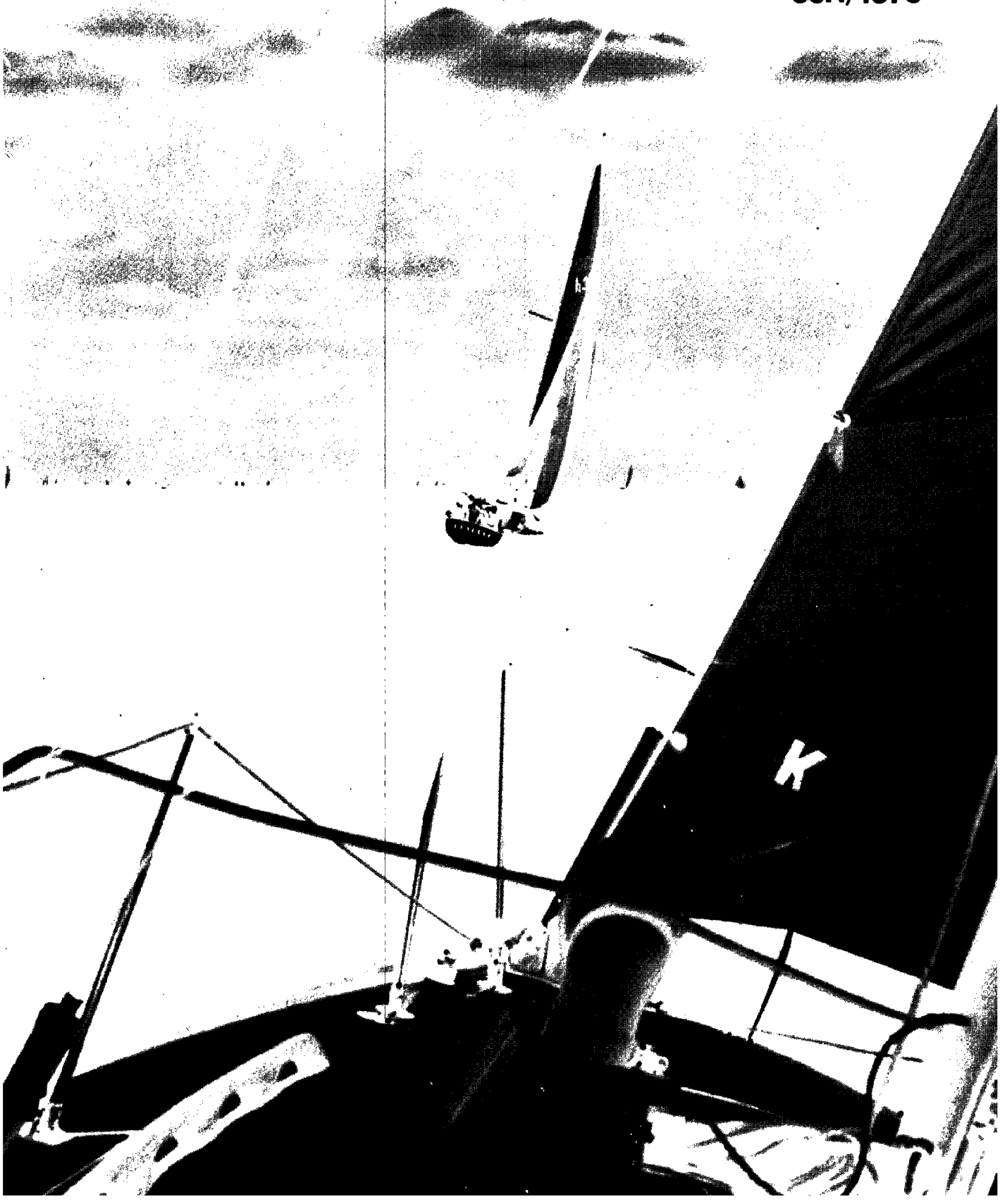
Downriver
Community
Conference

Detroit River
Recreation
Study

JJR/1979



Downriver Community Conference

Detroit River Recreation Study

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ACKNOWLEDGEMENTS

Johnson, Johnson & Roy/inc. has enjoyed assisting the Downriver Community Conference with this interesting and exciting project. Because of the excellent cooperation provided JJR, it is totally appropriate to identify the following individuals as members of the Project Team and to extend to them our sincere appreciation.

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We would also like to express our thanks to the members of the Project Advisory Committee for their support and assistance.

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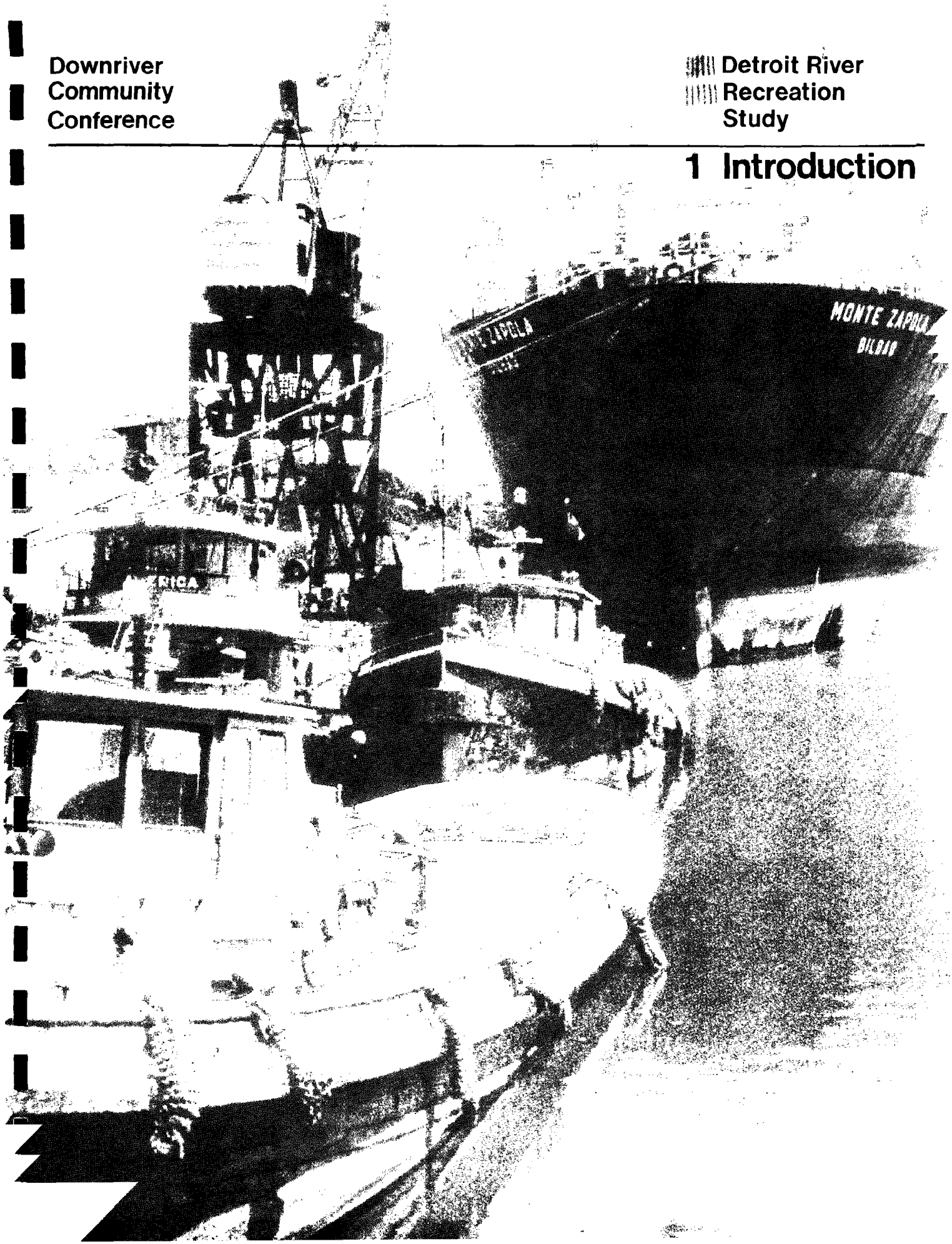
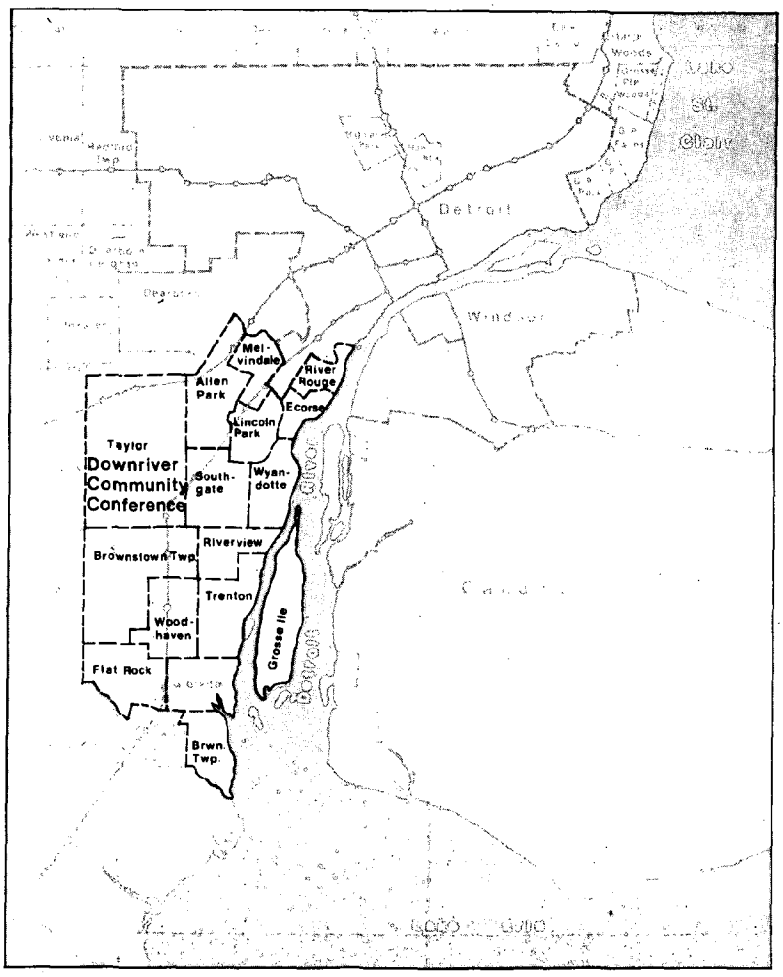
1 Introduction



DOWNRIVER COMMUNITY CONFERENCE

The Downriver Area is that portion of the Detroit Metropolitan Region which is located south or downriver from the City and in close proximity to the Detroit River. In 1977, the Downriver Community Conference (DCC) was formed as a regional agency whose function was to help improve the living environments within each member community. The organization has been extremely successful. Today DCC speaks on behalf of 12 cities, two townships and 360,000 people.

The Detroit River, which is an international boundary between Canada and the United States, is the busiest waterway in the world. As the name Downriver Area implies, the Detroit River plays an integral role in Downriver life in terms of economic development and open space/recreational opportunities. The River extends 31 miles between Lake St. Clair and Lake Erie, with 19.7 miles or two-thirds of its total length contiguous to the Downriver Area.



PURPOSE

The Downriver Community Conference received a Coastal Zone Management Grant to prepare a Recreation Master Plan for 19.7 miles of the Detroit River from Zug Island to Brownstown Township. Johnson, Johnson & Roy/inc. was retained to assist DCC in this effort.

The Detroit River is a unique component of the Downriver Area. Because of the river's potential significance, it has been the intent not only to deal with its recreational potential, but to identify ways that the river can lend interest and a feeling of uniqueness to the surrounding urban environment. The purpose of this project, therefore, has been to:

1. Accomplish community river-oriented recreational goals and objectives as set forth by the Downriver Community Conference, the Michigan Coastal Zone Management Program, and the Downriver communities.

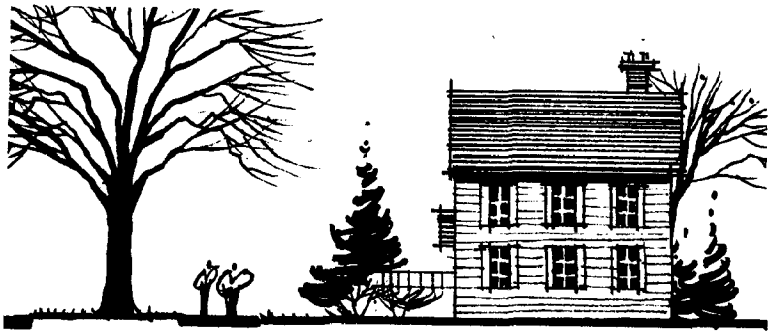
2. Stimulate interest in the river not only as a means for increasing recreational opportunities, but for providing a basis for strengthening and coordinating the Downriver community and their relations with Detroit and the Region.

3. To act as a catalyst to stimulate recreational development to benefit all Downriver residents.

4. Provide a basis for Downriver review and discussion so that a clearly defined and publicly supported river recreation program can be agreed upon.

5. Offer public agencies on the local, regional, and state levels a basis for identifying recreational priorities and opportunities within the Downriver Area.

6. Reinforce avenues of communication between competing and potentially conflicting riveredge users.



APPROACH

This study identifies recreational opportunities and design guidelines applicable along the riverfront, as well as illustrates specific site solutions for two high priority locations. This approach has been used in order to initiate a comprehensive planning/design approach and to provide the basis for rapid project implementation. It will provide private developers, local communities, and regional and state agencies with an understanding of Downriver recreational intentions while documenting the legal and design processes and general dollar commitments required to realize these priorities.

Based upon initial discussions with DCC leaders, the following assumptions were identified and then provided the basis for project recommendations.

1. The Detroit River is a special place, one which gives the Downriver a unique character.

2. Current riverfront recreational facilities are grossly inadequate in relationship to the potential riverfront recreational demand.

3. Inland DCC communities need access to the riverfront.

4. Proposed recreational development must recognize and build upon existing riverfront land use patterns.

5. The proposed Master Plan must be based on reality, not dreams.

6. Riverfront public transportation is essential to effectively tie the area together to establish a comprehensive recreational system.

To fully comprehend the recommendations documented in this report, the design process which was used must be examined. Because of (1) the size and complexity of the study area, (2) the number of communities involved, (3) the comprehensive nature of the project, (4) the need for interagency coordination, and (5) the need for citizen participation, a comprehensive project approach was used. Because recreational programming, site design and implementation strategies represented critical aspects of the project, the JJR team included recreationalists, landscape architects, planners, economists, historians and cost estimators, as well as graphic specialists.

During the course of the work effort, three levels of information were generated. First, the Master Plan identifies recreational opportunities for 19.7 miles of the river; secondly, Guidelines illustrate typical ways of dealing with the water/land interface; and finally, Schematic Site Plans for high priority areas show how two riveredge areas can be developed in an exciting manner. Because of the severe recreational pressures apparent today in the Downriver area, every effort has been made to encourage project implementation--not study preparation. Schematic design plans, cost estimates, funding opportunities and recommended phasing programs provide a solid basis for beginning design refinement and contract document phases. It is essential that Downriver recreational needs not only be acknowledged, but that new riverfront development be implemented as soon as possible.

1. Site Visitation and Data Collection

JJR team members viewed the study area on numerous occasions--from the air, by boat, and on foot. A comprehensive 35mm. slide inventory of the riveredge was prepared.

2. Identification of Critical Development Concepts

Assimilation of data collected during the previous task allowed for the identification of critical site concerns. These concepts are identified in the Data Interpretation section of this report.

3. Preparation and Review of Alternative Master Plans

Alternative approaches were prepared illustrating how a recreational river system could be developed. Based upon comments expressed by the Working and Advisory Committees, concerned agencies and communities, a preferred approach was agreed upon.

4. Selection of High Priority Project Areas

The selection of high priority areas was based upon critical sites identified by the Master Plan, areas currently experiencing high recreational demand, a variety of existing site conditions, and municipal DCC enthusiasm.

5. **Preparation and Review of Alternative High Priority Area Site Plans**

Alternative site plans were prepared and discussed with appropriate members of the Working and Advisory Committees, CZM, DCC and representatives from the participating communities.

6. **Plan Refinement**

Review comments and suggestions clarified during alternative discussions were incorporated and final schematic plans prepared.

7. **Preparation of Implementation Strategies**

On the Master Plan level, development procedures were prepared. At the high priority sites, Bishop Park and the Ecorse River Area, specific information was generated including cost estimates, funding resources and phasing programs.

8. **Project Review**

Reviews by the project committees, DCC and CZM were conducted, critical information discussed, and final revisions made.

9. **Documentation**

Critical project information is recorded in this report on 35mm. slides and drawings available at DCC.

REPORT ORGANIZATION

Every effort has been made to record not only the project process, but also the resulting findings and recommendations. The report identifies critical project information and explains how this information was used. All recommendations are carefully explained in both graphic and narrative formats. This material is organized and presented in six sections:

Introduction	Project purpose and approach.
Data Implications	Interpretation and identification of critical planning concepts.
Master Plan	Recommendations in terms of an overall river recreational system.

Guidelines	Appropriate design solutions for typically encountered riverfront opportunities.
Priority Projects	Schematic site plans and implementation strategies for two high priority project areas.
Appendix	Backup information.

PROJECT SUMMARY

Competition between alternative riverfront uses has increased markedly in recent years. As land availability continues to decrease, pressures will inevitably build for more effective land utilization. Because of the dominant role industry plays in the Downriver Area, it is essential for recreationalists and industrialists to work together effectively. The proposed Master Plan attempts to initiate such an approach by first recognizing riverfront, industrial land uses as being a necessary part of the Downriver Area, and secondly by identifying ways industry can contribute to recreational development.

The Master Plan is composed of the Framework Plan and Project Evaluations. The Framework Plan locates potential recreational sites and recognizes regional and municipal opportunities. Project evaluations include graphic illustrations of the proposed activities, an estimate of the anticipated recreational impact that facility will have, a description of the emphasis or type of facilities the site can provide, a priority evaluation, a proposed operational responsibility (i.e., municipal, regional or state), and a description of the proposed program.

The coordinated system outlined by the Framework Plan recognizes existing recreational facilities and future opportunities. Along the 19.7 mile riverway, seven new recreational areas are proposed, along with renovations to six existing areas. Acknowledging both land and water based opportunities, regional and municipal facilities are appropriately distributed according to local and regional recreational demands. A regional facility typically occurs every three to five miles along the riverfront, with the greatest concentration in the north where recreational demand is the greatest. The proposed regional sites include River Rouge Ecorse River Area, Point Hennepin, Elizabeth Park, Lake Erie Metro Park, Pointe Mouillee State Game Area, and Sugar and Stony Islands.

Development or improvements to existing municipal parks are proposed at Ecorse Memorial Park and Boat Launch, Bishop Park (Wyandotte), Elias Park (Trenton), and Gibraltar.

Typical solutions to frequently encountered riverfront conditions are presented as guideline approaches. Critical relationships dealt with include natural, industrial and municipal linkages, as well as riveredge treatments and waterfront observation/educational facilities. These solutions are intended to alert DCC members to potential opportunities within their communities and to provide a preliminary basis for implementation.

Site specific design solutions and funding strategies are also presented. Bishop Park, Wyandotte, and the Ecorse River Area provide an opportunity for developing exciting and appropriate riverfront solutions. While specifically tailored to local conditions, the plans should stimulate similar community involvement up and down the river. The accompanying implementation packages should also prove helpful by establishing general rules of thumb for construction costs, implementation procedures, permit requirements and potential funding sources.

