, and gives the visitor the same sense of detachment from the City, offering the views of the downtown area across the bay. At the same time it has immediate accessibility by car and bus.

The Toronto Harbour Commissioners began building this peninsula seventeen years ago as part of their plans for the expansion of a new port area for the City of Toronto; four years ago the Harbour Commissioners presented a plan for its use as a park that took advantage of the land area which was to be created on the harbour side of the spit by material dredged from the channel entries to the Inner and Outer Harbours.

The Authority was approached in 1973 by the Ministry of Natural Resources to study this site and determine what park uses could be accommodated on the site. As part of the process, other public agencies, ratepayers, and special interest groups contributed ideas and input. More than 150 uses were considered and screened, and ultimately a range of uses including boating, fishing, swimming, wildlife areas and group camping were endorsed in a Master Plan.

Subsequently, because of significant natural changes to the site since 1973, the Authority intends to carry out an extensive review of the Plan and update it to meet the needs of the present. Undoubtedly the implementation of the Plan for this site will proceed slowly over a number of years, the total development not being substantially complete for perhaps 25 years.

(c) **Ashbridge's Bay Waterfront Area** (Fig. 8)

This site is bounded by Ashbridge's Bay, Lake Shore Boulevard and the projection of Woodbine Avenue. At present, it includes 17 ha of new land at the western end and 7.3 ha of protected water which accommodates improved boating facilities of various kinds. The area is characterized by its high quality beaches and a boardwalk which extends almost 3.2 km. For the most part, the western portion of this site has been developed as part of the 1972-1976 Project.
Proposed future development includes minor improvements to the beaches and the rebuilding of the washroom/changehouse. In conjunction with these would be some landscape improvement to the northeast corner of Coatsworth Cut for community boating activities occurring in that location.

5.2.3 Scarborough Sector

This sector possesses some of the most spectacular landforms of the entire waterfront under the jurisdiction of the Authority. However, the physiography and character of the bluffs is a major limiting factor to public access and the enjoyment of them. In terms of length, this sector is the largest of all the sectors and therefore access points, harbours of refuge and the provision of a more complete range of facilities at each site are important considerations in planning future waterfront development in this sector.

In order to achieve its policy objectives, the first step was to determine where, in fact, there was the physical potential for waterfront area development. In terms of bluff top area, the Authority has acquired most of the undeveloped land; the Garton and West property, the rear portion of the St. Augustine Seminary, dedicated park land known as Cudia, Sylvan and East Point, and most importantly the Guild Inn area. The only outstanding piece of private waterfront open space is the Toronto Hunt Club property, to which serious consideration must be given should its use change in the future. These blocks of land provide a significant series of open space areas reasonably well distributed across the waterfront; however, at most of them the user is remote from the land/water interface because of the sheerness and height of the bluffs. Only at three locations across the 20.1 km of Scarborough shoreline is it possible to achieve satisfactory access to the water; the existing Bluffers Park area, the Guild Inn, and at East Point Park. The regional access potential at the mouth of the Rouge River, though existing in a minor form, makes use of a maze of residential streets and does not have the potential for major regional park development. Other areas along the bluffs have potential for access, such as the Garton and West property, but would require massive engineering works to be achieved.

With these constraints in mind, the Authority plans to achieve its waterfront objectives in this sector in the following manner:

- Major bluff top open space areas are available, as discussed, across the entire sector and a range of activities can be accommodated, primarily walking trails and picnic areas. Bluffers Park will be the only site where open space facilities are developed at the toe of the bluffs.

- Swimming beach facilities exist at Bluffers Park and the Lower Rouge and will be the only areas to provide for this kind of use. East Point Park will have protective beaches usable for sunbathing only. No artificial swimming facility is proposed for this sector for two reasons: the close
proximity of major municipal facilities, and the nature of the residential development, a substantial portion of which have background pools, which would reduce required off-peak or weekday use.

- major boat launch, day mooring and wet mooring facilities occur now at Bluffers Park and are planned for East Point Park as demand necessitates. A day mooring area is also planned for the Guild Inn area.

- fishing opportunities will center around potential access points: Bluffers, East Point and Lower Rouge. At these sites habitat and spawning areas may be constructed subject to the evolving strategy of the Ministry of Natural Resources in their Strategic Planning for Ontario Fisheries program.

- the opportunity for preserving significant natural areas is apparent in this sector. Perhaps the most important is the geology of Needles Bluffs west of Bluffers Park and the remnants of the old Lake Iroquois shoreline. The ravines themselves are significant in the same sense as are major river valleys. Certain terrestrial environments are sensitive, such as the prairie area at East Point Park. The Authority intends to take advantage of these assets through information and orientation facilities.

Following are descriptions of those areas planned for site development:

(a) **Bluffers West Waterfront Area** (Fig. 9)

As part of the 1972-1976 Project, the Authority acquired two parcels of land totalling 4.5 ha, situated between the 3.2 ha Rosetta McClain Gardens to the east and Lakehurst Drive to the west. This area of Scarborough is well supplied with community parks, as Birchmount Park is located on the north side of Kingston Road. These lands, in conjunction with those of the Scarborough Filtration Plant, will provide important regional complementary open space to the Bluffers Park Waterfront Area to the east.

The proposed initial development includes the construction of suitable access and parking as well as washroom facilities. Some minimal landscaping will be carried out to complement the existing mature growth which is very attractive. Such development will enhance the potential for picnicking.

(b) **Bluffers Waterfront Area** (Fig. 10)

For the purpose of this Program, the Bluffers Waterfront Area extends from Midland Avenue in the west to Fairmount Park in the east, a shoreline distance of 1.6 km. Throughout the length of Bluffers Waterfront Area, the northern boundary is formed by a number of residential communities with the notable exception of the St. Augustine Seminary property. Regional access to this site is gained from Brimley Road, an arterial road, which is the only public road in the sector which provides access to the base of the Bluffs. Much of the
The approved Master Plan for this site indicates the following uses: on the toplands, regional access will be developed off Brimley Road to serve the upper park area and servicing will be extended to allow the construction of an interpretive centre adjacent to the Iroquois shoreline. This centre will be developed in such a way that it can accommodate the general public, as well as special groups and tours. Several pieces of land have been acquired to the east of Brimley Road in order to accommodate the eastward extension. These lands will ultimately enable a system of rugged hiking trails linking various parts of the Scarborough waterfront. Park and boating areas will continue to be developed at the base of the Bluffs. It is also the intention of the Authority to work in co-operation with the Ministry of Natural Resources with respect to the development of various fish habitat areas for the promotion of recreational fishing along the Bluffs.

Emphasis in the development of this site will be placed on its resource nature and take cognizance of its proximity to residential communities along the northern boundary. The most active facilities will be at the foot of the Bluffs on the filled land, and the more passive activities will be on the toplands above the Bluffs.

(c) **Cudia/Sylvan Waterfront Area** (Fig. 11)

The Cudia/Sylvan Waterfront Area extends from Scarborough Heights Boulevard in the west to Markham Road in the east, and includes the areas known as Cudia Park, Meadowcliff Ravine, the Bellamy Road Ravine, and Sylvan Park. The area is adjoined on its west, north and east boundaries by residential communities.

The Cudia/Sylvan Waterfront Area is approximately 1.6 km in length, with Cudia Park located about 1.6 km east of the Bluffers landfill. Both Cudia Park and Sylvan Park are now owned by the Authority, and together comprise approximately 23 ha. Although both areas are relatively undeveloped at the present time, their many scenic qualities such as rolling land, clustered woods, and magnificent views attract visitors for strolling and nature study.

The development of the Cudia/Sylvan Waterfront Area is intended to promote passive uses with emphasis on its natural features, particularly the magnificent ravines which dissect the landscape. Development of this site will center on the pedestrian access along the Bellamy ravine from Kingston Road. This when complete, will enable a link between Cudia and Sylvan Parks and to Kingston Road via rugged hiking trails.

(d) **Guild Inn Waterfront Area** (Fig. 12)

The Guild Inn property was acquired by the Authority in 1978. It consists of 32.4 ha of land located almost exactly in the middle of the Scarborough Sector. The site is important in future waterfront planning and development not only because of the historical significance of the buildings and architectural remnants on the site, but also because it is one of only three sites that have access to the shoreline in this sector.
Major responsibility for planning the future of the Inn itself lies with the Municipality of Metropolitan Toronto. The Authority's involvement will be in the development of the waterfront and bluff top edges and the support facilities required for each. No intensive development of these open space areas is proposed other than provision for picnicking, lookouts, pedestrian trails. The development of boat access through development of day mooring facilities at the toe is another possibility.