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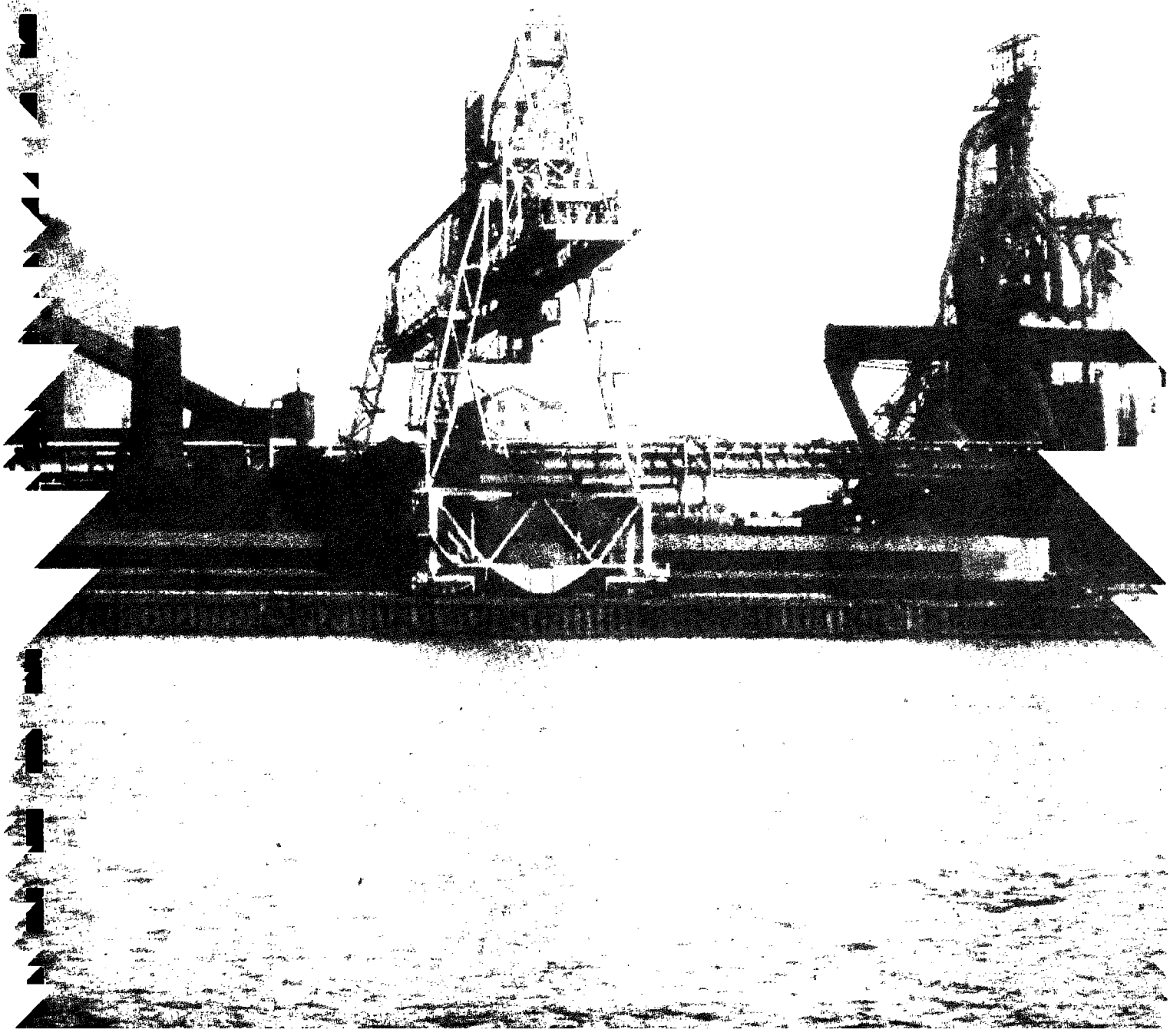
2 Data Interpretation



DATA INTERPRETATION INTRODUCTION

During this phase of the project, pertinent information was collected and evaluated. Using these materials, critical development concepts were identified which would affect recreational opportunities. Existing studies and reports, field investigations, boat tours, aerial reconnaissance, interviews and workshops provided this necessary base data.

Early in the project, it became evident that no single data source existed for the DCC area. Contacts were established with each of the 14 member communities and the numerous regional agencies which are active in the area. Pertinent, up-to-date information was not only difficult to locate, but also difficult to obtain. This proved to be the case on both regional and site specific levels. In order to deal with this problem in the future, JJR strongly suggests that DCC serve the Downriver Area as an information center. To initiate this approach, all project data, drawings and slides will be turned over to the DCC staff.

Project data was carefully reviewed by JJR and areas of significance identified. This material was then graphically recorded for the entire Downriver shoreline. While particular attention was paid the project study area--from Jefferson to the river--patterns extending inland two or three miles were also recorded. This information included:

1. Existing Land Use Inventory
2. Community Master Plans
3. Zoning Plans
4. Visual Conditions and River Configuration
5. Riveredge Conditions[1]
6. Transportation Systems

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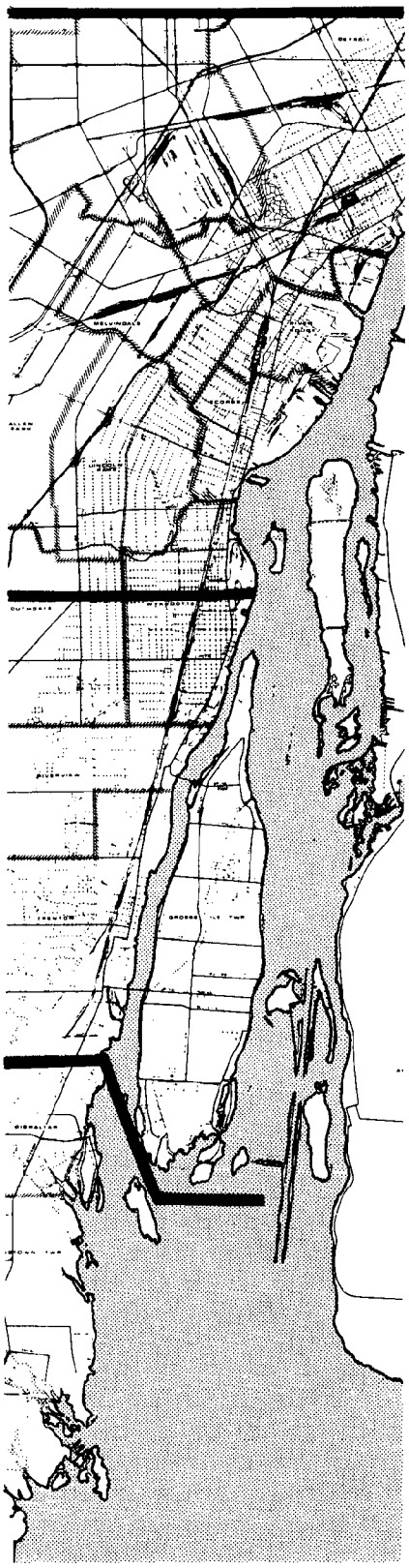
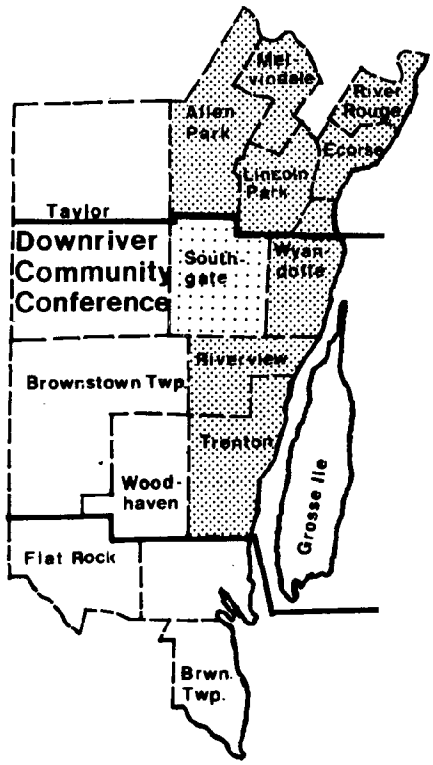
[1]Huron Clinton Metropolitan Authority personnel assisted with this process.



DOWNRIVER PATTERNS

Natural and man-made environments vary significantly within the DCC study area. Review of these analysis materials resulted in the identification of critical development patterns. Recognition of these variations assists not only in placing each potential opportunity in a proper context, but contributes to identifying an appropriate type and level of development at each site. These patterns and variations can best be understood if the 19.7 miles riveredge is separated into three different areas--Northern, Transitional and Southern Zones. Zone 1, Northern, extends from Zug Island to Ford Road in Wyandotte; Zone 2, Transition, goes from Ford Road to Gibraltar and encompasses Grosse Ile; and Zone 3, Southern, extends southward to Lake Erie.

While these areas do represent significant differences, it is important to note that these are gradual changes. It is not suggested, for instance, that the north side of Ford Road is different from the south side. Because existing and proposed land use patterns, recreational needs, visual conditions, riveredge conditions and transportation needs and patterns all vary according to these zones, community recreational expectations must also vary. To explain how these variations will affect design recommendations, potential impacts are identified and specifically addressed on the following pages. Categories of concern are population characteristics, riverfront development, riverfront access, recreational needs, and environmental factors.



POPULATION CHARACTERISTICS

There are approximately 360,000 people living in the Downriver Area. Of these, some 134,000, or 37%, live in the eight areas along the Detroit River. Based on SEMCOG's 1977 Small Area Forecasts, population levels are projected to increase by 10% to total 400,000 by 1990. Of particular interest is the anticipated trend for the eight riverfront areas. River Rouge, Ecorse, Wyandotte, Riverview and Trenton are all predicted to have declining populations by 1990. This rate of decline varies from 7% in Trenton to 23% in Ecorse. Grosse Ile, Gibraltar and Brownstown Township are projected to have rising populations. When comparing the 1990 estimates for all Downriver communities, it appears that the northeast industrial area (Allen Park, Lincoln Park, Melvindale, River Rouge, Ecorse and Wyandotte) may decline, while the southeast area (Brownstown Township, Flat Rock, Woodhaven, Gibraltar and Grosse Ile) will be growing in population.

Population Characteristics - Northern Zone

The communities in the northern zone exhibit distinctive differences when compared with the other zones. These differences are evidenced by population densities, occupation and income levels.

The greatest population density within the DCC is recorded for Lincoln Park--8,350 people/square mile. The lowest density is Brownstown Township with 378 people/square mile. The five most densely populated areas (Lincoln Park, Wyandotte, Ecorse, River Rouge, and Allen Park) are all totally or partially within the northern zone.

The average age of northern residents is higher than in the transitional and southern areas. Slightly fewer children and significantly greater numbers of older residents are responsible for this variation. River Rouge has the highest percentage of people over 65, almost 10%, with Wyandotte next with 9%. These levels are much higher than the average DCC rate of 5.5 percent.

The northern zone also has the greatest number of low and moderate income households.[1] While DCC averages 33%, River Rouge has the highest at 66% followed by Taylor, 61%; Ecorse, 51%; and Wyandotte, 44%.

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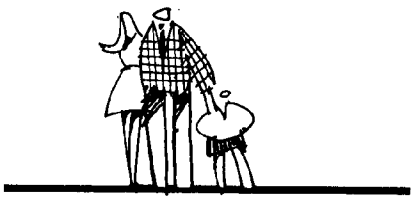
[1] 80% or less of the SMSA Median Family Income, 1970 Census.

As a result, the northern zone has the greatest number of low and moderate income families, about 46%, while the transitional zone averages 25.7%, and the southern zone, 33%. Lower than normal incomes are also documented by the 1974 estimated per capita money income per community. Average community incomes in the north are $4,962 annually, as compared to $5,635 and $5,179 for the transitional and southern zones, respectively.

Based upon these figures, it is clear that the northern communities are more densely populated, typically have lower incomes, and a greater percentage of older residents.

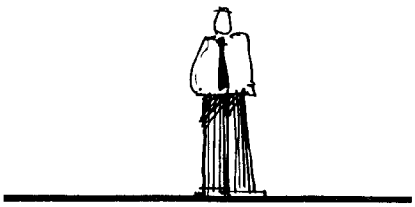


Population Characteristics - Transitional Zone

Overall, the transitional zone has lower population densities, fewer senior citizens and higher income levels. Wyandotte and Grosse Ile reflect the extremes faced in the transitional zone.

Population densities in this zone average 3,546 people per square mile, as compared to 5,721 people per square mile in the northern zone. Wyandotte has 6,951 people per square mile and Grosse Ile, 891 people per square mile. Estimated per capita money income levels in this zone average $5,635 annually. Wyandotte averages $5,037 annually, while Grosse Ile residents average $7,647. Grosse Ile also has the greatest number of managerial and professional level workers, 46%, while Wyandotte leads in the number of skilled workers, 43%. Interestingly enough, Brownstown Township has the highest percent of skilled workers in the DCC, an estimated 52%, followed by Ecorse with 47%.

Clear distinctions can be made between northern and transitional zones based upon population characteristics. This contrast is reduced, however, due to Grosse Ile's unusual situation.



Population Characteristics - Southern Zone

The rural composition of the southern zone is evidenced by the lowest population densities in the DCC. Estimated per capita money income averages $5,179, less than the transitional zone, yet higher than the northern zone. Percent of low and moderate income families is 33%, as compared to the 46.1% and 25.7% evident in the northern and southern zones, respectively. The median family income in Brownstown Township is $8,349, $1,360 lower than for Ecorse, and $2,934 less than the average Wyandotte income.

RIVERFRONT DEVELOPMENT

The Detroit River has played a major role in establishing regional development patterns. As the busiest waterway in the world, and a unique natural feature, it has stimulated development along its shores. The eight governmental units which line the river share this resource with the residents of Detroit and our Canadian friends across the border. Unfortunately, major differences exist between the Canadian and American sides. Windsor has recognized the special nature of the river and developed riverfront parks and open space buffers. The American side continues to struggle in their attempt to reestablish critical open space and recreational opportunities.

Within the Downriver area, the 19.7 miles of riverfront are broken up as follows.

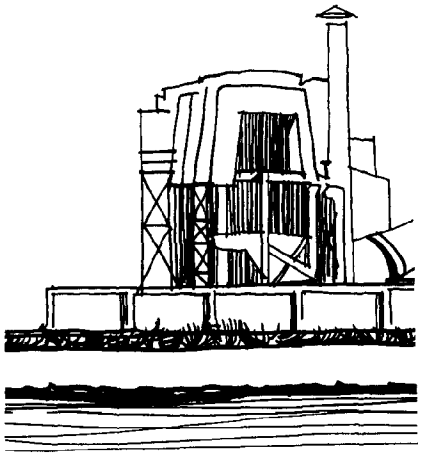
1.	River Rouge	1.9 miles
2.	Ecorse	2.2 miles
3.	Wyandotte	3.7 miles
4.	Riverview	1.2 miles
5.	Trenton	4.5 miles
6.	Gibraltar	2.8 miles
7.	Brownstown Township	3.4 miles

Surprisingly, Grosse IleTownship, because of its size and island character, accounts for almost the same length of shoreline--19.6 miles. It should be pointed out that the land use percentages typically used in this report do not include Grosse Ile statistics.

Along the river commercial, residential, industrial, governmental and recreational land uses occur. The principal mainland use is clearly industry (45%), followed by residential (25%), public and private recreation (17%), vacant lands (9%), and commercial and governmental uses (2% and 2%).

Riverfront Development - Northern Zone

The northern zone is an urban area. It is composed of River Rouge, Ecorse, and the northern third of Wyandotte. This area can best be described as an older, industrially-oriented area with aging physical facilities, declining populations and housing stock.



Land uses along this section of the river are almost totally committed to heavy industrial uses. This use consumes 4.5 miles or 79% of the zone. Residential use accounts for .6 miles, or 11%; recreational uses, .5 miles or 8%; and commercial use, .1 mile or 2%.

To appreciate the level of industrialization which occurs in this zone, it is interesting to note that two-thirds of the entire city of River Rouge is committed to industrial uses. This has been described as being seven times the "normal" amount of industry. The result of this situation is that existing industrial uses join with quality residential and commercial/marina uses to discourage increased riverfront recreational development. While opportunities do exist for increasing the efficient use of the existing park facilities, such an approach cannot satisfy existing recreational demands. Because sufficient mainland lands are not available, the only development opportunity exists in terms of using existing Mud Island--an undeveloped man-made island located across from Ecorse Memorial Park and less than 300' from shore--or in creating additional man-made islands.

Riverfront Development - Transitional Zone

This is the largest of the zones and accounts for 8.8 miles of riverfront. Communities within this area include Wyandotte, Riverview, Trenton and the northern part of Gibraltar. These are mature but stable communities which are fully developed and have little or no vacant land for new development. Housing, community facilities and industrial facilities are aging.

Industrial uses continue to dominate the water's edge. While steel plants are also located in this area, power, chemical and production facilities begin to soften the heavy industrial image. Industry accounts for 60% of all uses; residential uses, 28%; recreational, 10%; governmental uses, 6%; and commercial uses, 3%.

With 20% less industrial use in this zone as compared to the northern zone, appreciation of open space begins to occur with the increasing frequency of parks such as Bishop Park, Trenton's parks and, of course, Elizabeth Park. Unfortunately, vacant parcels of any size are currently being acquired for development by industry unable to find river sites closer to Detroit. Despite these acquisitions, the possibility of extending land-based walkways along short segments of the shore, and into the urban fabric to provide access to the riverfront area, begins to be feasible.

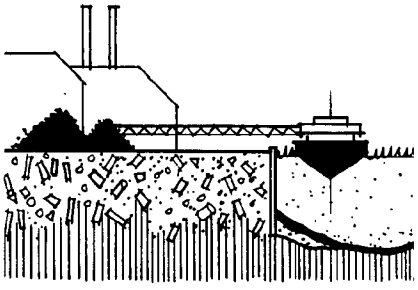
Riverfront Development - Southern Zone

This is a rural zone where natural islands and undeveloped shorelines are the rule. Industrial development which dominates the other zones has not yet moved into this area, and no shoreline plants exist within this 5.2 mile section. The lack of shipping channels, frequency of flooding, and lack of municipal facilities appear to be responsible for this. Residential and recreational uses (Lake Erie Metro Park and the state wildlife area) jointly account for 45% of the use with substantial areas available for development. As a result, these developing areas are experiencing increasing demands for public services and utilities. Pressures for retaining land for community facilities and industrial uses compete with needs to upgrade predominately rural facilities.

RIVER CONFIGURATION

The Detroit River extends 31 miles to link Lake St. Clair to Lake Erie. The Downriver Area has 19.7 river miles. The river drains a basin of 1,786 square miles and accommodates water from several rivers, creeks, and other tributaries. The Rouge River, Ecorse River, Brownstown Creek, and the Huron River terminate in the Detroit River. The Rouge River and Huron River are major tributaries serving both Detroit and Ann Arbor. The river also drains several man-made drains and canals including the Ecorse Drain, Marsh Creek, Frank and Polk Drain, Rockwood Inlet, Thoroughfare Canal, and Frenchman's Creek. Offshore shipping channels, islands, and shallow areas characterize the Downriver section of the river. The main channel is divided into two--the Amherstburg (upbound) and the Livingstone (downbound) Channels, separated by Bois Blanc Island. The Army Corps of Engineers maintain 27 feet draft depths in these channels.

River conditions vary substantially along the 19.7 mile riveredge which extends from Zug Island to Brownstown Township. Recreational boaters mix with ocean and lake freighters; the main river course varies from one-half mile to more than 3½ miles in width. Annual water levels fluctuate from 7' to 8' with a 3' variation typical during the summer months. Water depths of 30' are common 15' offshore in certain segments, while in others a 7' depth is encountered 2,000' from shore. Extremes in water quality reflect variations in shoreline uses. Filling has replaced natural and gradual riveredges with severe, well-defined banks edged with steel and concrete. Visual impressions vary from concern to excitement.



River Configuration - Northern Zone

This zone accounts for approximately 5.7 miles of the riverfront. Within this area, the river can be separated into a four mile long segment which averages about one-half mile in width, while the southern segment widens out to form a pocket one mile wide within which Mud and Grassy Islands are located.

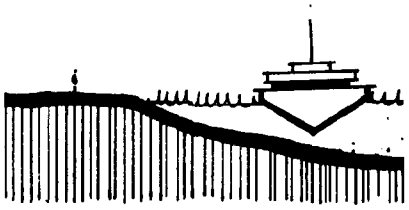
The area north of Fighting Island provides the narrowest main river channel within the DCC area. This has a significant effect on potential recreational uses in the Northern Zone in terms of water depth, visual opportunities, currents and ice.

Water depths typically exceed 30' close to the American shore. As a result, commercial docks line the shore and are an essential part of industrial activities located here. Freighters and pleasure boats are able to travel next to the shore for close-up views of the ships and industrial operations. Areas of special significance exist at Mud and Grassy Islands and Belanger Park because of their closeness to the shipping channels. Unique views of the Ambassador Bridge, the Detroit skyline and the Canadian shore are also provided from Belanger Park.

River currents are severe in this area. Because of the narrow channel, the water is not only deeper, but moves faster. As a result, while Detroit River recreational boaters are always subjected to strong currents, they are more significant in this area.

Within the Ecorse River area, river conditions begin to change. While the shipping channels are dredged to maintain a 27' depth, pockets of shallow water exist. The creation of Mud and Grassy Islands exploited this situation.

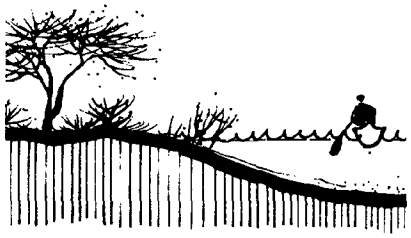
Boaters traveling the river are aware that this is a special area as the river widens out, islands which are small enough to identify as islands appear and after closer inspection, the Ecorse River joins with the Detroit River.



River Configuration - Transitional Zone

The Transitional Zone accounts for approximately 8.8 miles. This area is unique because of Point Hennepin and Grosse Ile. Because the river divides to flow around Grosse Ile, two very different river conditions result. The main flow passes east along the American-Canadian border with the major shipping channels delineated by land created from dredge material. Because the Trenton Channel, which lies between Grosse Ile and the mainland, extends southward half the length of the island, optimum ship viewing positions are at Point Hennepin and along the eastern side of Grosse Ile. Views from Point Hennepin are particularly panoramic and include the river Canadian shores and distant views directly upriver toward Detroit. Typically, pleasure boaters traveling along the east side have boats large enough to withstand the increased winds and wave actions resulting from this more open water or are intending to visit Canada.

When standing on the mainland or boating next to it, it is difficult to realize that Grosse Ile is an island. Extending more than 7½ miles in length, a visitor often forgets that this is not the main channel. With the interior channel being only 1,000' wide, erosion is a potential problem. Two swing bridges provide vehicular access to the island. While time consuming for commuters, a sense of excitement develops as vehicular traffic stops and the bridge opens to allow ships to pass.



River Configuration - Southern Zone

This zone accounts for the remaining 5.2 miles of the 19.7 mile study area. Conditions in this area of the river are totally different from those in the north. Here the Detroit River widens out to more than 3½ miles with distant views to Canada and across Lake Erie. With the widening of the river, it simultaneously becomes shallower. As a result, natural islands appear for the first time and the mainland shoreline assumes a highly irregular edge. Pleasure boaters approaching shore must search carefully for proper channels and soon learn that shallow water of one or two feet in depth complicates access to many areas.

Water actions and levels increase as unobstructed winds sweep across the Great Lake. Rough boating and shoreline instability result. Erosion has been a particular problem at the Pointe Mouillee State Game Area where the U. S. Army Corps of Engineers is currently constructing a protective barrier in order to preserve critical marsh areas. The State of Michigan is experiencing similar problems at Celeron Island where substantial areas of the island are currently being destroyed by wind and wave.

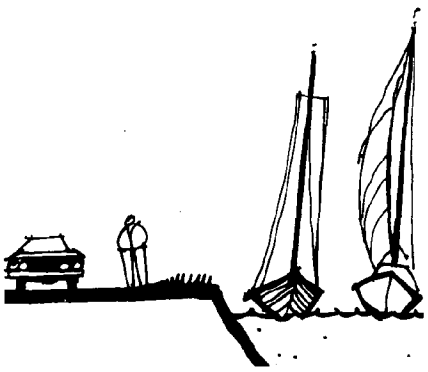
RIVERFRONT ACCESS

Riverfront access is provided by boat and automobile. Because almost no public docking facility opportunities are currently available, boaters have little opportunity for visiting public recreational facilities. As a result, boating activities on the Detroit River are simply a case of traveling up and down the river. As scarcity of fuel increases, it will be highly desirable to provide stopover areas so that boaters can participate in mainland activities.

Vehicular access as might be expected provides a more developed system for riverfront access. The principal reason for this has been the need of industry to provide rail, water and truck accessibility. As a result, existing vehicular access routes currently stress industrial necessity rather than scenic or recreational concerns.

The road system in the Downriver Area is organized around I-75 and I-94 expressways. I-75 parallels the river and due to its six to eight lane capacity and location within DCC, it provides the primary means of access and egress from the DCC area.

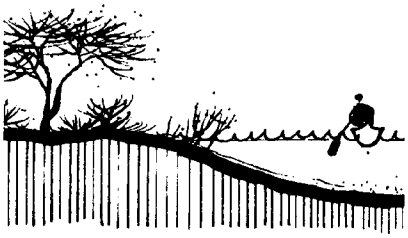
Also paralleling the river and its close proximity to it is Jefferson Avenue. This primary truck route extends along the entire length of the Wayne County riverfront, servicing industry and other riverfront uses. This arterial reflects the conflicts currently visible along the water's edge. Industry naturally views this route as a critical life line, while residential, commercial and recreational uses view it as a means of access to the river. The 1977 Downriver Truck Study prepared for the Southeast Michigan Council of Governments responded to this dilemma and recommended several alternative truck route alignments. While regional and municipal agencies have reviewed these options in detail, no action has yet been initiated. Should a new truck route be created paralleling the existing railroad corridor, it would have a positive effect on the riverfront environment. The current situations at Ecorse and the potential realignment under consideration at Wyandotte illustrates this concern.



Riverfront Access - Northern Zone

Throughout the northern 4½ miles of this zone, water depths frequently exceed 20 feet directly next to the shore. As a result, recreational boaters have no difficulty in approaching the shore. A problem does exist, however, in that deeper water has encouraged the intensive development of commercial docks, thus discouraging creation of public leisure boat docking facilities. To encourage recreational stopovers, short term boat tie-ups are essential.

When standing on the mainland or boating next to it, it is difficult to realize that Grosse Ile is an island. Extending more than 7½ miles in length, a visitor often forgets that this is not the main channel. With the interior channel being only 1,000' wide, erosion is a potential problem. Two swing bridges provide vehicular access to the island. While time consuming for commuters, a sense of excitement develops as vehicular traffic stops and the bridge opens to allow ships to pass.



River Configuration - Southern Zone

This zone accounts for the remaining 5.2 miles of the 19.7 mile study area. Conditions in this area of the river are totally different from those in the north. Here the Detroit River widens out to more than 3½ miles with distant views to Canada and across Lake Erie. With the widening of the river, it simultaneously becomes shallower. As a result, natural islands appear for the first time and the mainland shoreline assumes a highly irregular edge. Pleasure boaters approaching shore must search carefully for proper channels and soon learn that shallow water of one or two feet in depth complicates access to many areas.

Water actions and levels increase as unobstructed winds sweep across the Great Lake. Rough boating and shoreline instability result. Erosion has been a particular problem at the Pointe Mouillee State Game Area where the U. S. Army Corps of Engineers is currently constructing a protective barrier in order to preserve critical marsh areas. The State of Michigan is experiencing similar problems at Celeron Island where substantial areas of the island are currently being destroyed by wind and wave.

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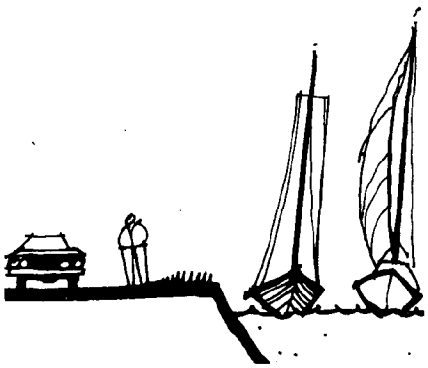

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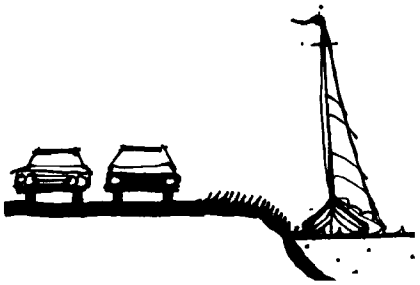
Vehicular access to the riverfront varies considerably. When visiting the area, it is advisable to use arterial streets such as Southfield Drive or Jefferson. When departing from these major streets, as at River Rouge, it is difficult to find the river. Special street treatments are essential to guide visitors to the water's edge. Signage, street trees, and special graphics are all appropriate.

At Ecorse Memorial Park, Jefferson's close proximity severely impacts the site. Not only is noise and emission a problem, but this major truck route is a barrier to pedestrian movements to the river.



Riverfront Access - Transitional Zone

The river becomes wider and less deep as it flows southward. This variation, while requiring boater awareness, does not prohibit access to the mainland. Lack of short term boat tie-ups continues to discourage land-based recreational participation by boaters.

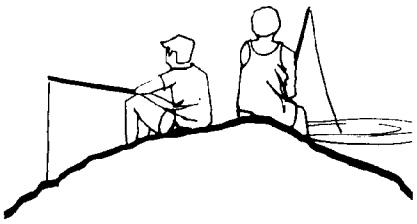
Throughout the transitional zone, Jefferson is rarely more than one-quarter mile away from the river. While riveredge uses temporarily block views to the river, orientation is not a typical problem. Special situations do exist, however, where critical concerns are evident. At Wyandotte, for instance, the possibility of diverting truck traffic off Jefferson and next to the river is being considered. Such an approach will have a significant impact on the community's riverfront character.

Additional attention is also needed at Elizabeth Park where the park entrance is not clearly identified. Care needs to be taken to implement similar strategies as recommended in the northern zone to guide visitors to the river park.

Riverfront Access - Southern Zone

Water access to the mainland is very difficult throughout this area. Channels must be dredged and regularly maintained in order to provide access. Lake Erie Metro Park will rely on this approach to provide short-term docking facilities.

Currently, vehicular access to the riverfront is complicated only by the lack of existing roads. Again it is anticipated that once Lake Erie Metro Park is developed, river access will be clearly identified and adequate opportunities for access will be provided.



RECREATIONAL NEEDS

There are substantial recreational deficiencies in the Downriver Area. This lack of facilities is compounded by the type and limited variety of facilities currently available. Many of these problems are evident not only in the Downriver Area, but Wayne County and the Detroit Metropolitan Region as well. The result is that although this region has the highest recreation participation levels in the state (52% of all participation), lack of appropriate facilities forces many residents to either forego the opportunity or to travel outside the area. This region has the highest rate of participation exported in the state, 67%, while only 2% is imported.

During the course of this project, many Downriver recreational concerns and opportunities were identified. Critical information was provided by the Recreational Interviews conducted by DCC in 1978 as part of the Innovative Recreation Grant funded by Wayne County; The Land and the River & People and the River, Wayne County Planning Commision; Recreation in Southeastern Michigan Shoreline Study, Bureau of Outdoor Recreation; Recreation in Southeastern Michigan, Detroit Joint Recreation Committee.

Critical Downriver recreational deficiencies which were noted and warrant special attention are:

1. Lack of critical information and data identifying regional and community recreational need studies, and records regarding facility operation and use levels. What materials do exist do not recognize riverfront potentials beyond the city level with opportunities typically expressed in terms of picnicking and boat launches.

2. Lack of awareness by residents of what facilities are already available in the Downriver Area.

3. Historically, the Downriver Area has been forced to rely on municipal and private recreational facilities. As a result, the facilities which do exist are typically small in size, have limited recreational opportunities and are restricted to local residents. Recreational development along the riverfront, therefore, is irregular and uncoordinated, reflecting limited recreational budgets. Inland residents are not encouraged to interact with the river. Recent interest on state and federal levels, as reflected by this study, can move quickly to compensate for past neglect.

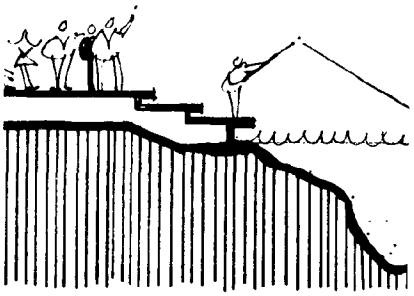
4. Existing riverfront recreational facilities are grossly inadequate. Not including Elizabeth Park (168 acres) or the newly acquired Lake Erie Metro Park area (1,550 acres), only 33 public acres are currently developed and available for recreational use. All 33 acres are operated on the municipal level.

5. Not only is a comprehensive recreational system needed and warranted in terms of size and operating agency, but also in terms of increasing the variety of facilities available for use. The proposed Lake Erie Metro Park will assist greatly by offering swimming, camping, golf, nature interpretation and other activities to the public which are not found elsewhere along the river.

6. Transportation problems must also be dealt with. Because distances encountered in the Downriver Area are significant, facility access must be considered. While currently a problem, it is one which rising gas prices and increasingly older DCC populations will aggravate. Public transportation and/or facility proximity are, therefore, essential.

7. Park maintenance and visitor security are also of critical importance. Both have been severely hampered as operating budgets have declined.

Because lists of recreational activities needed in the Downriver Area were not available, JJR based their recommendations on: (1) discussions with municipal representatives, (2) the type of facilities being proposed--regional or municipal--and the appropriate operational funds available, (3) specific site characteristics such as size of area, unique relationship to the river, etc., and (4) appropriate riverfront uses. Because of limited site availability, appropriate riverfront uses was the critical and overriding concern. Each activity under consideration was evaluated in terms of its contribution to the Detroit River, and if a riverfront site was the only location where such a use would be feasible. A ballfield was not considered as an appropriate riverfront use, but marinas, island developments, boat destinations, aquatic nature trails, historic, environmental, and industrial river information displays were considered appropriate.



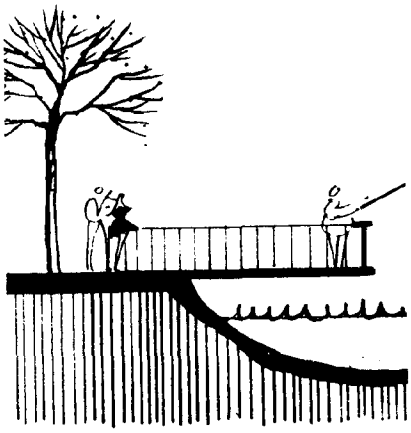
Recreational Needs - Northern Zone

Almost 50% of the total DCC population is located in this zone (River Rouge, Ecorse, Melvindale, Allen Park, half of Taylor, and Lincoln Park), which accounts for only 30% of the total DCC land area. As a result of this intensive development, open space is at a premium while almost 80% of the riverfront currently supports industrial uses. To satisfy riverfront recreational needs, 12.8 acres are currently available--Belanger Park, 9.5 acres; Ecorse Memorial Park and Boat Launch, 3.3 acres. These areas are barely able to accommodate local municipal needs and are totally unable to provide inland residents riverfront opportunities.

Grassy Island, a national wildlife refuge, is managed by the U. S. Fish and Wildlife Service. No visitor facilities of any kind have been developed on the island, and no regional recreational facilities exist.

Because of declining population levels, this zone has a greater number of older residents--groups which statistics show to be particularly active recreationally. These people are frequently financially unable to pursue recreational interests outside the area. Thus, we are confronted with an area where local demand is the greatest, existing riverfront recreational opportunities the fewest, and land least available for potential development.

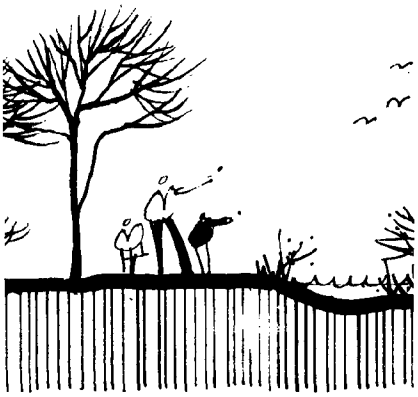
As is true for both northern and transitional zones, fishing, picnicking, general river watching and boating are activities currently in greatest demand. The July 4th hydroplane races are a highly appropriate riverfront activity and one which demonstrates the riverfront potential value to the area. If Mud Island, the only substantial undeveloped land available in this zone, were developed for recreational purposes, a wide range of river-oriented facilities could be developed. Such an approach would allow resdients to enjoy the river's open space conditions and to temporarily escape from an intensive urban environment.



Recreational Needs - Transitional Zone

The transitional zone exhibits many of the same characteristics found in the north, but to a lesser extent. Population levels and densities are less. Wyandotte and the Trenton parks provide 20 acres of municipal recreational facilities. Only Elizabeth Park, currently operated by Wayne County, provides riverfront recreational opportunities for inland residents. Unfortunately, the existing facilities and visitor patterns discourage family participation. It is essential that this facility not only provide family-oriented activities in a secure environment, but if an entrance fee is collected, it should be applied as a means to control use patterns and not as a means for making a profit which could discourage low income or disadvantaged groups from using the park.

In the north, emphasis was placed on development in this zone. Emphasis should be placed on increasing the variety of recreational opportunities. If Elizabeth Park were used at its most efficient level, it would probably be necessary to provide other facilities to increase the available variety of activities.



Recreational Needs - Southern Zone

The rural setting has a significant impact on local recreational habits and desires. Because of the abundant open space available, rural residents typically are able to use that open space as a means for satisfying many of their recreational needs. More specialized opportunities will be provided by Lake Erie Metro Park. This new regional park will play an essential and critical role for residents living in the northern and transitional zones. This will provide an opportunity for northerners in particular to leave behind urban recreational opportunities where maximum use of land is essential. It will be essential, however, to provide inexpensive and efficient public transportation--either land and/or water oriented--to make the new park accessible.

Because of the abundance of available land, Lake Erie Metro Park will provide specialized facilities which require large land areas, such as swimming, camping, golf, and nature interpretation.

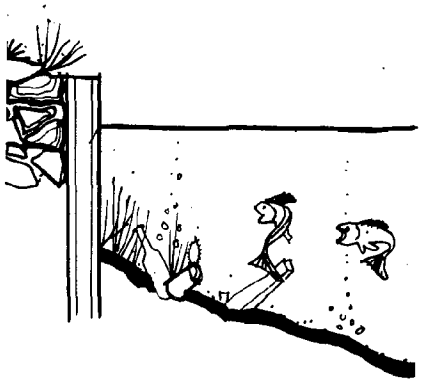
The southern zone will also provide hunting opportunities for those outside the area. Because of the abundance of waterfowl and the appeal of hunting to young low and moderate income workers, this provides a welcome opportunity not available upriver.

ENVIRONMENTAL FACTORS

As a whole, the environmental character of the river corridor grows increasingly diverse downriver. Expressed in terms of habitat diversity, the southern zone and the lower part of the transition zone support the greatest variety of habitats. These include extensive wetlands, estaurine environments at the mouths of tributaries, woodland, swamplands, lake-type environments of slow-moving water and fluvial (channel) environments. In contrast, the northern zone supports only two types of habitats, the principal one being the main river channel and the secondary one being the various man-made channels at the mouth of tributary rivers, such as the Rouge River.

The Detroit River is an essential ingredient in the Mississippi Flyway. Waterfowl migrations follow this route in the fall and spring and, therefore, waterfowl resting areas within the Detroit Metropolitan Region are of concern. To protect such habitats, the state has acquired Celeron Island and is considering acquiring Calf Island. The U. S. Fish and Wildlife Service also participates in this effort by administering the Grassy Island National refuge.

The Coastal Zone Management Program has recognized certain critical environmental areas under the Shoreline Protection and Management Act of 1970. The following sites have been proposed: Mud & Grassy Islands, northwest segments of Grosse Ile near the northern toll bridge, the wetland area west of Calf Island, Celeron Island, Pointe Mouillee, and Lake Erie Metro Park.

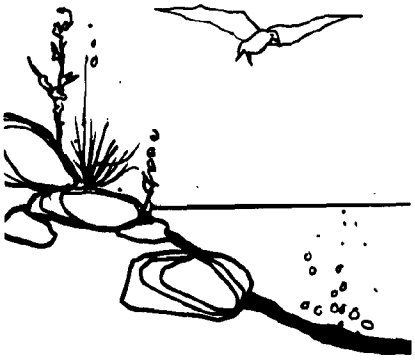


Environmental Factors - Northern Zone

In the northern zone, the Detroit River is relatively narrow and generates faster flows than it does in the wider reaches downriver. The river is generally deeper in this zone, ranging from 20 to 40 feet in depth, and less prone to sedimentation than is the case in the lower zones.

The water quality of the Detroit River generally improves with distance downriver. However, this trend may vary with flow conditions and the pollution events. The City of Detroit is the primary source of nutrient loading in the form of partially treated and untreated sewage. Stormwater and related forms of runoff are also a source of pollution and are most concentrated in the northern zone where urban and industrial development is heaviest. The decline of pollution levels downstream can be attributed to a combination of dilution, loss of contaminants in sediments, and variations in mixing of river water with marginal water bodies.

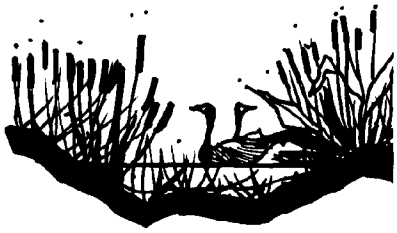
The urban character of this zone has resulted in loss of wildlife habitats. Those remaining areas such as Grassy Island and Mud Island, therefore, are of particular concern. At Mud Island, the celery beds along the south side of the island are a major attraction to migrating waterfowl. The island itself provides upland habitats where small birds and sea gulls abound. The eastern point of the island is a major ring bill sea gull nesting area.