(e) **East Point Waterfront Area** (Fig. 13)

East Point Waterfront Area is a 48 ha site in the Borough of Scarborough. The area lies to the south of the CNR tracks, between Highland Creek on the east and Manse Road on the west. This is an attractive site with a rolling landscape joining Lake Ontario in a moderately high bluff bordered by narrow gravel beaches.

The approved Master Plan recognizes the potential of this site as a major waterfront area and recommends the development of interior ponds and waterways, large areas for open space uses, bathing and wading facilities, field sport facilities to serve adjacent communities, and the creation of a protected harbour for recreational boating.

Road access, parking areas, landscape development and services, including public washrooms, will be among the developments which will be undertaken. When demand necessitates, a start will be made on the harbour area, commencing on the east side of the property.

(f) **Lower Rouge Waterfront Area** (Fig. 14)

The Lower Rouge Waterfront Area is bounded by the Rouge River to the east, the eastern limit of the CNR lands to the west, and the projection of Taylor Road to the north, and consists of approximately 4 ha of land and 10.5 ha of marsh. This site presently contains a sand beach, changing facility and a canoe club. The Lower Rouge area is also one of the most popular recreational fishing spots along the Metropolitan Toronto region waterfront.

5.2.4 **Pickering/Ajax Sector**

During past Projects, the Authority has been successful in bringing much of this sector's shoreline into public ownership. One of the priorities for this sector is to continue the land acquisition in order to acquire the remaining waterfront properties. However, major blocks of public land now exist at Petticoat Creek, the west and south side of Frenchman's Bay, Duffin Creek and the frontage of the Town of Ajax across, but excluding, the Carruthers Creek marshes. Because of the extent of public ownership in this sector and the presence of Frenchman's Bay, most of the Authority's objectives can be achieved without creating protected water areas, the exception being in Ajax at the foot of Harwood Avenue. Therefore, water-oriented development in this sector will emphasize the existing resources:
- major open space development will focus around the southwest end of Frenchman's Bay and the spits, the Lower Duffin Creek marshes and the Carruthers Creek marshes. Facilities will be provided to complement the existing natural features being careful not to encourage over-use since these river mouth marshes are among the last remaining in the area of jurisdiction of the Authority. Active open space uses will be confined to Frenchman's Bay and Petticoat Creek and the Ajax waterfront. The Duffin Creek and Carruthers Creek will be managed to control access and enhance wildlife and fish habitats.

- boating activities will centre in Frenchman's Bay but be confined to where they occur presently in order to preserve the natural features of the north and southwest corners. No boat launching will be provided in the Bay itself because of potential problems within the Bay. Other boating facilities including launching ramps will be located at the foot of Harwood Avenue in Ajax, a site planned for private commercial development as well. This site will provide for boating activities in the easterly end of the sector without encroaching on the significant creek mouth areas.

- the potential for fishing activity is the greatest in this sector. Areas such as the Lower Rouge, Frenchman's Bay and Duffin Creek are considered among the best fishing locations in the region. Authority plans call for enhancing the fishing opportunity with improved access both by land and water, and careful management of the aquatic habitat in conjunction with the Ministry of Natural Resources.

Development in this sector will focus on the following sites:

(a) Frenchman's Bay Waterfront Area (Fig. 15 & 16)

The nucleus of the Frenchman's Bay Waterfront Area has been acquired by the Authority under a previous Project and added 21 ha to the inventory of waterfront lands at Frenchman's Bay. Project W.F.-3A, referred to previously, made provision for the acquisition of isolated parcels of land which were not part of the original purchase, together with lands fronting on Lake Ontario at Fairport Beach, enabling a land link along the waterfront between the Frenchman's Bay Waterfront Area and the Petticoat Creek Waterfront Area.

The entire Frenchman's Bay area is surrounded by residential development. The only existing major street giving access to the lands at Frenchman's Bay on the west side is West Shore Boulevard.

Since West Shore Boulevard serves primarily as a residential collector, it is considered inappropriate to encourage traffic going to Frenchman's Bay to use West Shore Boulevard as an access route. This is supported by a resolution of Pickering Council. Access to Frenchman's Bay will be developed via an internal system from the Petticoat Creek access at Whites Road.
To date, the Authority has acquired approximately 40 ha in the Frenchman's Bay Waterfront Area. Emphasis on the development of these lands will be placed on passive open space activity. This concept includes beach development and associated facilities, picnic areas, access and parking, day mooring and marsh development.