Environmental Factors - Transitional Zone

In the transition and southern zones, the river breaks down into several channels as it moves around islands and shoals. Flow velocities are variable, ranging from as much as 4.5 feet per second in selected spots to less than 2.0 feet per second over large segments of the river; and sediment accumulation may be considerable in slow moving water. In addition, the presence of landfills in the river associated with channel improvements and industrial waste disposal have further diversified the river environment, especially in the transition zone.

Development within this zone is less intense, and open space and wildlife habitat increases. Existing wildlife areas include the Grosse Ile wetlands, Calf Island, Gibraltar's wetlands across from Calf Island and Stoney and Sugar Islands. Stoney Island is an important egret nesting area.

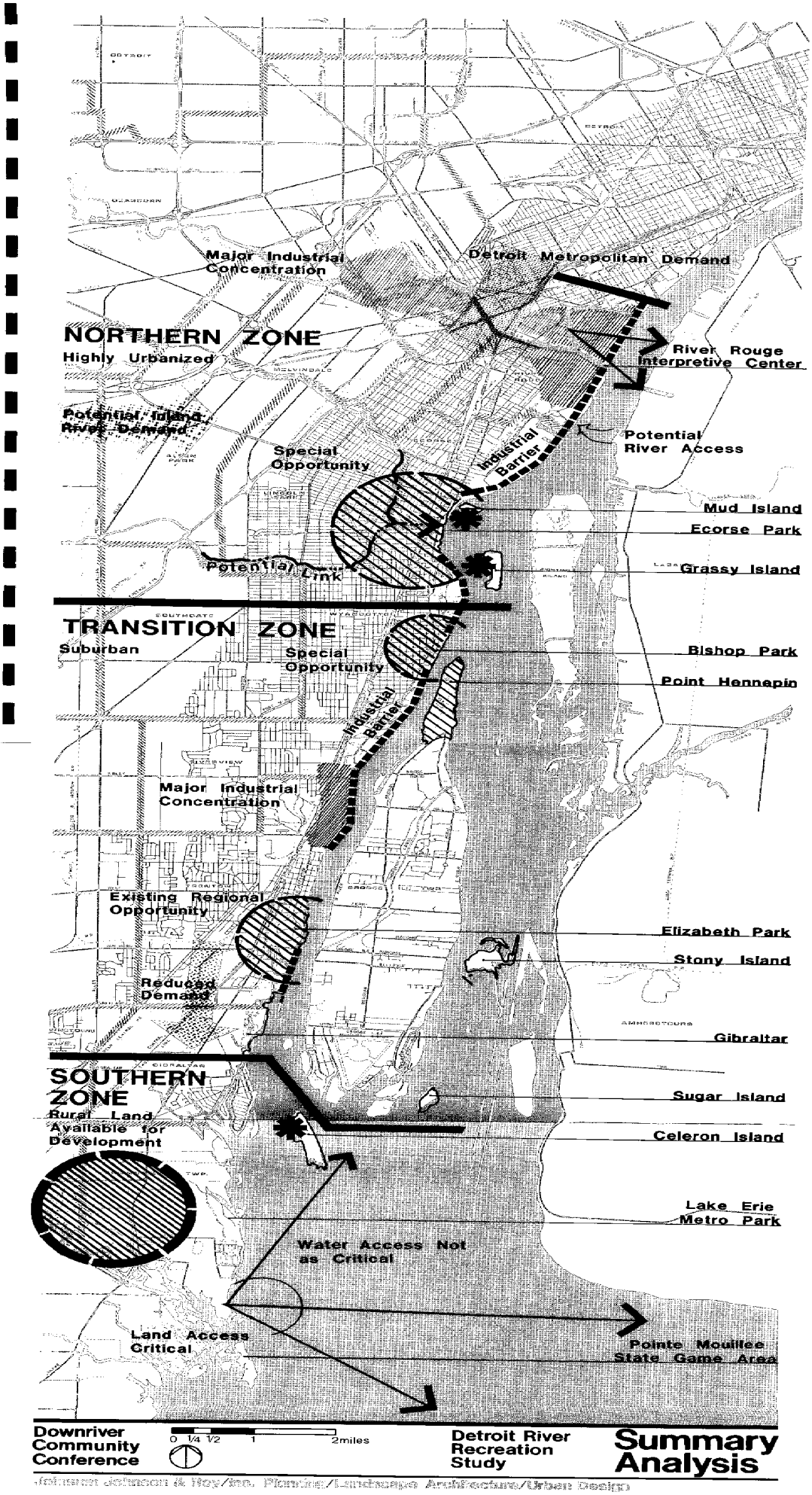


Environmental Factors - Southern Zone

Habitat diversity is extensive in this zone. With limited riverfront use (no industrial development), improved water quality and shallow water is contained by natural banks. A wide variety of wildlife can be viewed throughout the year. Pointe Mouillee State Game Area and the Lake Erie Metro Park preserve many of these critical areas and will provide excellent nature interpretation opportunities for visitors.

DEVELOPMENT PATTERN SUMMARY

Concern	Northern Zone	Transitional Zone	Southern Zone	Potential Impact
Population Densities	50% of total DCC population - inland and riverfront. Declining population.	35% of total DCC population - inland and riverfront. Declining population.	15% of total DCC population - inland and riverfront. Growing population.	Area of greatest recreational demand is in the north. Recreational transfer occurs most heavily in north from Detroit Metropolitan area and inland DCC communities.
Development Levels	High level development - Urban environment.	Moderate development yet urban environment.	Little development results in rural impression.	Potential recreational lands are easiest to find in the south. Land is expensive when available in the north.
	79% industrialized shoreline.	60% industrialized shoreline.	No industrialized shoreline.	Shoreline industries block public river access.
River Configuration	Narrow - close to shipping channel.	Narrow with open pockets.	Wide - only distance views.	Close-up views of Detroit CBD, freighters, and Canada occur only in the north. Extensive views onto Lake Erie in south.
Riverfront Access	Frequently difficult to see and find way to riverfront by car.	Riverfront less difficult. Vehicular access easier.	Easy to see and find riverfront, but new roads are needed to get to river.	Special signage and street treatment needed in north to guide visitors.
	Deep water encourages boat access but few short term tie-up opportunities.	Water depth is conducive to boat access in most instances.	Shallow water makes boat access difficult.	Boat access in north is easily accommodated, in south difficult.
Environmental	Poor water quality and lack of habitat diversity - few natural areas. Man-made islands.	Improving water quality. Increasing habitat diversity and varying water depths. Natural islands.	Excellent habitat diversity with extensive natural areas. Shallow water.	
Recreational Demand	Area of greatest demand with fewest existing facilities. Islands only real opportunity for regional facilities.	Strong recreational demand. Elizabeth Park cannot provide variety of facilities needed.	Rural area provides space for large area activities - golf, camping, etc. Lake Erie Metro Park major attraction.	Extensive unsatisfied demand in DCC. Recreation opportunities must be reintroduced to the area. Need regional facilities close to demand plus transportation to special facilities at Lake Erie Metro Park.


Major Industrial Concentration
Detroit Metropolitan Demand
NORTHERN ZONE
Highly Urbanized
River Rouge Interpretive Center
Potential Inland River Demand
Special Opportunity
Industrial Barrier
Potential River Access
Mud Island
Ecorse Park
Potential Link
Grassy Island
TRANSITION ZONE
Suburban
Special Opportunity
Bishop Park
Point Hennepin
Industrial Barrier
Major Industrial Concentration
Existing Regional Opportunity
Elizabeth Park
Stony Island
Reduced Demand
Gibraltar
SOUTHERN ZONE
Rural Land Available for Development
Sugar Island
Celeron Island
Lake Erie Metro Park
Water Access Not as Critical
Land Access Critical
Pointe Mouillee State Game Area
Downriver Community Conference
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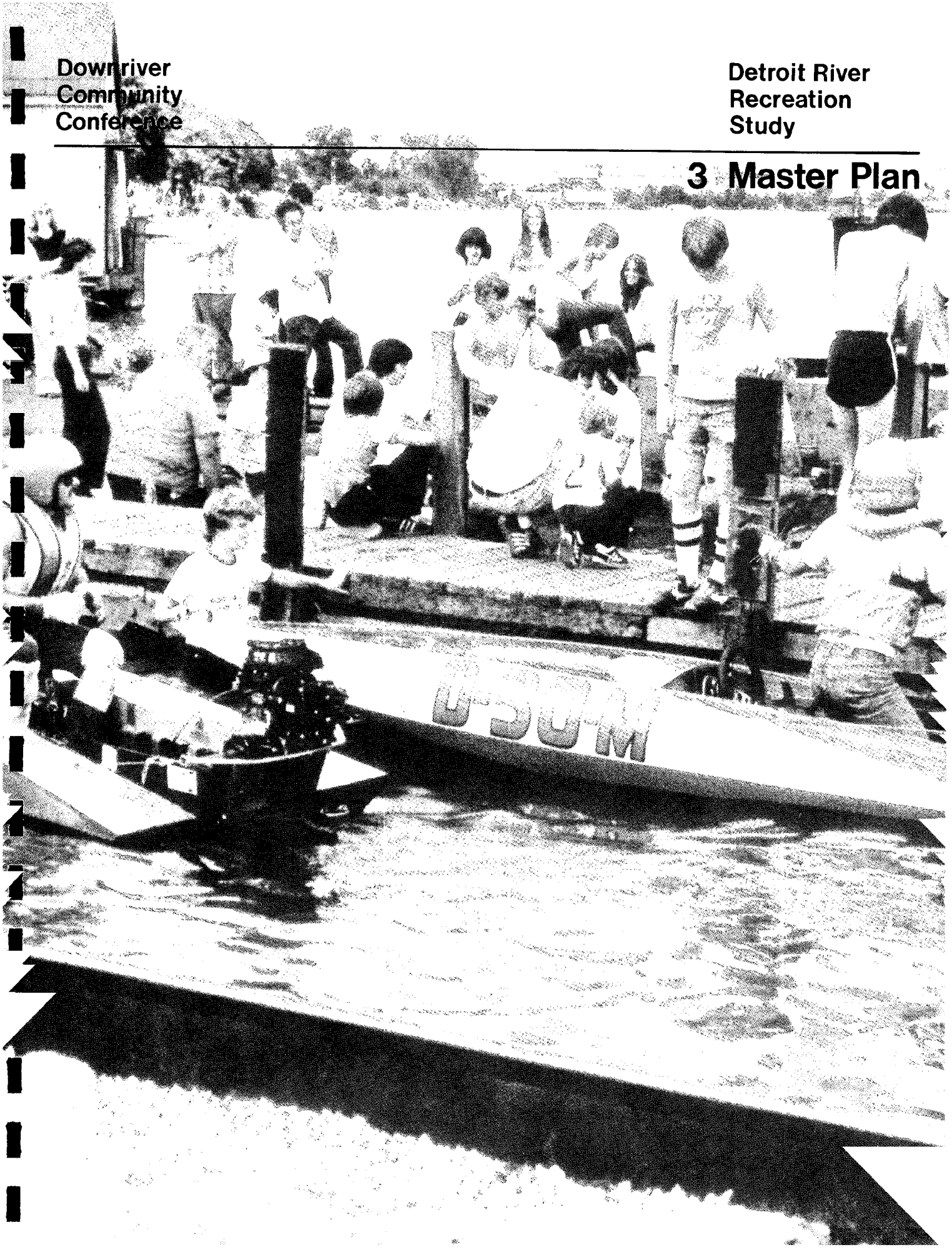
Detroit River Recreation Study
Summary Analysis

Downriver
Community
Conference

Detroit River
Recreation
Study

3 Master Plan



MASTER PLAN INTRODUCTION

The Master Plan is one of three levels of information produced during the course of this project. The others are riverfront Guidelines and Schematic Plans and Implementation Strategies for two high priority project areas. The Master Plan identifies recreational opportunities along the entire DCC riverfront, and establishes the basis for a coordinated riverfront recreational system. The proposed Guidelines illustrate how key riverfront recreational facilities should be built to satisfy typical site conditions. The Schematic Site Plans and Implementation Strategies show how proposed Master Plan recommendations can be implemented at two specific, high priority locations.

Competition between alternative riverfront uses has increased markedly in recent years. As land availability has declined, public demand for more effective land utilization has resulted. Due to the lack of a coordinated riverfront open space approach and limited economic capabilities of most Downriver communities, recreational opportunities are severely limited. While acknowledging that industrial uses are essential, it is likewise necessary to recognize that recreational/open space opportunities can also make essential contributions to the quality of Downriver life. The need is obvious. The challenge is to identify an approach and programs which can effectively stimulate and guide a coordinated comprehensive approach. This approach must define avenues of joint participation for both private and public sectors. The following Recreational Master Plan attempts to do this. Based upon recreational needs and existing development patterns within each zone (Northern, Transitional and Southern), potential recreational sites and appropriate riverfront activities are recommended. Attention is likewise given to identifying critical implementation concerns.

The Master Plan development process reflects the data collection and interpretation efforts identified in the preceding section. Working within the framework established for each zone, a series of alternative Master Plan approaches were prepared and discussed with Working Committee members at a workshop meeting. The Master Plan alternatives were refined and presented to the Advisory Committee. A luncheon boat tour of the 19.7 mile study area followed to facilitate understanding of the river, the proposed recommendations and to encourage an effective exchange of information.

Evaluation/recommendation forms were filled out by the participants and reviewed by JJR. Follow-up discussions were then held by DCC with CZM, regional agencies and local community representatives to review project recommendations and approaches, and to select two high priority projects warranting site specific consideration.

MASTER PLAN DESCRIPTION

The Master Plan offers a coordinated basis for approaching Downriver recreational needs. Because of regional complexities, limited local funding abilities and land scarcity, a unified, comprehensive riverfront approach is essential. Such an approach requires communication between Downriver residents continue and that the Advisory and Working Committees established to provide citizen and agency involvement throughout the course of the project be continued. The Working Committee in particular has provided a common meeting ground for recreationalists, industrialists and politicians. Such an approach will continue to encourage the combined contributions of both private and public groups. Private recreational opportunities in the Downriver Area not only include marinas, restaurants and river-oriented shops, but also active industrial participation. Because of extensive industrial concentrations in the Northern and Transitional Zones, potential recreational sites are limited and relatively well defined. Production facilities are typically in close proximity to existing or proposed recreation areas. Therefore, an effective approach must build upon a cooperative recreational approach. This plan establishes a beginning for such an approach by proposing:

1. Major industrial interpretation opportunities (River Rouge), educational/environmental displays (Bishop Park - Wyandotte Municipal Power Plant; Belander Park - Detroit Edison/Great Lakes Steel; Elizabeth Park - Detroit Edison, etc.).

2. Controlled pedestrian access routes (Bishop Park - Wyandotte Municipal Power Plant) along industrial properties (Ecorse River - Great Lakes Steel).

3. Observation points may also be feasible (River Rouge - Jefferson Street Bridge Facility; Nicholson Terminal - access by boat only; and next to the Detroit Edison Plant just south of Elizabeth Park).

4. Offering non-essential, industrial properties for sale to public agencies (Ecorse River Area - Great Lakes Steel).

Commercial and residential opportunities can also contribute significantly to the riverfront. For example, Detroit River marinas are frequently overutilized storage areas for boats and cars. Few of the DCC marinas include open space, day use facilities or relate positively to surrounding park or open space areas.

Restaurants and high density residential areas also offer opportunities for riverfront improvement. Limited site availability in attractive areas and outdated images of the Detroit River frequently discourage such an approach. However, both if properly handled can add vitality and interest to the water's edge. As land use densities increase, however, it is essential that additional riverfront open space be preserved and that it is interwoven into the surrounding recreational pattern.

The Master Plan is composed of the following elements:

The Riverfront Framework Plan outlines a comprehensive recreational system which identifies appropriate regional and municipal opportunities.

The Riverfront Activities Plan records existing and proposed recreational activities along the entire DCC shore.

Riverfront Project Priorities are established for all proposed facilities.

Project Recommendations for each of the project areas are summarized in terms of existing site conditions, proposed activities, and a basic implementation approach.

FRAMEWORK PLAN

This plan identifies a proposed Downriver recreational system which reflects existing and proposed recreational opportunities. While frequently discussed, this is the first time a comprehensive riverfront system has been prepared for the DCC area. Existing recreation facilities as a result are typically small, municipally operated and unable to meet local needs, let alone to provide water-oriented opportunities for inland residents.

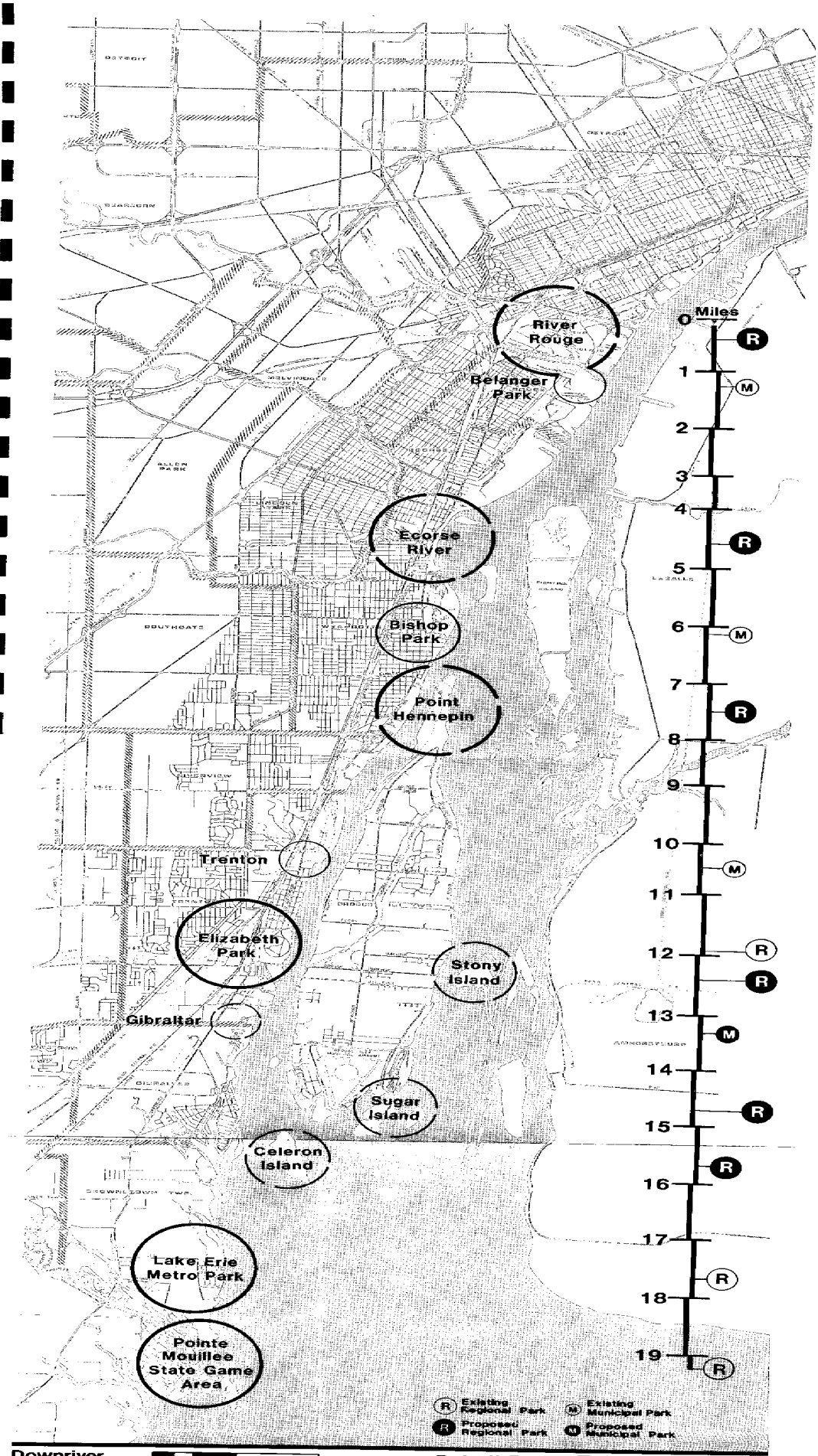
The proposed Master Plan presents a comprehensive approach in that it deals with the entire DCC riveredge, it recommends both land and water-oriented uses, and not only endorses creation of new municipal and regional parks, but also suggest ways existing parks can be incorporated more effectively into the local community and the overall river system. In all cases, these recommendations reflect existing development patterns, recreational needs, site conditions and riverfront priorities. There are 13 existing and proposed recreation areas included in the plan, of which seven are proposed and six suggest revitalization. A total of eight regionally-oriented facilities are identified in the plan. These facilities occur every three to five miles along the river. The greatest concentration of regional facilities is proposed to be located in the Northern Zone in an intensively developed urban environment where recreational demand is the greatest and user access paramount. Regional opportunities are proposed at River Rouge, Ecorse River, Point Hennepin, Elizabeth Park, Celeron, Calf, Sugar and Stony Islands, and Lake Erie Metro Park. While none of these areas will be of a comparable size, nor offer the variety of activities proposed by the Huron Clinton Metropolitan Authority, all will be needed to provide comprehensive and accessible recreational opportunities. JJR is confident that these facilities are properly developed, well managed and operated as a river system, that all appropriate recreational needs can be met, and a giant step will be taken toward revitalizing life in the Downriver Area.

Recognizing the important contributions municipal facilities provide, the plan identifies opportunities relating to five municipal parks, four of which are existing. These recommendations typically suggest how the parks become more effective by providing a greater variety of recreational opportunities and how they can relate to and support the regional system. The following table entitled Framework Plan Summary identifies areas of specific concern.

To stress the importance that river facilities complement one another, a mileage line is shown. This line identifies each river mile from Zug Island to Pointe Mouillee. This approach has been used to not only graphically summarize key components of the plan, but to more accurately depict travel distances between facilities, particularly by boat. Mile distances on the drawing vary in length due to shoreline irregularity. Mile 4, for instance, is much shorter in length than Mile 5 because the shoreline curves westward in the vicinity of the Ecorse River. Circles show where existing and proposed facilities are located. Regional sites are represented by "R", and municipal sites by "M". Existing sites are identified by a black letter in a white background, while proposed parks are indicated by white letters against a black background. The data appear in two columns to illustrate which side of Grosse Ile they are located on. The following table entitled Framework Plan Summary also identifies areas of specific concern.

FRAMEWORK PLAN SUMMARY

Name	Condition	Mile	Type	Emphasis	Distance South to Similar Facility	Distance North to Similar Facility
River Rouge	Proposed	.5-1	Regional	Educational	Unique	Unique
Belanger Park	Existing	1.3	Municipal	Day Use	Ecorse Memorial Park	
Ecorse River Area	Proposed	4.-4.5	Regional	Day Use		
Ecorse Memorial Park	Existing	4.5	Municipal	Day Use	Bishop Park	Belanger Park
Bishop Park	Existing	6.1	Municipal	Day Use	Trenton	Ecorse Memorial Park
Point Hennepin	Proposed	7-8	Regional	Boaters - Day Use	Elizabeth Park	
Trenton Parks	Existing	10.5	Municipal	Day Use		Bishop Park
Elizabeth Park	Existing	12	Regional	Day Use	Lake Erie Metro Park	Point Hennepin
Gibraltar	Proposed	13.3	Municipal	Day Use	Trenton	
Celeron Island	Existing	15.6	State	Educational Wildlife	Grassy Island	Lake Erie Metro Park
Lake Erie Metro Park	Existing	17.7	Regional	Day Use - Educational	Celeron Island Elizabeth Island	Pointe Mouillee
Stony Island	Proposed	12.4	Regional	Educational	Celeron Island	Point Hennepin
Sugar Island	Proposed	14.7	Regional	Day Use	Point Hennepin	Lake Erie Metro Park


River Rouge
Belanger Park
Ecorse River
Bishop Park
Point Hennepin
Trenton
Elizabeth Park
Stony Island
Gibraltar
Sugar Island
Celeron Island
Lake Erie Metro Park
Pointe Mouillee State Game Area
0 Miles
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
R Existing Regional Park
R Proposed Regional Park
M Existing Municipal Park
M Proposed Municipal Park
Downriver Community Conference
0 1/4 1/2 1 2miles
Detroit River Recreation Study
Framework Plan

Master Plan recommendations have been varied to reflect recreational needs, development patterns and site conditions. Therefore, it is desirable to discuss proposed activities in terms of Northern, Transitional and Southern Zones.

The Northern Zone accounts for less than 30% of the 19.7 mile riverfront, yet contains approximately 50% of all riverfront populations. Currently there are 11.5 total acres of recreational land available along this segment of the river. Excluding Elizabeth and Lake Erie Metro Parks, there are approximately 34 total acres of riverfront parks. The Northern Zone accounts for only 35% of this land area. Municipal dollars for recreational development or maintenance are limited because this area accounts for the lowest per capita income levels in the Downriver Area. Family funds also are less available for pursuing private recreational opportunities, such as Detroit River boating, for paying entrance fees to public facilities, or for traveling outside the area to participate in regional recreational or cultural activities.

Intensive shoreline development by heavy industry accounts for 79% of the riveredge. Therefore, few mainland areas are available for recreational development. Attention is, therefore, directed toward a coordinated industrial/ recreational approach, increased mainland efficiencies, and island development.

The Master Plan responds to these conditions by recommending the development of two new regional facilities. Because no regional parks exist in this zone, such development warrants high priority consideration. It is also proposed that the existing municipal parks (Belanger and Ecorse Memorial) be incorporated with the regional facilities to expand and create a unified recreational edge more in scale with current uses.

There is no doubt that island use offers a highly attractive opportunity. Grassy Island, a U. S. Fish and Wildlife Refuge, and Mud Island are both man-made islands. Creation of additional man-made islands in this vicinity, or the use of Mud Island for recreational purposes, could increase use options. Environmental repercussions would obviously need to be taken into account.

Recreational needs within the Transitional Zone vary considerably from the Northern Zone. Here, higher income levels, lower land costs, and significantly less industrial use provides a more balanced and appropriate relationship between shoreline development and open space. This has resulted in a more comprehensive approach to both municipal and regional recreation. Existing municipal parks at Wyandotte and Trenton, in combination with private recreational developments such as marinas and golf courses and, of course, Elizabeth Park, form the existing recreational framework. While a regional recreational system must be created in the north, the basis for such a system currently exists in this area. Therefore, emphasis here is placed on revitalization and refinement, primarily in terms of increasing the variety of activities.

Elizabeth Park must continue to function as a regional facility and to be accessible to DCC residents, both in terms of entrance fees and public transportation to the site. A more comprehensive approach is needed in order to attract a wider range of users and a stronger relationship with other existing and proposed parks. It is anticipated that the new Elizabeth Park Master Plan being prepared by Wayne County will accomplish this.

Point Hennepin is an island located at the extreme northern end of Grosse Ile. Larger than Elizabeth Park, this site projects outward into the middle of the Detroit River and, therefore, relates closely to the river. Because of its river orientation, isolated location and size, this parcel could serve as an important Detroit River boat destination. Currently, lack of land support facilities force river travelers to remain on the river. Development of Point Hennepin as proposed would result in a unique Detroit River stopping point, strategically located in terms of existing DCC population patterns and marina locations.

Improvements to the Wyandotte and Trenton parks are proposed in terms of expansion and linkages into the existing urban pattern and river-oriented facilities. Because of intervening industrial uses, however, it remains impractical to establish a continuous riveredge linkage system extending outward from these sites.

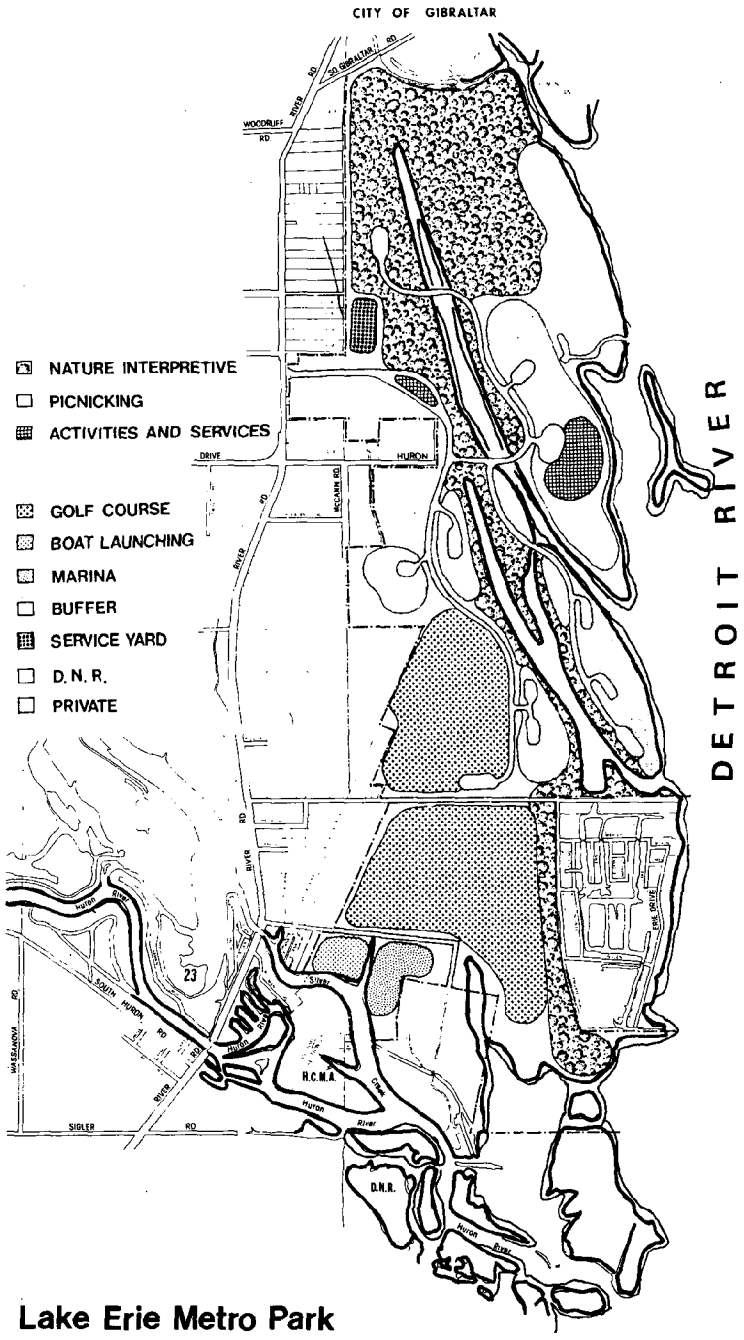
As non-industrial uses increase, roads frequently terminate at the river's edge. Largely ignored in the past, these road end areas provide a special river access point for the surrounding residential users.

Because of its relatively rural nature, the Southern Zone offers very different recreational opportunities. Low population levels and land availability provide opportunities for regional facilities. Activities proposed at Lake Erie Metro Park reflect these natural conditions and the activities which require large land areas, such as golf, camping, nature interpretation, etc. The proposed HCMA Master Plan appears on the following page.

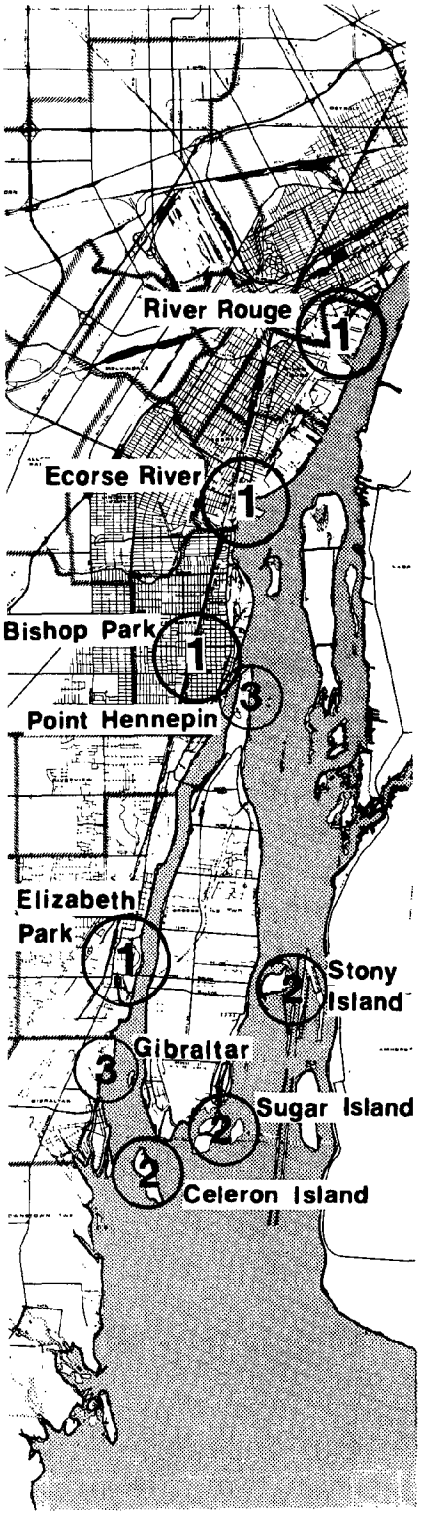
Composed of approximately 1,550 acres, Lake Erie Metro Park will play a critical role in providing exciting recreational opportunities to Downriver and metropolitan area residents. Because acquisition is almost complete and development plans finalized, this study treats this facility as already in existence. It is important to note that the proposed regional system will offer a wide variety of recreational opportunities with little duplication. Because of its size and comprehensive program, Lake Erie Metro Park is obviously the key element in the proposed regional system. The proposed regional areas to the north, while smaller in size and having more limited activities, are closer to major population concentrations.

Celeron, Calf, Sugar, and Stony Islands located around the southern tip of Grosse Ile can also contribute to the proposed program. While only Celeron Island is currently state owned, the other islands also offer valuable wildlife habitats. These areas are necessary as feeding areas for water fowl traveling the Mississippi Flyway. Therefore, proposed recreational activities should recognize and build upon this wildlife priority. Should Mud Island in the Northern Zone be developed for recreational purposes, the wildlife value of the southern islands increases. It may be feasible for the DNR to acquire and manage all four islands as a wildlife system with appropriate nature-oriented facilities which could provide boaters nature-oriented boat destinations similar to Grassy Island's proposed role to the north.

To appreciate how the proposed program will increase recreational opportunities, an Activities Plan has been prepared. This plan locates and distinguishes existing and proposed riverfront activities as recommended by the Master Plan.



Lake Erie Metro Park



PROJECT PRIORITIES

Each of the proposed projects was evaluated in terms of its potential contribution in light of existing recreational needs, implementation feasibility and local Downriver enthusiasm. Priorities were identified based upon responses from the Working and Advisory Committees, local community leaders, representatives from regional agencies and DCC, CZM, and JJR recommendations. The projects have been identified as having a high, moderate and low priority. Explanations for these conclusions are also noted.

High Priority Areas (1)

1. River Rouge Industrial Interpretation - totally unique opportunity for entire metropolitan area; could commence with minimal development; more a matter of coordinating existing activities.

2. Ecorse River Area - best opportunity in northern urban zone to provide a significant regional facility; few obstacles to development.

3. Bishop Park, Wyandotte - opportunity to immediately contribute to river character in a unique way by tying CBD to riverfront.

4. Elizabeth Park - only established regional park in the area; therefore, must respond to everyone's needs until other regional facilities are completed.

Moderate Priority Areas (2)

1. Celeron Island - existing wildlife area is not threatened, but does not offer educational uses it could.

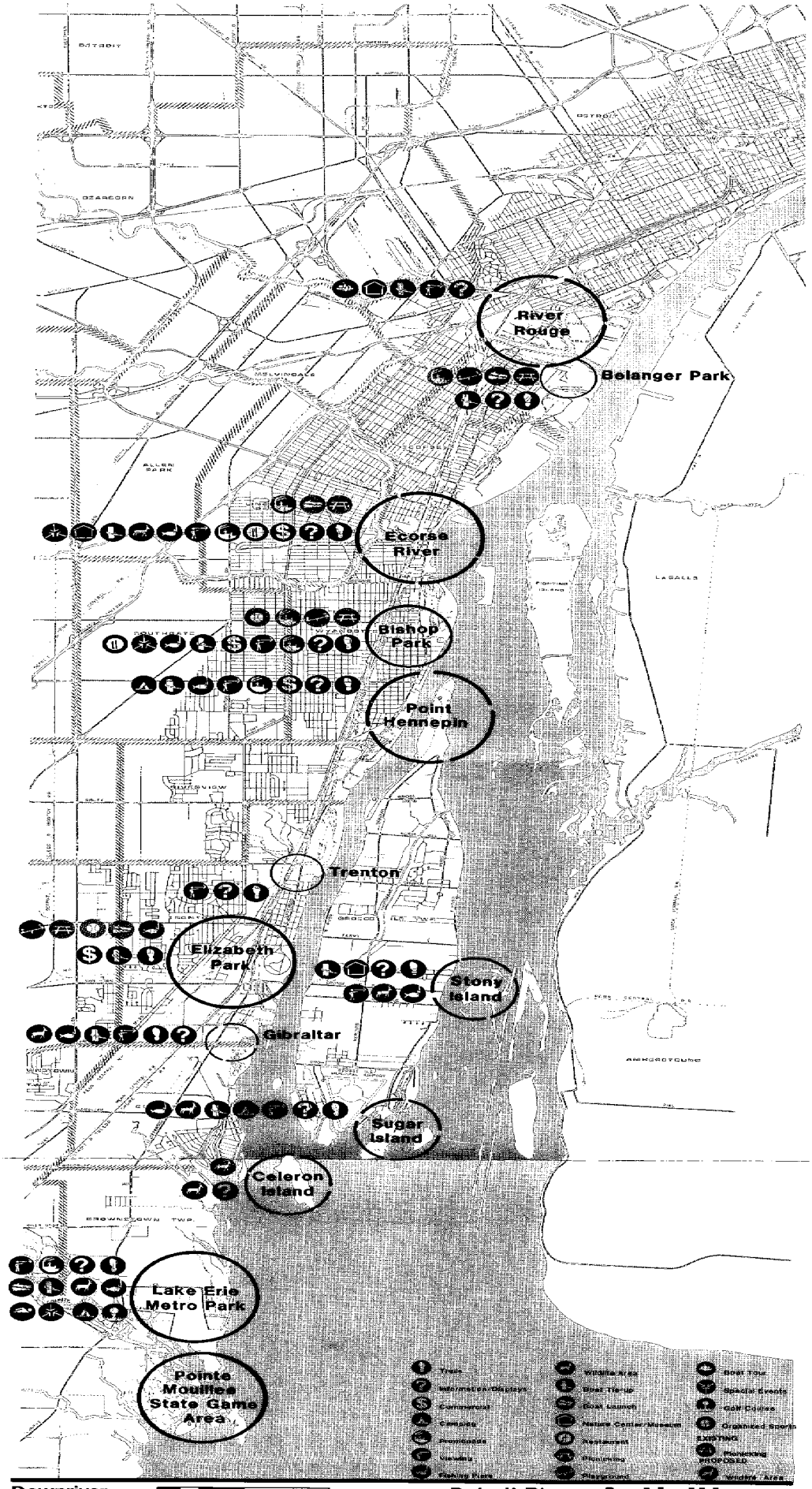
2. Stony Island - isolated location, low ground level, few competing uses.

3. Sugar Island - unofficially being used for recreational uses today; few competing uses.

Low Priority Areas (3)

1. Point Hennepin - future value to BASF, uncertain; ground stability and soils ability to support vegetation is uncertain.

2. Gibraltar - shoreline buffer zone is highly desirable, but community facility is not critical.



Downriver Community Conference

Detroit River Recreation Study

Activities Plan

Johnson Johnson & Roy/Inc. Planning/Landscape Architecture/Urban Design

PROJECT DESCRIPTIONS

Each of the nine major project areas identified in the Master Plan are individually described in detail on the following pages. Key components of the project evaluation include:

1. Impact

An estimated impact of each facility's potential affect on river recreation as reflected in terms of need, physical site capacity, proposed activities, and anticipated service area. These are expressed in terms of state, regional and muncipal.

2. Emphasis

A primary theme or general type of recreational use is suggested. This reflects variations in site and area conditions, ownership, recreational need and the desirability of offering a variety of opportunities. These are summarized below.