The water area of Frenchman's Bay is an important part of the site. Development and management of the Bay itself by the Authority is limited since the Bay is in private ownership. The ultimate development of the Bay itself includes improvements to the entrance to facilitate boating activities, and to enhance recreational fishing, as well as to preserve the marsh habitat areas on the north and west sides of the Bay. The Authority has proposed that generally southeast part of the Bay be available for seasonal mooring.

Major development of the Frenchman's Bay site is predicated on the land link across Fairport Beach to the Petticoat Creek Conservation Area. Therefore, this Program will accent the acquisition of the Fairport Beach area as well as those remaining properties in southwest Frenchman's Bay and the spits. Ultimately the Bay itself should be publicly acquired, the timing being dependent on inappropriate changes in its use, and on funding.

(b) Duffin Creek Waterfront Area (Fig. 17)

The Duffin Creek Waterfront Area includes those lands on both sides of the creek mouth extending north to the proposed Dreyer Drive crossing. It also includes that area known as Squires Beach, extending from Duffin Creek west to the east property limit of the Pickering Nuclear Generating Station. This Waterfront Area traverses the Pickering/Ajax boundary; the Squires Beach area being in Pickering and the creek mouth being in Ajax.

The Lower Duffin Creek valley is a broad expanse of marsh area lying within gentle valley slopes. The land surrounding the creek has been farmed in the past and thus is not heavily wooded, however, there is sufficient tree cover adjacent to the marsh areas to make it an attractive area with a strong rural quality. Over the past few years, the Authority has acquired considerable land in this area and now owns all the valley and considerable waterfront lands at Squires Beach. The Ministry of the Environment has acquired all those lands not included in Authority plans north of the waterfront between Duffin Creek and the Hydro property and has constructed the first phase of a Pollution Control Centre.

The development of this site will emphasize the protection of the marsh areas, the development of valley hiking trails, the establishment of wildlife and bird observation and fish habitat areas, and the development of a good beach at the mouth for more active purposes. Ancillary to the foregoing is the construction of proper access and parking as well as washroom and shelter facilities. Access to the west side of the creek will be via a newly constructed road, built
by the Ministry of the Environment to serve the Squires Beach community which will link up to a relocated Montgomery Park Road. Access on the east side will ultimately be from a collector road bounding the adjacent future residential development; for the present time, however, access is from Valley Road.

Accommodation will be made within the site for an interpretive centre to be developed and operated by the Authority as part of its nature interpretive program.

(c) Ajax Waterfront Area (Fig. 18 A, B)

This extended waterfront area includes all those waterfront lands lying between Duffin Creek and the eastern limits of the Authority's area of jurisdiction, including the Carruthers Creek mouth and marsh area. The Authority has acquired most of this frontage and now owns approximately 3.2 km of the 4.8 km stretch of shoreline. For the most part the unowned lands are those lands at Carruthers Creek and the shoreline area to the west.

Acquisition of this waterfront area has been achieved, for the most part, prior to residential development and has reserved a publicly owned strip of waterfront land linking three activity nodes along the Ajax waterfront. These areas are the Duffin Creek mouth and its marshes, the proposed private commercial development at the foot of Harwood Avenue, and the beaches and marshes of Carruthers Creek mouth/Pickering Beach area.

Development of this site will be geared to enhancing the link potential of these lands and the vistas they provide, including hiking and bicycle trails, lookout areas, as well as buffer and landscape planting. The Conceptual Plan encourages abutting developers to recognize the adjacent waterfront resource in their development and the Authority has recommended certain ways in which development could occur to achieve this end. The Authority will work closely with the Town of Ajax and the developers in order to achieve as handsome an adjacent residential development as is possible, a development which recognizes the proximity of the waterfront.

5.3 FISHERIES ENHANCEMENT

It is estimated that over three million Ontario residents angle every year (Strategic Planning for Ontario Fisheries, 1976). In the Toronto region this translates to a potential fishing population in excess of one million people. The Authority in its 1977-1981 Waterfront Project recognized this fact and defined as one of its objectives:

"to improve the sport fisheries along the Lake Ontario waterfront"

and

"provide feasible habitat for a variety of fishing opportunities."