River Rouge	Educational Industrial Historical
Ecorse River Area	Day Use and Educational Wildlife/River
Ecorse Memorial Park	Day Use
Bishop Park	Day Use
Point Hennepin	Day Use and Camping Boat Destination
Elizabeth Park	Day Use
Gibraltar	Day Use
Celeron/Calf Island	Educational Wildlife
Stony Island	Educational Wildlife/River
Sugar Island	Day Use and Camping Boat Destination

3. Priority

Since availability of resources does not allow for immediate implementation of all recommendations, projects warranting immediate attention are identified. The proposed categories of high, moderate or low reflect site potential, recreational need estimates; discussions with community representatives and regional agencies; DCC staff recommendations and consultant suggestions.

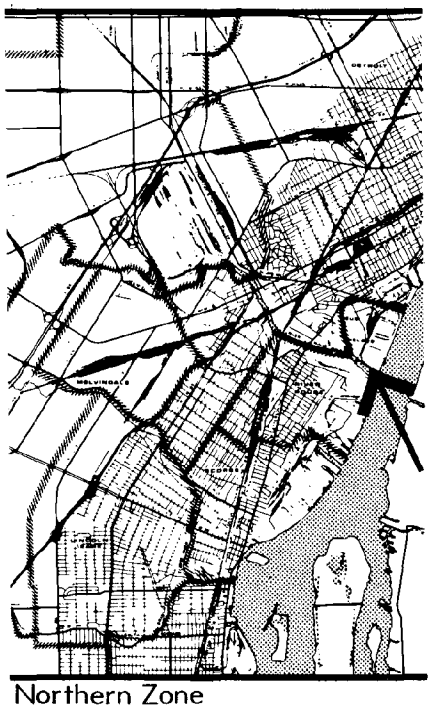
4. Responsibility

Operational and maintenance responsibilities are presented in order to facilitate project understanding and implementation. Federal, state, regional and municipal agencies are all currently involved in the DCC area. Therefore, similar categories are identified for the proposed facilities. Report recommendations assume that Federal denotes such agencies as the U. S. Fish and Wildlife Service and U. S. Corps of Engineers; State, the DNR Wildlife, Waterways Divisions, etc. Region suggests Huron Clinton Metropolitan Authority, Wayne County, or possibly the Downriver Community Conference, while Municipality obviously refers to local government. These recommendations are based on:

Area influence and primary user

Expenditure needed to construct the facility

Anticipated operation - maintenance complexities and costs reflected by jurisdictions, size and range of activities.

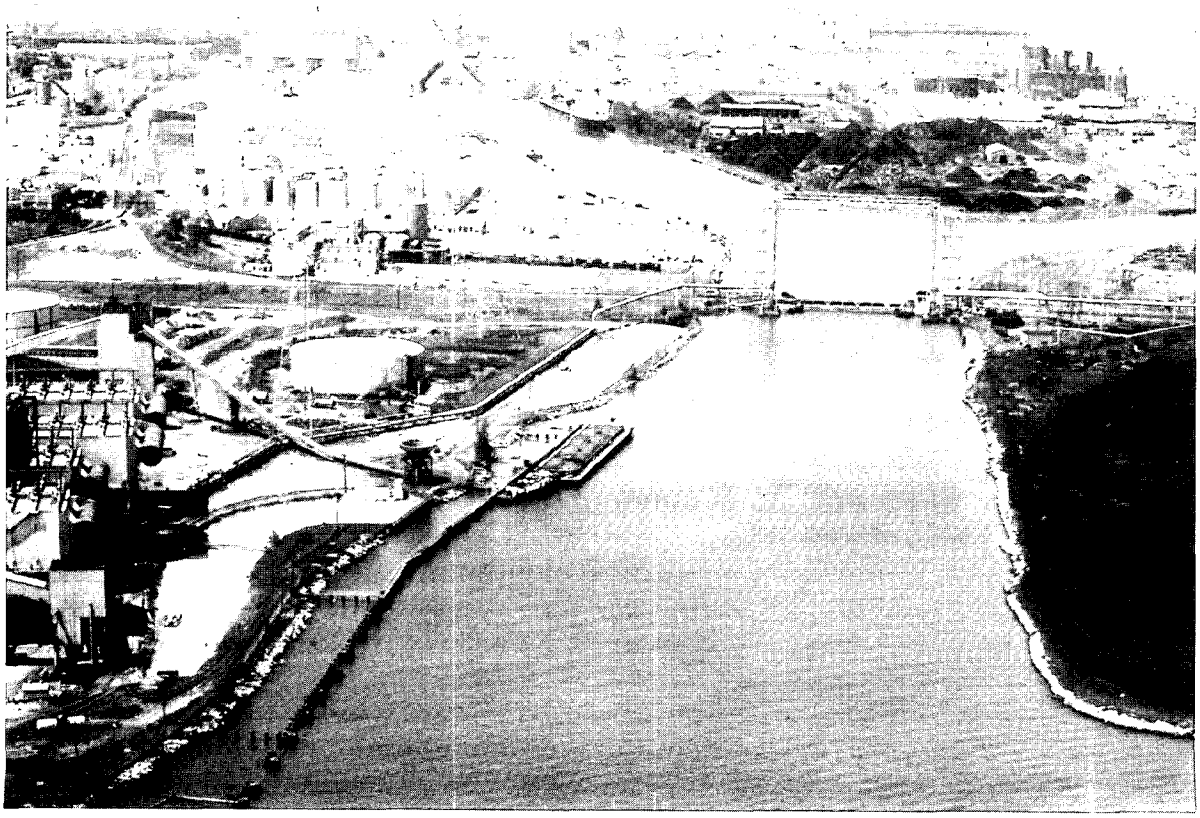


Northern Zone

RIVER ROUGE

Detroit is known throughout the world as the center of the automotive industry. Industries along the Rouge River play a key role in supporting this image. With one of the world's greatest concentration of industrial activity per square mile along its shores, the river serves as a major link between the waterway and the surrounding industrial community. Currently, visitors are able to tour isolated plants, but no coordinated approach is available. As a result, the significance of the complex is lost.

The river originally provided the basis for industrial development. Today, river industries are highly diversified and deal with production and storage of electricity, chemicals, oil, steel, salt, cement, lime and, of course, automobiles. Zug Island, was created when the man-made channel shortened the river's run to the Detroit River. Today, blast furnaces dominate the skyline and welcome ocean and lake freighters traveling up the Rouge River.



The confluence area is used almost exclusively for industrial purposes. Moving to the north, the first non-industrial use encountered is old Fort Wayne. Operated since 1971 by the Detroit Historical Commission, the old fort joins with the industrial area in stressing the importance of the Detroit River--in the past and in current and future times.

To the south of the Rouge River is Belanger Park. The 9.5 acre municipal park is heavily used by River Rouge residents for ship viewing and day use activities.

Project Description

Creation of an industrial interpretation facility at the Rouge River has been under consideration for a number of years. The concept of how such a facility could operate, however, has varied. While Wayne County considers a new interpretive building as key to implementing this concept, JJR suggests that, at least initially, existing facilities and industrial plants provide the basis for the program. This approach emphasizes a general river use orientation program highlighted by an actual on-site tour of the Rouge River complex. Direct experience by the visitor with the complex is considered critical.

Based upon current use patterns and surrounding land uses, access to the proposed industrial interpretive site is proposed at Fort Wayne (A), the Jefferson Street-River Rouge Bridge (B) and Belanger Park (C). Each of these access points contributes an unique perspective of the industrial environment and each serves as a point of entry to the interpretive program. At Fort Wayne, a special historic riverfront approach is recommended to explain how historic river uses have changed and how industry came to locate along the Detroit River.

Vehicular pull-offs and viewing areas could be developed along Jefferson describing contiguous industrial activities. At the Jefferson Street/River Rouge Bridge, a maritime museum is being considered by the City of River Rouge. Located in the south tower of the Jefferson Street Bridge, an opportunity exists for telling regional visitors how the City has grown because of the rivers. Temporary boat tie-up facilities could be incorporated with the existing boat launch at Belanger Park. Emphasis here would be placed on the World Fair held on this site in 1889, as well as the views to Detroit, the surrounding industrial development and ships traveling the river.

Specific activities and opportunities are proposed as follows:

1. Direct vehicular access is provided to the area from I-75, I-94 and off Jefferson.

2. In order to appreciate the Detroit River's influence on growth, a special riverfront tour could be created so that visitors learn about past and current river activities. This self-guided automobile tour could incorporate industrial displays between Fort Wayne and the Jefferson/River Rouge Bridge. Ultimately, this riveredge tour could be extended to include the Ecorse Rowing Club, Wyandotte's Bishop Park and historic area, Elizabeth Park and Lake Erie Metro Park.

3. A River Rouge interpretive boat ride operated as a concession, allowing visitors to travel the rivers which historically stimulated such industrial growth. During this ride, visitors learn about steel production, electrical generation, etc., while contained on the boat, thereby eliminating security or liability concerns.

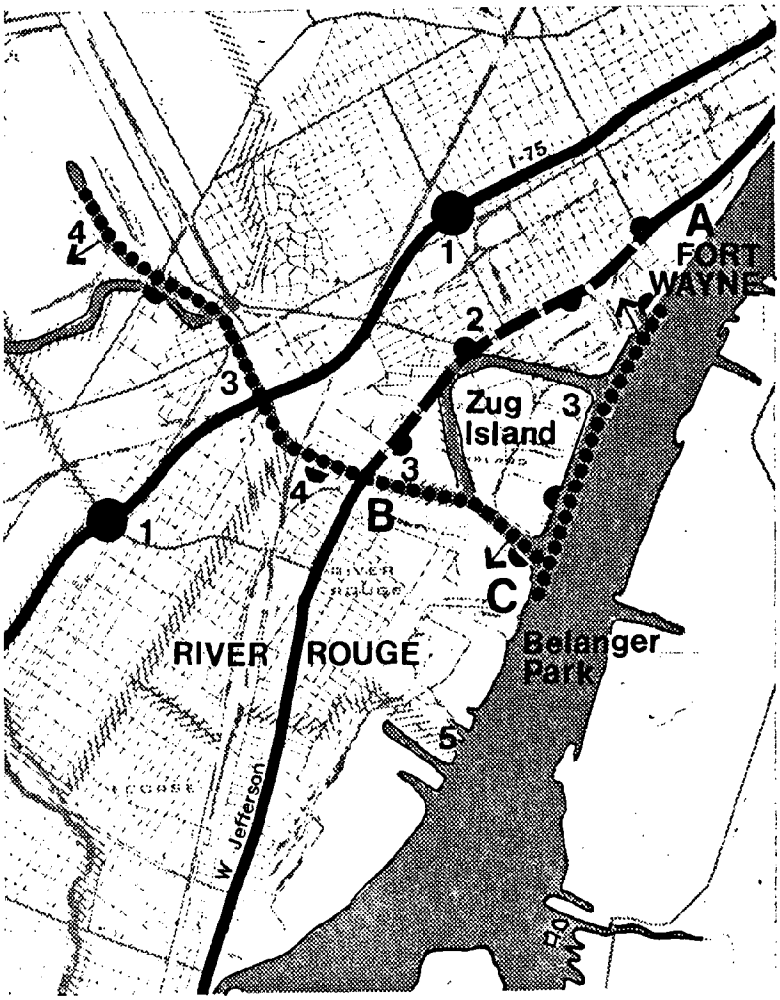
4. Industrial plants along the river can contribute to the interpretive experience by instigating explanatory displays and incorporating the river tour directly with their own internal plant tour.

5. An opportunity may exist for creating an industrial observation area at Nicholson's Terminal. With access exclusively from the river, an observation tower might be jointly constructed with public and private funds to provide elevated views of terminal activities. A typical approach is illustrated in Section 4.

Approach

It is recommended that old Fort Wayne be the center of this facility. Initially, an informative simulation program using 35mm. slides and recording could be housed at the Fort for public viewing. In the long-term, however, public boat rides which link the Fort, Bellenger Park and the Rouge River could be initiated. Before this can be successful, however, several problems need to be rectified. This includes providing access from the Fort to the waterfront, lack of short-term boat tie-up facilities at Bellanger Park, and potential conflicts between a tour boat and freighters using the river. Industrial plants must actively support the program in

RIVER ROUGE INTERPRETIVE CENTER



Impact: Detroit Metropolitan Region
Emphasis: Industrial Interpretation
Priority: High
Responsibility: Regional

terms of initiating paint programs, clean-up/fix-up activities and preparation of explanatory displays identifying critical steps in their production process. Because the Detroit Sewage Treatment is located on the Rouge River, the City can help initiate this program by seeking federal funds for development of an informational program at the facility.

The following steps are suggested as a means to accomplish implementation of the suggested plan along the Rouge River:

Step 1

Determine a sponsoring agency who will provide the initiative for project development.

Step 2

Develop support from the community of River Rouge and surrounding industries.

- Encourage involvement by suggesting a Nature Museum and new boat launch facilities

Step 3

Seek out an industrial leader from the community who can provide the impetus necessary to stimulate participation by the industrial community.

Step 4

Investigate funding opportunities for Master Plan development of the area.

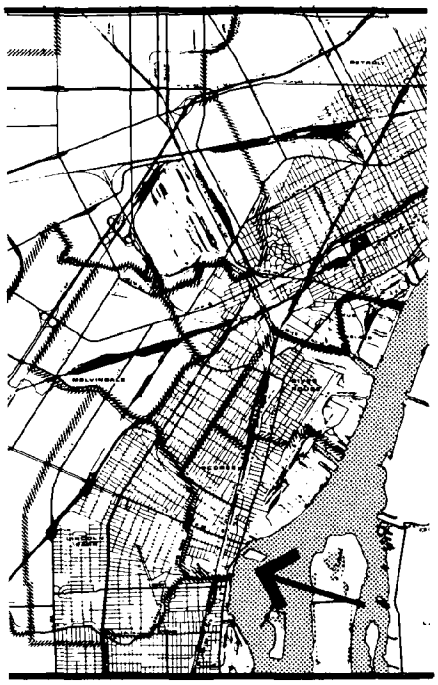
- Agencies providing such assistance include, but are not limited to:

  Natural Foundation for the Arts
  Land and Water Conservation Fund
  Urban Parks and Recreation Recovery Program
  CZM

Step 5

Develop Master Plan and seek construction funds.

- Pursue applicable funding sources presented earlier using individual plan components as a basis.

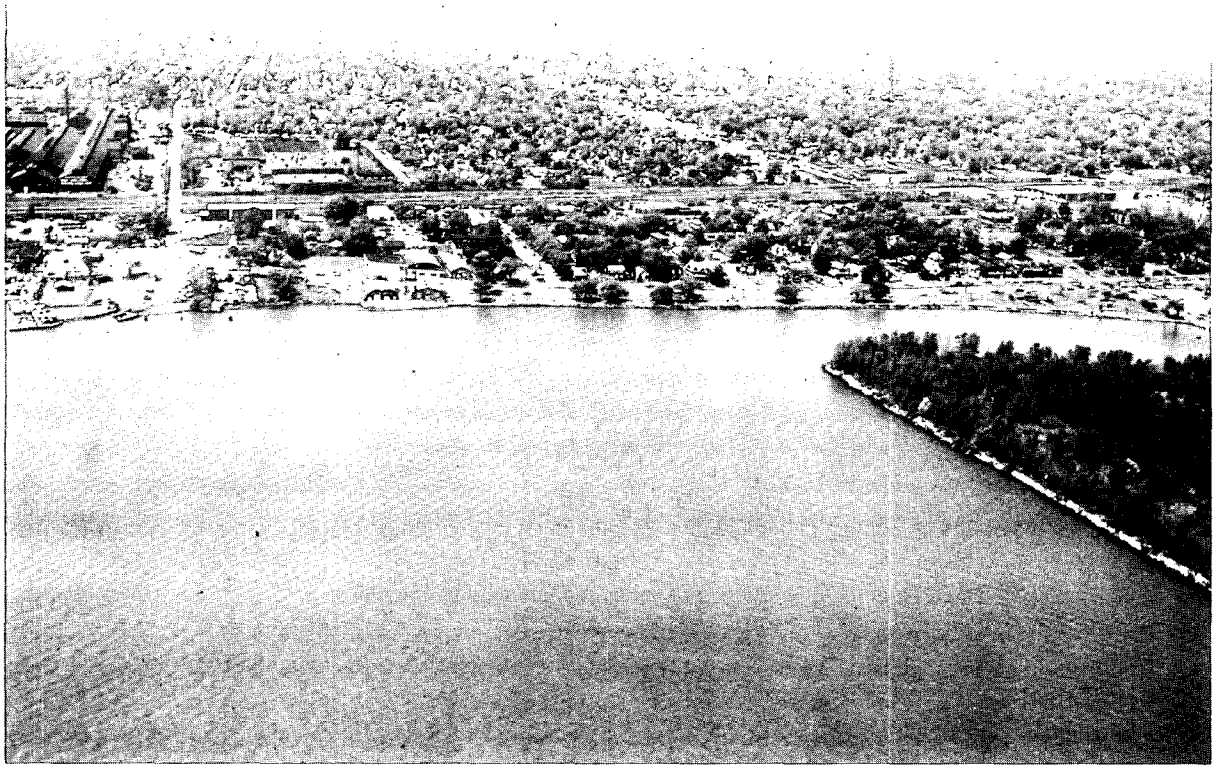


Northern Zone

ECORSE RIVER AREA

The Ecorse River Area extends from Southfield Drive southwards to the confluence of the Detroit and Ecorse Rivers. The Ecorse Memorial Park and the municipal boat launch are separated by 12 privately-owned parcels and the Ecorse Rowing Club facility. Also included in this area are Grassy and Mud Islands, which are former disposal areas for the U. S. Army Corps of Engineers. This area assumes particular importance because it is part of the longest non-industrial riveredge in the Northern Zone.

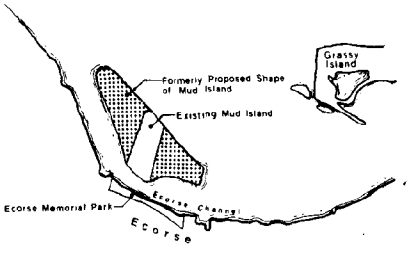
North/south access to the site is currently along West Jefferson Avenue, while Southfield Road approaches from the west and dead ends at Ecorse Memorial Park. While an extensive length of shoreline is publicly owned, the usefulness of the site is reduced because Jefferson passes so close to the river. Noise, high traffic volumes and five lanes of traffic create a pedestrian barrier, which discourage movement from the low income residential areas located west of Jefferson.



Recreational needs in this area reflect the unusually high population densities, the number of older people in the area, modest income levels, and the desire by municipal leaders to use riverfront recreational opportunities to to rejuvenate their City. Because this is the only publicly-owned Detroit riverfront property in Ecorse, it must respond to these needs and provide a wide variety of passive recreational opportunities--such as picnicking, strolling, river watching, fishing, special events and boating.

This area also has the potential to provide river-oriented recreational opportunities for the entire Northern Zone. Use of riverfront parks by inland residents is not encouraged because no regional facilities have been provided. Sufficient funds and organizational expertise do not currrently exist in the area. Therefore, it is proposed that an established regional agency interested in providing recreational opportunities in a highly urban area provide assistance.

Only a limited mainland riverfront area is available for recreational use. Therefore, potential use of the off-shore islands is critical. Totaling more than 45 acres, these islands do not currently provide any recreational opportunities. While Grassy Island is a National Wildlife Refuge, it could provide appropriate wildlife-educational opportunities. Mud Island has very significant recreational potential. This 18.5 acre site could provide the basis for a regional facility offering a wide variety of regional facilities, such as boat launches, marinas, bank fishing, sledding, ship viewing, concerts, etc.



In the 1960's, the U. S. Army Corps of Engineers proposed to expand Mud Island. Because of the proposed configuration, concerns were voiced by local residents regarding shoreline water quality downriver from Ecorse River. As a result, the project was never implemented. It may well be that while the concept was valid, the specific solution was inappropriate. Because of intensive needs of this area, man-made islands must be considered. The location of these islands is important, not only for increasing land areas, but also to provide a calm water area for smaller boats. Because a tremendous boating demand exists in the Downriver Area, low income participation could be encouraged by creating a protected small boating area. Short-term boat rentals could be provided.

Project Description

The existing Ecorse Memorial Park has a unique opportunity for expanding both mainland and island

opportunities. While it is assumed that mainland facilities will remain a City responsibility, it is recommended that island use become the responsibility of a regional agency.

Site access is recommended from Southfield Road (A), from Jefferson (B), and from a proposed bicycle and pedestrian trail along the Ecorse River (C). This trail will provide river access to five inland communities.

Specific recommendations are as follows:

1. Acquisition of 12 privately-owned parcels located between the existing park/Rowing Club and the municipal boat launch is proposed.

2. Because Southfield road provides direct riverfront access, the use of street trees, colorful flags or banners, special signage approaches, etc. inland is appropriate to emphasize this special significance.

3. Great Lakes Steel should be encouraged to use earth mounds and vegetation to screen industrial activities north of the park.

4. A major riverfront promenade with major fishing/observation nodes from Southfield Drive to the Municipal Boat Launch and a general face-lifting are proposed for the city park.

5. Acquire and develop Mud Island as a major regional day use recreational facility.

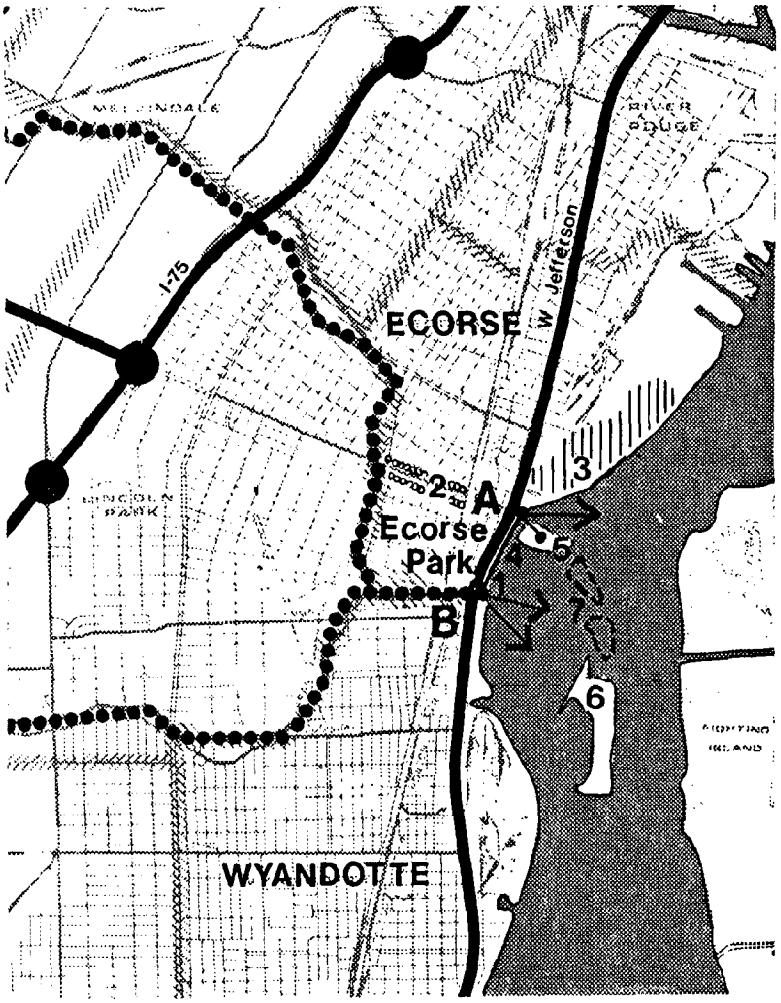
6. A short-term boat tie-up, nature walks and viewing platforms, bank fishing opportunities and ship watching could appropriately be accommodated on Grassy Island, which is currently a National Wildlife Refuge.

7. Man-made islands are proposed between Grassy and Mud Islands. Water depths of one to two feet, and the successful creation of Grassy and Mud Islands indicate that this is feasible. The shipping channel must be maintained and shoreline water quality south of Ecorse River not detrimentally affected. Additional wildlife habitat and a protected small boat area on the river could be created.

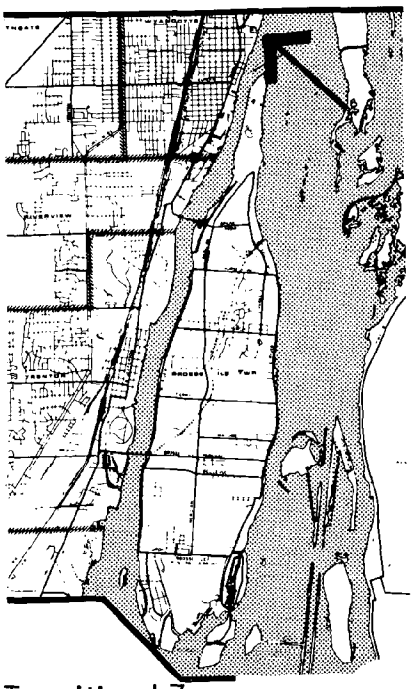
Approach

This site was selected as a high priority project area. As a result, it is discussed in detail in Section 5 of this report.

ECORSE RIVER



Impact: Municipal and Downriver Region
Emphasis: Day Use
Priority: High
Responsibility: Municipal and Regional



Transitional Zone

BISHOP PARK

The existing 12.2 Wyandotte municipal park is one of the best known parks along the river. It is also one of the most exciting municipal riverfront facilities in the DCC area. Its impact and significance to the community and to river users demonstrate how successful riveredge parks can be. Located one block off Main Street (Biddle/Jefferson) and between the municipal power plant and parking lot, it supports bank fishing, picnicking, strolling, concerts, a children's play area, a few boat tie-ups, and a building currently under lease to the American Legion.

Wyandotte has many of the characteristics of both the Transitional and Northern Zones described in the Data Interpretation Section of this report. It is a mature community, facing the possibility of a declining population by 1990. Working under an existing master park plan, improvements have been very slowly implemented.

While the riverfront is viewed as a special resource, concern has recently been raised about how the riveredge can best be used. In the 1970's, the City adopted a Master Plan which proposed a realignment of Biddle/Jefferson, between Superior and Eureka, to connect with Van Alstyne just south of the park. If implemented as envisioned, the abandoned Biddle Avenue would become a downtown pedestrian mall. Other proposals recently under consideration are a riverfront restaurant, expansion of the municipal power plant and a handicapped fishing pier.

Project Description

When visiting the park, it is evident that it contributes significantly to community life and that it is highly used. This facility accommodates local use, and occasionally regional visitors who prefer not to travel to Elizabeth Park--the only existing regional facility on the river. To increase the park's recreational value will require general revitalization and a bold approach to integrate this open space more effectively into the community. It is highly recommended that private dollars, as well as public dollars, be used to establish a new riverfront image. This could include restaurant and riverfront commercial growth.

The riverfront is too special to be used for car storage. The existing municipal parking lot has the potential to provide for much needed park expansion and to create a direct link between the river and the Central Business District. A proposed riverfront restaurant can also be accommodated. Because the CBD is so close to the river, a unique opportunity exists for Wyandotte store owners to attract boaters traveling the river. This approach would supplement existing land-based riverfront access (A) with regional boater access (B).

Specific recommendations are as follows:

1. Resolution of the proposed Biddle/Van Alstyne realignment.

2. Expansion and renovation of short-term pleasure craft tie-up facilities.

3. Creation of a hard surface multi-use plaza to complement Bishop Park opportunities and attract people to the CBD.

4. Existing Biddle Street shops can be renovated to provide access from the riverfront.

5. Major park improvements such as promenades, sitting areas, new uses for the American Legion Building, etc., can unify Bishop Park.

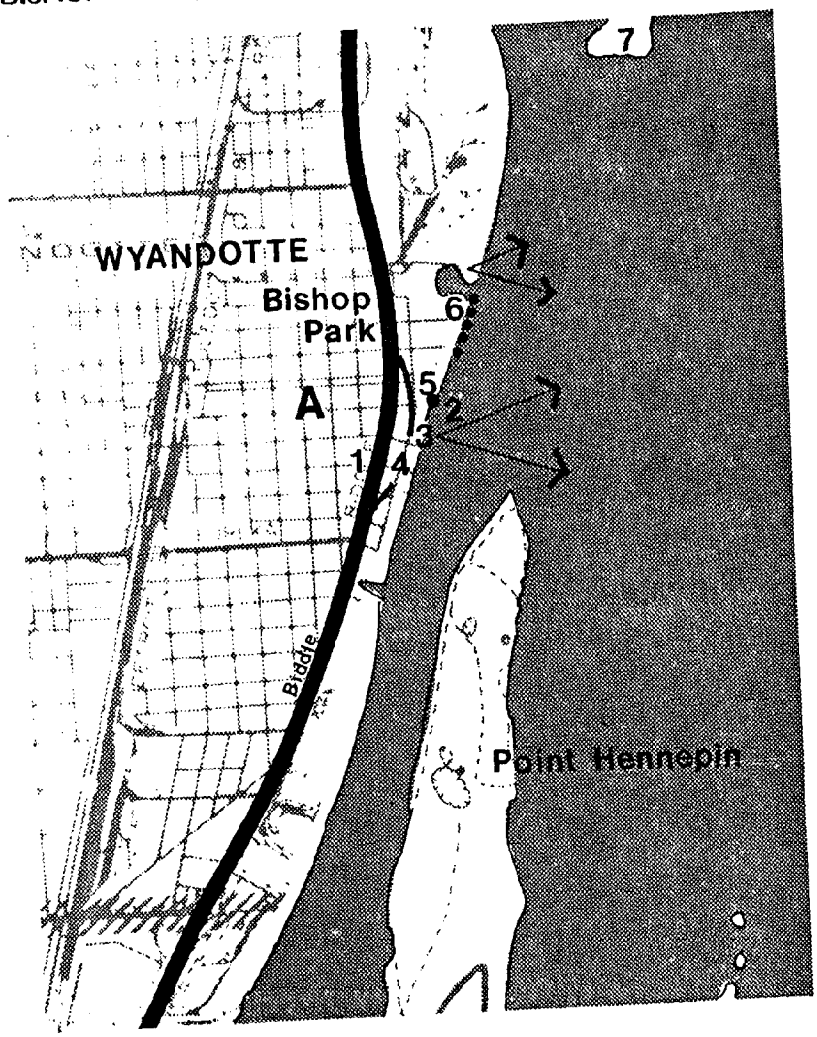
6. A riveredge pedestrian walk is proposed along the entire public edge, including north from the park, across the front of the municipal power plant, to link the Wyandotte Yacht Club with the Park. This is a special opportunity for industry to demonstrate their willingness to help.

7. Encouragement of U. S. Fish and Wildlife Service to plant trees and provide interpretive facilities at the Grassy Island Refuge.

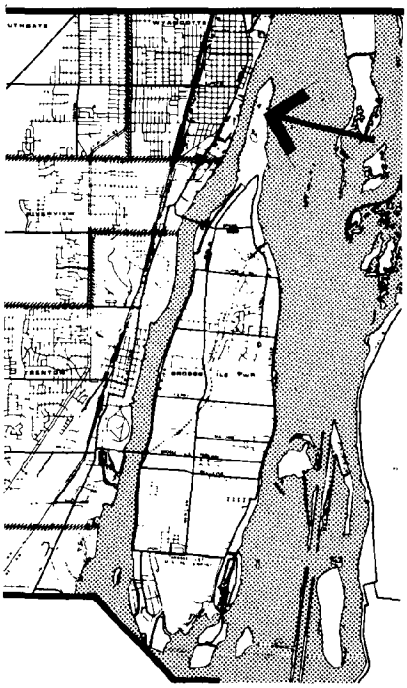
Approach

Bishop Park was selected as a high priority project area. Detailed implementation techniques are, therefore, presented in Section 5 of this report.

BISHOP PARK, WYANDOTTE



Impact: Predominantly Municipal
Emphasis: Day Use, Special Events
Priority: High
Responsibility: Municipal



Transitional Zone

POINT HENNEPIN

Point Hennepin is located at the extreme northern end of Grosse Ile Township. Containing 225 acres, it is 1¼ miles long and ¼ mile wide. Projecting out into the river, the eastern edge of Point Hennepin defines the main channel of the Detroit River. Along the west side is the Trenton channel which separates the point from the island. The tip of Point Hennepin is across from and just south of Bishop Park. Although described as a "point", the site is actually an island since it is separated from Grosse Ile by a 50' channel. Local residents are very concerned about the impacts this area may have on the quality residential area located in the Township.

Originally a Detroit River marsh, the area served as an industrial disposal area for BASF Wyandotte Corporation until the 1950's. Currently, wells are located on the site which tap salt beds more than 1,000' underground. In two areas, the subterrain salt cavities have collapsed resulting in the formation of craters up to 600' in width. Because the sides of these craters are nearly vertical, they are

extremely dangerous. To deal with this problem, BASF is preparing to fill these crater areas. Because of the nature of the original fill material, it is difficult to grow vegetation on the site. It has only been in recent years that vegetation has become established due to both natural succession and BASF planting programs.

Because of the size and orientation of the area, it has a potential to serve as a unique boat stopover site. Currently, nothing comparable exists in the DCC area. Major facilities such as camping, marinas, and interpretive programs should be considered. We believe sufficient demand exists and will continue to grow as boat registrations continue to increase rapidly and the cost of gasoline increases.

Project Description

Point Hennepin is currently an undeveloped parcel of land which has the potential to play a major role by providing recreational activities within the Downriver Area. BASF, while presently regarding future site uses does not appear to be considering disposing of the property. Because of soil instability, Point Hennepin probably best lends itself to a low intensity use such as recreation.

River (A) and bicycle (B) access onto Point Hennepin are proposed in order to avoid vehicular congestion on Grosse Ile.

Specific recommendations are as follows:

1. Possible water taxi could provide access to the Point from the mainland if a marina is included as part of the proposed mixed use project currently proposed in Wyandotte.
2. Picnicking, ship watching, bank fishing and strolling are recommended.
3. Water edge promenade, with a major viewing area at the northern tip and informational displays identify unique historical sites, islands, shipping channels and skyline features.
4. Viewing areas are proposed. The 30' difference in grade which exists on the point can be utilized to provide an elevated viewing position rarely available elsewhere in the Downriver Area.

5. Bicycle concession provides visitors with an opportunity to view the point and Grosse Ile's historic and cultural areas. Special trails could connect Elizabeth Park and Point Hennepin.

6. Only service vehicles are allowed on Point Hennepin; therefore, visitors will not be contributing to vehicular congestion on Grosse Ile.

Approach

In order to take advantage of a unique recreational opportunity before it is lost, the following procedural steps are suggested to encourage retention for future recreational use.

Step 1

DCC reviews plan with Grosse Ile to ensure concept reflects Township views regarding future use.

Step 2

DCC seeks to clarify the intentions of BASF regarding use of the property and whether acquisition is feasible.

Step 3

Determine a project sponsor to initiate and implement appropriate activities.

- Contact Huron Clinton Metropolitan Authority or State and indicate ties to their plans.

Step 4

Seek funding for Master Plan development.

- Potential funding sources include:

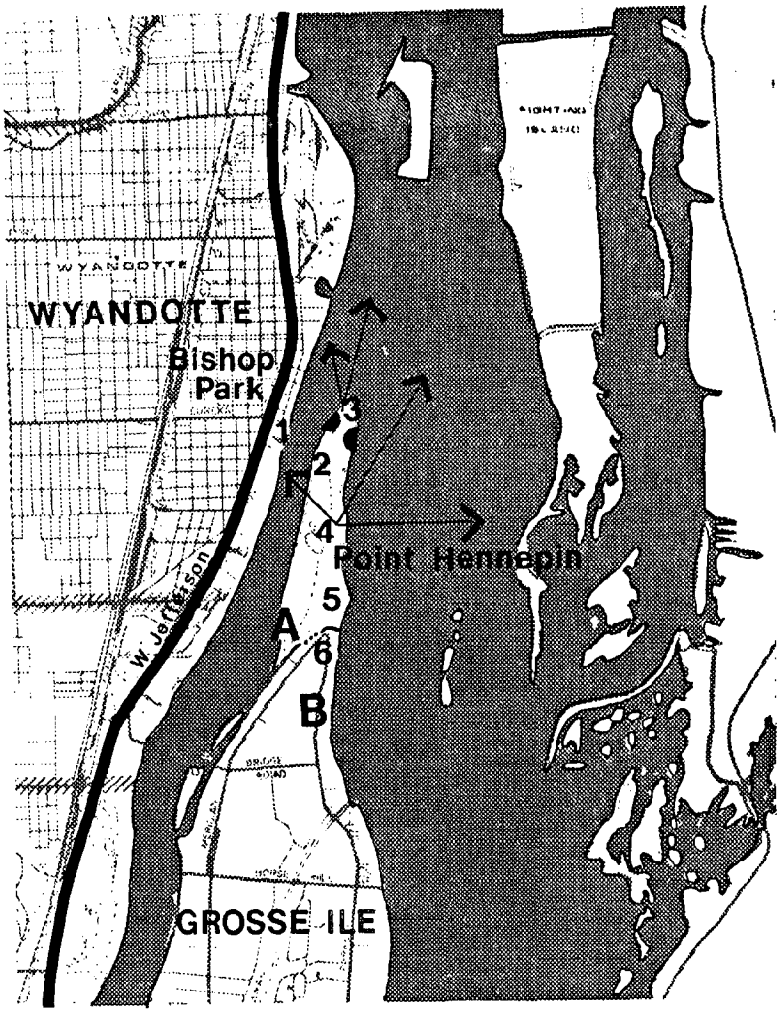
  Coastal Zone Management
  Land and Water Conservation
  Urban Parks and Recreation Recovery

Step 5

Preparation of Plan Document and construction documentation.

- Evaluate reclamation techniques and costs and types of activities feasible.
- Confirm final plans with township and surrounding community.

POINT HENNEPIN



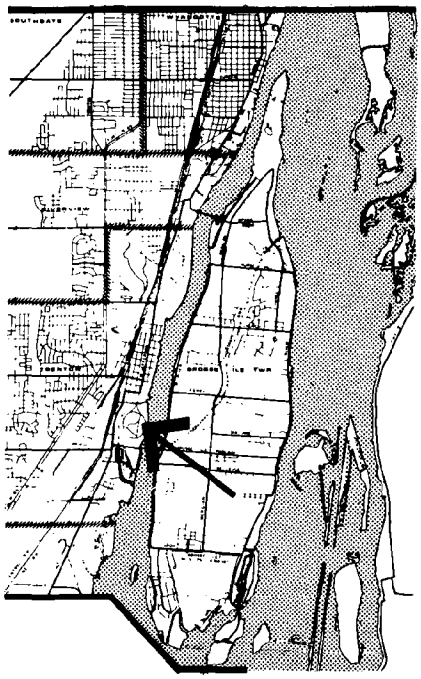
Impact: Regional
Emphasis: Camping and Day Use
Priority: Low
Responsibility: Regional

- Investigate necessary permits for implementation,

Step 6

Seek funds for construction implementation.

- Pursue applicable funding sources presented earlier using individual plan components as a basis.



Transitional Zone

ELIZABETH PARK

Elizabeth Park is located in Trenton, just south of West Street directly across from Grosse Ile. Access to the 162 acre facility is difficult for regional visitors who must travel minor community streets to enter the park. The facility has two major use areas: the northern access which provides picnicking, river watching, ball fields, tennis courts, special use buildings and automobile touring; and the southern area provides boat launching facilities. This area is heavily used. Additional launch facilities are obviously needed.

Existing user patterns, facility availability, and operating budgets hamper the park's regional value. Families who would like to use the facility have been discouraged from doing so by insufficient security and inadequate public transportation. This lack of accessibility results not only from the land-based access, but also water access. The total lack of any short term boat tie-up facilities is also a problem. While able to launch your boat at the park, no boaters day use areas are provided. Recognizing many of

these problems, Wayne County has recently completed a Master Plan for the facility. The plan proposes to increase the variety of activities available, as well as controlling user behavior.

Elizabeth Park is a very scenic facility with mature, dense woods and steep river banks encourage distant views across the river to Grosse Ile. Along this river segment, no shipping channel exists and, therefore, pleasure boats have free rein of the area. These special views draw visitors to the river but unfortunately, once a visitor walks down the bluff to get closer to the river, it is almost a disappointment. The edge is delineated by a narrow concrete walk and repressive chain link fence. Few facilities are provided to encourage a more detailed investigation of the shore.

One of the most scenic and special areas is the channel which makes Elizabeth Park an island. The confluence area where the channel separates from the river has largely been ignored and is rarely used.

While recognizing Elizabeth Park's regional potential, its local value must also be acknowledged. Trenton currently has two municipal riverfront parks: Ellias Park (5.5 acres) and Harrison Boat Launch Park (1.9 acres). These facilities are well maintained and provide much needed municipal day use facilities. They join with Elizabeth Park to provide residents a wide range of recreational opportunities close to home.