Since that time the Authority has cooperated with the Ministry of Natural Resources in a sport fishery study of the Waterfront (Operation Doorstep Angling, 1976). The purpose of the study was to assess the fisheries habitat and access for fishermen. This report went so far as to make specific
recommendations for each of the Authority's sites along the waterfront. Unfortunately, at the time the report was prepared, contaminants in fish were such that consumption could have posed a health hazard; consequently, none of the report recommendations have been implemented. In recent years the efforts of several organizations to reduce contaminant levels in Lake Ontario and the Ministry of Natural Resources' commitment to the rehabilitation of the fish stocks has warranted a renewed emphasis by the Authority towards its fisheries enhancement objective.

The habitat in the vicinity of Authority waterfront areas will be enhanced for species associated with the nearshore region (embayments and river mouth marshes) such as pike, perch and bullhead and for species associated with deeper offshore regions at least part of the year but which are considered to be socio-economically more valuable, such as trout and salmon. The two groups, hereafter referred to as nearshore and offshore species, have different habitat requirements and therefore require different habitat enhancement strategies.

5.3.1 Nearshore Species

The major emphasis of Operation Doorstep Angling (1976) was the enhancement of the nearshore sport fishery. The study indicated that many nearshore sport fish are already present in low or moderate numbers along the waterfront and that this fishery could be greatly improved with respect to fish production and angler success. This report, which represents the basis for the present program, recommended the following methods for fishery enhancement:

(a) bottom contouring with the addition of rubble mounds, brush piles, etc. to provide cover for fish;

(b) aquatic vegetation which serves to improve habitat for all life stages of fish should be encouraged in some areas;

(c) small areas in river mouth marshes should be dredged to provide adequate water depth for sport fish;

(d) fishing platforms should be provided near areas of modified habitat where fish will tend to congregate.

Many of the specific recommendations of Operation Doorstep Angling will be implemented over the course of this program, however; prior to the provision of access to an area for fishing, the success of the habitat modifications must be assessed.

The enhancement of this type of fishery requires little in the way of expenditure on the part of either the fishermen or the implementing agency and can provide a moderate sport fishery for a segment of the fishing population. The major weakness of these fisheries is that the fish are limited to localized areas (marshes and embayments) that are incapable of supporting large numbers of fish, and therefore heavy angling pressure could tend to deplete the fish populations.
5.3.2 Offshore Species

Many fishermen consider the nearshore species to be inferior to the salmon and trout. In order to provide the greatest opportunity for the largest number of fishermen, the stocking and the enhancement of habitat for offshore species must be part of the overall program. The potential for the success of such a program has been demonstrated in Lake Michigan, Lake Huron and to a lesser extent in the Port Credit area of Lake Ontario where species such as lake trout, brown trout, rainbow trout, chinook salmon and coho salmon have provided an almost unlimited sport fishery. Successful implementation depends on the goals and priorities of the Ministry of Natural Resources, which have not as yet been formalized.

Preliminary planning by the Ministry of Natural Resources for their Strategic Planning for Ontario Fisheries has indicated that the emphasis will be on the establishment of self-sustaining populations, but for an indefinite period 'put-and-delayed-fishery', as presently exists with their salmon-stocking program, will continue. Lake trout is the highest priority species, being indigenous and a prized commercial and sport fish. The major impediment to the success of this species is the lack of spawning shoals in the western end of Lake Ontario and in particular along the Toronto region waterfront. A number of sites exist near Authority projects where artificial shoals could be created to enhance the habitat and reproductive success of this species. The establishment of lake trout in the vicinity of Authority projects will involve several stages. All potential areas will be surveyed by scuba diving to determine the most acceptable site for the establishment of a spawning shoal. The area must be free of fine sediments and extensive cladophora growth. Small shoals will be created with various types of material including quarried stone and construction rubble. Sediment buildup will be monitored over a one year period and if only a small amount is deposited, lake trout eggs will be placed on the shoal. If the eggs hatch successfully the shoal will be increased in size, and additional eggs (or fry and fingerlings) will be planted on the shoal over a four year period. The site will be monitored on a yearly basis and if egg hatching is successful and fish return to the shoal to spawn, additional shoals will be created in other locations.

Rainbow and brown trout, two species that spawn in rivers, will be receiving high priority by the Ministry of Natural Resources for stocking purposes. These species can provide recreational fishing at both river mouths and landfill parks. They tend to remain in nearshore areas where they are available to the sport fisheries. All that is necessary to provide a successful fishery for brown trout is a comprehensive stocking program. Habitat enhancement through shoal creation and bottom contouring provided in other sections of the fishery enhancement program should be sufficient to support this species. Rainbow trout tend to be available to the sport fishery only during spring and fall when they congregate around the mouths of rivers. The only suitable location along the Toronto region waterfront for the establishment of self-sustaining populations is Duffin Creek. The mouth of this creek received low angler usage at the present time due to the inaccessibility of the shoreline, but this can easily be rectified by following the recommendations in Operation Doorstep Angling if the Ministry of Natural Resources is committed to increasing the population of rainbow trout in the area.
The Ministry of Natural Resources considers the least desirable type of fishery to be the 'put-and-delayed-take' fishing as presently exists near Port Credit for salmon, but such a program is presently necessary, and may always be necessary in order to provide a viable sport fishery. Discussions with the Ministry of Natural Resources personnel indicate that future stockings of this nature will be directed away from rivers capable of supporting trout populations and should be in locations where the public can easily gain access to the lake. Several Authority areas along the waterfront fit the above two criteria. At such time as the Ministry of Natural Resources is committed to stocking salmon at any of these locations, the Authority will take the appropriate steps to improve the access for fishermen.

The above discussion of the Authority's fishery enhancement direction is preliminary, it being dependent upon the priorities set by the Ministry of Natural Resources. When the Ministry of Natural Resources' priorities are established, the goals and priorities of the Authority's program will be reviewed to ensure that they do not conflict with those of the Ministry of Natural Resources and taking into account unique opportunities available at each of the waterfront areas.

5.4 PRIORITIES AND PHASING

Much of the waterfront effort in the past ten years has been acquiring or creating a land base and developing four major waterfront areas. Authority direction in the future is oriented to maximizing the benefit to the public of the less major waterfront areas which have been acquired and increasing angling opportunity especially in terms of habitat development. In addition to this, there are two new waterfront areas, the Guild Inn and Aquatic Park which will require special attention in the near future. The degree of expenditure at these areas is highly dependent on the Master Plans produced for them, thus making it difficult to project their phasing.

In discussing priorities for recreational development, consideration must be given to the constraints of funding.

In this regard the Authority estimates a requirement for $3 million annual appropriation for Lake Ontario Waterfront Development; this figure does not include Shoreline Management or Hazard and Conservation Land Acquisition which are described and funded as separate programs within the Watershed Plan.

Taking this into account, the Authority has divided its priorities into three groups:

first: Marie Curtis
      Colonel Samuel Bois Smith Phase I
      Western Beaches Phase I
      North Ashbridge's Bay
      Bluffs toplands
Aquatic Park Phase I
Guild Inn Phase I
East Point Park Phase I
Ajax Waterfront
Land Acquisition

second:
Shoreline Connecting Links
East and West of Number Bay
Woodbine Beach
Bluffs Park West
Duffins Creek Phase I
Aquatic Park Phase II
Western Beaches Phase II
Colonel Samuel Bois Smith Phase II
Land Acquisition

third &
beyond:
Aquatic Park Phase III
Guild Inn Phase II
East Point Park Phase II
Frenchman's Bay
Carruthers Creek
Duffins Creek Phase II
Land Acquisition

Development would be carried out within this generalized priority list but recognizing that variations will occur as a result of changes in funding or approval delays.

5.5 ENVIRONMENTAL MONITORING AND ASSESSMENT

The environmental program as part of the Authority's ongoing commitment to the preservation and improvement of the natural qualities of the waterfront will include: monitoring new sites prior to project commencement as input to environmental assessment; and monitoring projects under construction or recently completed.

The Authority, as part of properly implementing its developments, will comply with the terms of the Environmental Assessment Act, 1975. An environmental assessment of all developments requiring approval under the Act will be submitted to the Minister of the Environment and will consist of those items detailed under Section 5(3) of the Act.

Between 1975 and 1980 the Authority's monitoring work provided valuable information on the short term impacts of various Authority projects both during construction and after stabilization. This monitoring will continue to examine short term impacts at sites under construction but will concentrate on any long term, permanent impacts. The rate of deposition and quality of sediment will be closely monitored in the vicinity of landfill areas as well as the impacts
sedimentation has on the biological community. In order to meet new Authority direction regarding angling opportunity, fish, fish spawning and habitat will be studied in the vicinity of existing and proposed parks.

The Authority recognizes that the Metropolitan Toronto and region waterfront is and should remain a multiple use resource but that multiple use leads to conflict. Throughout implementation of this Program, the environmental information base will be constantly re-evaluated and updated to ensure that the Authority's projects enhance as much as possible other uses of the waterfront.

5.6 IMPLEMENTATION AND MANAGEMENT

In providing the land base and basic facilities, the Authority in essence, acts as a developer. This section briefly outlines the approval process which is adhered to and what happens to the park areas once they are completed.

From concepts to opening ceremonies the development process is complicated. The approval process involves three stages. The first is overall direction and intent which is specifically what this Program is about; the second is the Project phase, which raises money for a definitive period of time required to implement selected components of the Program (i.e. the 1977-1981 Waterfront Project); the third is the Master Plan phase, which deals with the site-specific details. Regarding the later, the Authority has followed an extensive approval process. It begins with a concept extracted from the earlier plans and modified to meet current requirements for demand, access and effects on adjacent areas. Modification occurs in various ways: meetings with municipal and provincial officials, public meetings, Council and Authority meetings. Once all the factors have been considered that are reasonable and justified, the formal approval process is initiated. This involves the Authority, the area municipal Council, the regional municipal Council, the Ministry of Natural Resources, and more recently the Ministry of the Environment under the requirements of The Environmental Assessment Act. Normally the area municipality carries out a thorough examination of the proposal, which is justifiable since it is their residents which are affected to the greatest degree.

The Authority has had considerable success in following this approval process, mainly because it is flexible in its approach and takes all concerns into account by modifying the plan of development wherever it can so long as the Authority's policy principles are not violated. In this regard the Authority must maintain a regional focus for the development in order that it has benefit for the people of the region as a whole; not only those close to the waterfront, but also those further away. Once approvals are in hand, implementation is carried out in accordance with the procedures established by the Ministry of Natural Resources. During the process continual liaison is maintained with officials of the funding and management agencies in order to resolve the normal complications posed by any design and construction activity.

When the development is complete, either by phases or in total, it is turned over to the regional municipality for management in the case of Metropolitan Toronto, or to the Authority's Land Management Division where there is no
municipal agreement for management. Metropolitan Toronto Parks Department manages the total operation of their sites including the administration of boating clubs and required waterfront policing. Any revenues, as with boat clubs, are collected by the municipality. The Authority, by agreement, remains responsible for shoreline maintenance.
6. **COSTS AND FINANCIAL IMPLICATIONS**

In order to carry out waterfront development at a reasonable level, that which will meet the development requirements of the municipalities and the Province of Ontario, it is estimated that an annual appropriation of $3,000,000 is required. This level of expenditure is approximately 20% less than that expended per year over the past five year period and makes no adjustment for inflationary changes which may be required in the future.

This level of capital expenditure will mean added operational cost to the management agencies, which, for those areas in Metropolitan Toronto would be the Metropolitan Toronto Parks Department, and for those areas outside Metropolitan Toronto; the Conservation Authority or the local municipality. Within Metropolitan Toronto average operational costs for the type of waterfront development being completed is in the range of $7,907 per ha per year. The total operational funding requirement in a given year will depend on the number of acres completed and turned over for management. Outside Metropolitan Toronto, operational costs are at about the same level, $7,413/ha/year, but are offset to some extent by gate receipts where the Authority operates the area as a Conservation Area.

The funding required will be raised on the basis that a 50% grant is received from the Province of Ontario, and that the municipal share, 50%, is split as follows:

- **95%**: levied from the waterfront municipalities of Metropolitan Toronto and the Region of Durham.
- **5%**: levied from the non-waterfront municipalities of Peel and York Regions and the Townships of Mono and Adjala, on the basis of equalized assessment.

The actual split in funding will be described in an implementation Project which will be prepared after approval of the Watershed Plan.
WATERSHED PLAN
LAKE ONTARIO WATERFRONT DEVELOPMENT PROGRAM

BELFFERS W.A.

LEGEND

--- Authority Project Boundary

Existing Planting

Proposed Planting

MAY 1980

the metropolitan toronto and region conservation authority

FIG. 10