Project Description

Elizabeth Park has a special importance for the Downriver Area. It is currently the only operating regional Downriver park. As a result, it offers a special opportunity to demonstrate how a regional facility can provide recreational opportunities for all regional residents. To accomplish this objective will require an imaginative approach which stresses and builds upon the Detroit River. One of the most significant ways to do this would be to establish a water-oriented transportation system with Elizabeth Park as one of its major origin destinations. Because a land-based linkage system is impractical north of Grosse Ile, such a system is particularly appropriate. Used during the week as a commuter link to Detroit, the riverboats could support weekend recreational uses. A tour to Celeron Island, an opportunity to travel from Elizabeth Park to Lake Erie Metro Park, or ultimately a basis for linking a series of Downriver regional parks to Detroit are all possibilities.

Regardless of who assumes such responsibility, multiple means of access must be encouraged--automobiles (A), Detroit riverboats %B), and land based public transportation are all needed. The park must reach out and establish ties into surrounding areas--pedestrian links with Trenton Parks, bicycle trails to Point Hennepin or at least Grosse Ile, and contacts with surrounding industrial areas. New recreational opportunities within the parks must also be explored.

Specific ways for accomplishing this may be:

Trenton

1. Acquisition of the leased land and expansion of Ellias Park northward to include the point just north of the park.

2. Create an inland pedestrian/bicycle route along residential streets to connect Elizabeth Park with community elements, such as the municipal riverfront parks, revitalized mini-parks where roads and river meet, the hospital, etc.

   Ensure that high-rise towers do not visually infringe or screen the river from inland viewers.

Elizabeth Park

3. Keep Elizabeth Park as a major family-oriented regional park.

   Creation of upper and lower pedestrian promenades to link riverfront and inland activities, including sitting areas, information displays and special events amphitheater for boaters and park visitors.

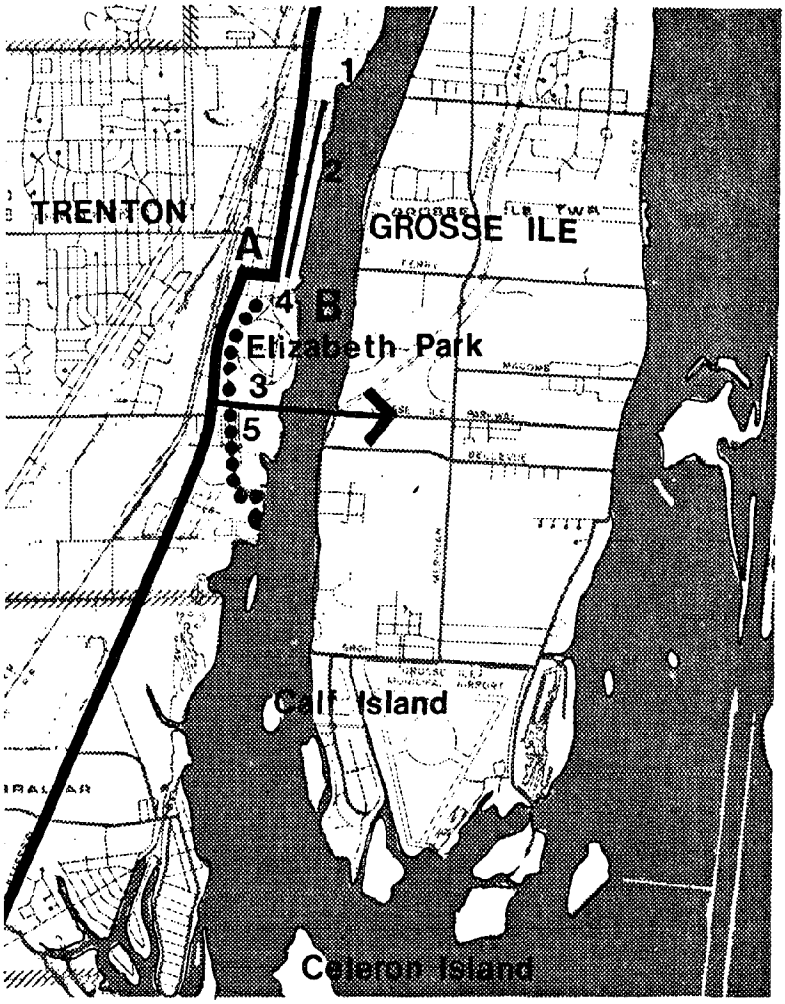
4. Treat the water's edge as a special place and the channel-river confluence as a unique area, one which can accommodate modest development.

   Incorporate 25 to 35 short term boat tie-ups within the channel mouth along the northern side and create a boaters' day use area on the three acres of land currently available for acquisiton.

5. Enlarge the channel inland from the river to provide a boat concession area where visitors can lease small boats.

   Dredge the channel to provide a 3' depth so that concession boats can travel behind the park and the Detroit Edison Plant. Locate nature and industrial displays at critical points.

ELIZABETH PARK



Impact: Regional
Emphasis: Day Use, Boat Destination
Priority: High
Responsibility: Regional

Approach

Step 1

Seek a concurrence regarding continued use of Elizabeth Park as a regional facility from appropriate agencies.

Step 2

Resolve the issues adressing who should be responsible for operation and management of the facility.

Step 3

Encourage the responsible agency to adopt an approach or plan which best meets the region's recreational needs.

- Seek acceptance or revision of the Master Plan for the park using previously stated regional recreation objectives as a basis for evaluation.

Step 4

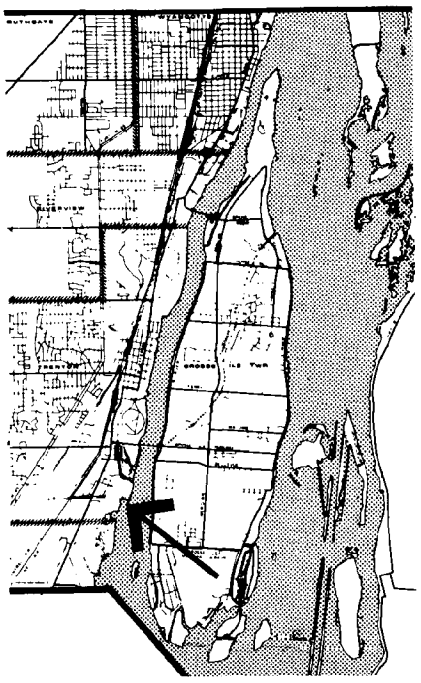
Encourage the agency to seek funds for the development of a detailed plan which recommends design refinements and construction documentation.

- Typical funding sources include:

  Land and Water Conservation Funds
  Urban Recreation and Recovery Funds
  Coastal Zone Management Funds

Step 5

Encourage development of a final plan and seek concurrence of the recommendations.

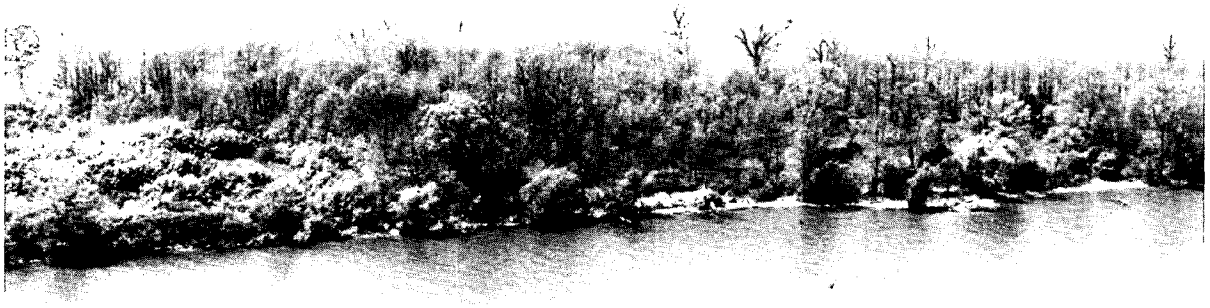


Transitional Zone

GIBRALTAR

The proposed development site is located in the Transitional Zone, directly west of Calf Island, just south of the Gibraltar-Trenton Boundary. Currently owned byMcLouth Steel Corporation, the undeveloped parcel is characterized by an irregular river edge, high water level, lack of roads and an abundance of trees. These conditions render the site undesirable for industrial development, yet make it one of the better wildlife areas along the riverfront. Celeron Island is currently eroding away at a very rapid rate. Should the State of Michigan decide not to stabilize and preserve it, this areas wildlife importance would probably increase.

Despite the site's size and diverse habitat, its regional recreational value is diminshed by its proximity to Lake Erie Metro Park, and the low population densities found in the area. While little regional support exists for developing this site, there is a meaningful opportunity for Gibraltar residents. It is a regular occurance for residents to stroll along the river or go boating. A tremendous



demand for boating facilities currently exists. Marina and boat launching facilities are heavily used and additional facilities are needed.

Project Description

Because of local municipal recreational needs, it appears that the city would benefit by developing this site as a municipal recreational facility. This river segment represents the last major uncommitted riveredge within the study area. However, there is an exciting opportunity to supplement existing municipal recreational amenities.

It is proposed that site development maximize mainland and island-oriented day use opportunities. A road must be developed from Jefferson to allow access to the river (A). Access to the existing uncharted island would be exclusively by boat (B). The following recommendations are made:

1. Creation of a visual buffer extending at least 300' inland from the shoreline. Results will be to preserve the natural edge, screen the McLouth Steel plant just off Jefferson, maintain critical wildlife habitat and accommodate needed municipal recreational facilities.
2. Vehicular access off Jefferson will be needed. High water will make this difficult. Care is necessary to minimize the roads impact on the natural environment.
3. Development of municipal boat launch, fish cleaning station, restrooms and informal riveredge walk with bank fishing opportunities.

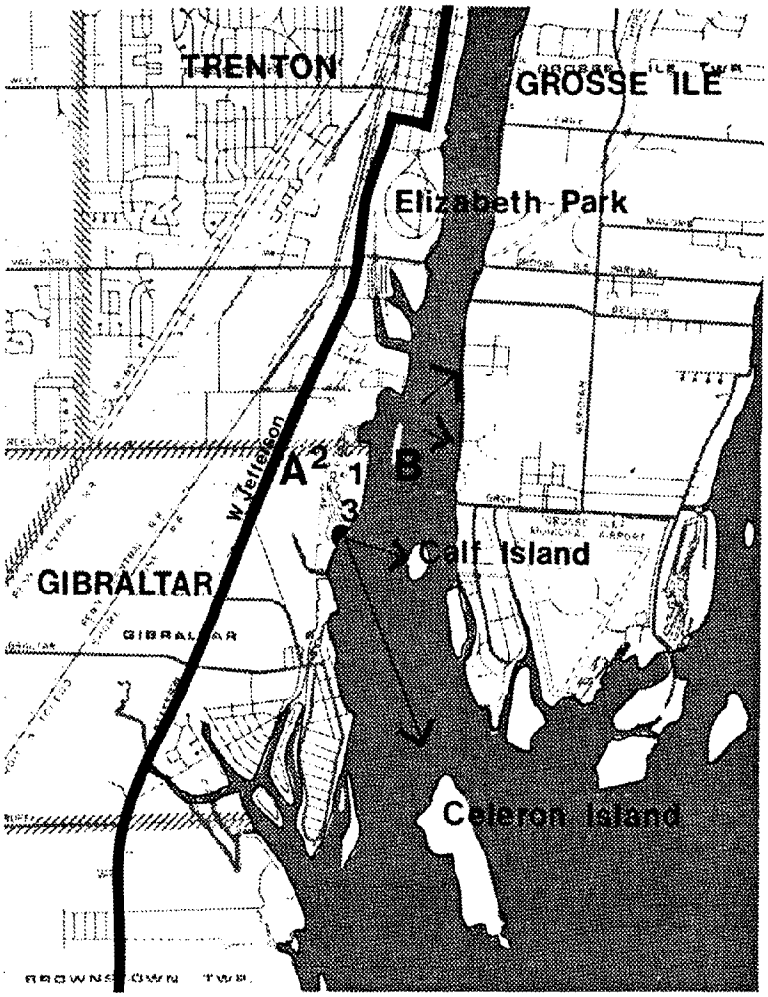
   Land-based nature interpretive display describes wildlife habitates on Calf Island and Celeron Island.

   Beaching of boats along uncharted island shoreline, water edge fishing, viewing trail, and a few limited picnic tables.

Approach

Limitations which pose problems to future use of this site include lack of a public access, potential high water problems and private ownership of the property.

GIBRALTAR



Impact: Municipal
Emphasis: Day Use
Priority: Low
Responsibility: Municipal

The following steps suggest a process which is necessary in order to accomplish implementation.

Step 1

DCC contacts Gibraltar to inform and gain community support for this project.

- Since it will be a municipal facility, Gibraltar would be an appropriate sponsoring agency.

Step 2

Discuss the long range plans of McLouth Steel Corporation and determine what options are available for recreational use.

Step 3

Develop a preliminary study which schematically addresses alternative uses and suggests potential funding sources for Master Plan development.

- Funds available for document preparation include but are not limited to:

  Land & Water Conservation
  Urban Park and Recreation Recovery
  Coastal Zone Management

Step 4

Seek community support for preliminary recommendations.

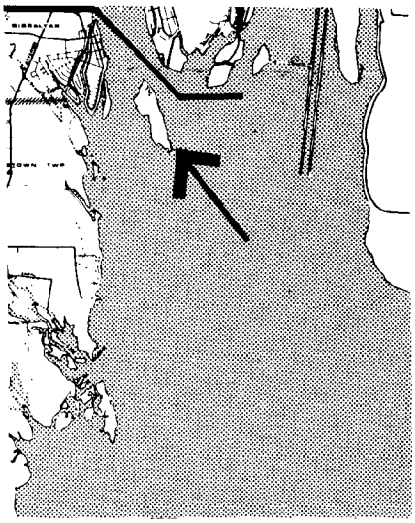
Step 5

Develop a Master Plan and seek construction funds.

- Investigate permits required for implementation, including:

  DNR - environmental assessment
  Coast Guard - river transportation
  DNR - waterfront construction
  DNR, County, Corps - shoreline fill
  Local - site, building
  County - soil erosion and sedimentation

- Pursue applicable funding sources presented earlier using individual plan components as a basis.



Southern Zone

CELERON ISLAND

Celeron Island is an undeveloped island owned by the Michigan Department of Natural Resources. It is one of a number of natural islands which are first encountered in the Southern Zone. Because of its designation as a wildlife area, the island's natural habitates must be preserved. Currently the island is in danger of eroding away. Unless the State acts immediately, there is a real possibility that the entire site may be lost to wind and wave action. Should this happen, Gibraltar may be exposed to higher water levels.

To save the island will require that shoreline stabilization techniques be implemented along the southern end. If this approach is selected, it may be that physiography and interpretive opportunities may change significantly. For example, a construction channel may be needed to provide shoreline access. Once created, the channel could serve as a water oriented nature trail in areas where water depths of one and two feet currently exclude such an approach.

Immediately north of Celeron Island is Calf Island which is located halfway between Grosse Ile and Gibraltar. Because of its wildlife value, the state is also considering acquiring this island. It is much smaller than Celeron, is more clearly defined and is surrounded by deeper water.

Proposed facilities at Celeron and Calf Islands include:

1. Creation of a self guided nature trail at the north end of the island where higher land exists. Minimal development, such as trails, short term boat tie up and exhibit markers are proposed.
2. Due to high water and more fragile habitates, access to the southern end is prohibited.
3. Island boat tour visits could be included as part of a nature interpretation program initiating at either Elizabeth or Lake Erie Metro Park.
4. Use of Calf island primarily as a wildlife area but also as part of nature boat tour. Visitors tour the island from their boats.

Approach

Step 1.

Encourage the State Department of Natural Resources to establish a policy regarding the future role of Celeron and Calf Islands.

- Review and assess the impact of the inclusion or exclusion of the islands within the regional system.

Step 2.

Assuming that DNR decides to recommend inclusion of the islands in a regional program, action must be directed towards stabilizing the shoreline of Celeron Island.

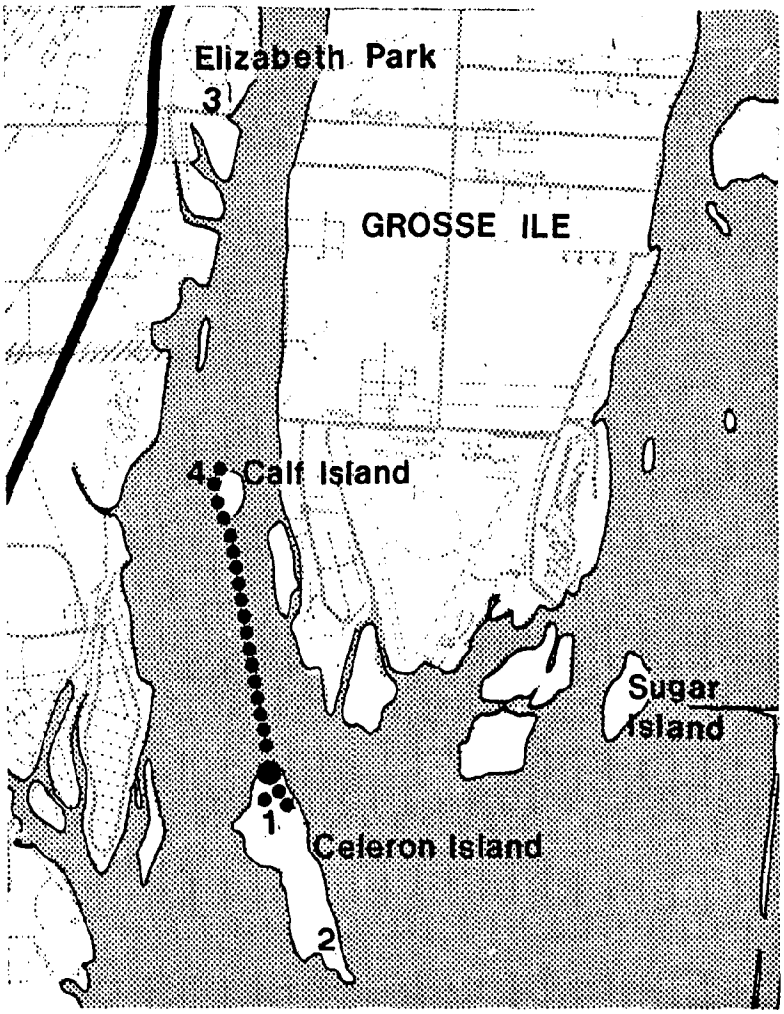
Step 3.

Seek assistance from the Army Corp of Engineers in accomplishing stabilization of the shoreline.

Step 4.

Encourage acquisiton of Calf Island by the DNR.

CELERON ISLAND



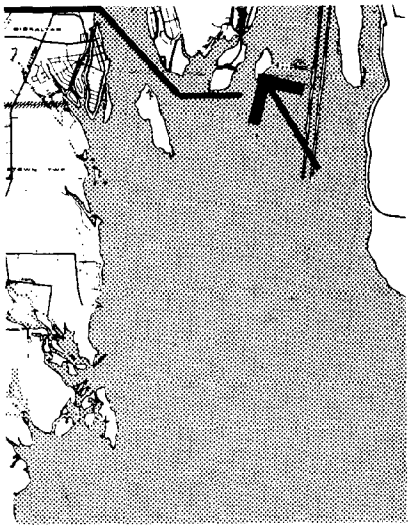
Impact: Regional
Emphasis: Educational
Priority: Moderate
Responsibility: State

Step 5.

Encourage development of a long term plan which addresses the opportunities of creating a series of islands which complement the potential uses of others.

Step 6.

Work with DNR on accomplishing the objectives of using



Southern Zone

SUGAR ISLAND

The island is located approximately 1000' off Meso Island, east of Grosse Ile Township. The wooded island is highly picturesque and visible from shore. Stony Island is a privately owned American island which has a proven ability to serve as a regional boat destination. The accompanying photograph illustrates current use patterns where boaters unofficially beach their boats on shore and enjoy weekend camping. Because this occurs regularly throughout the summer months, it is highly apparent that a need exists for a major DCC boat-oriented overnight destination. This need will substantially increase as the number of boaters continues to increase dramatically, the energy crisis increases in severity, and mainland development increases in intensity.

Despite potential logistical difficulties involved with recreational use of islands, such sites offer exciting and special opportunities for getting away from it all.

Project Description

The island is undeveloped and has been for sale for a number of years. Because of the uncertainty surrounding future recreational use of Point Hennepin, it may be in the best interest of DCC to examine the feasibility of acquiring this site and developing it as a major boat destination.

Picnicking, nature and river trails, educational displays and other day use facilities could be accommodated without destroying the island's natural qualities. It might prove feasible for the Michigan DNR to develop an island wildlife recreational system incorporating Celeron, Calf, Sugar and Stony Islands.

The following facilities are proposed:

1. Short term boat tie-up area and wildlife interpretive area.

2. Major ship viewing and interpretive area.

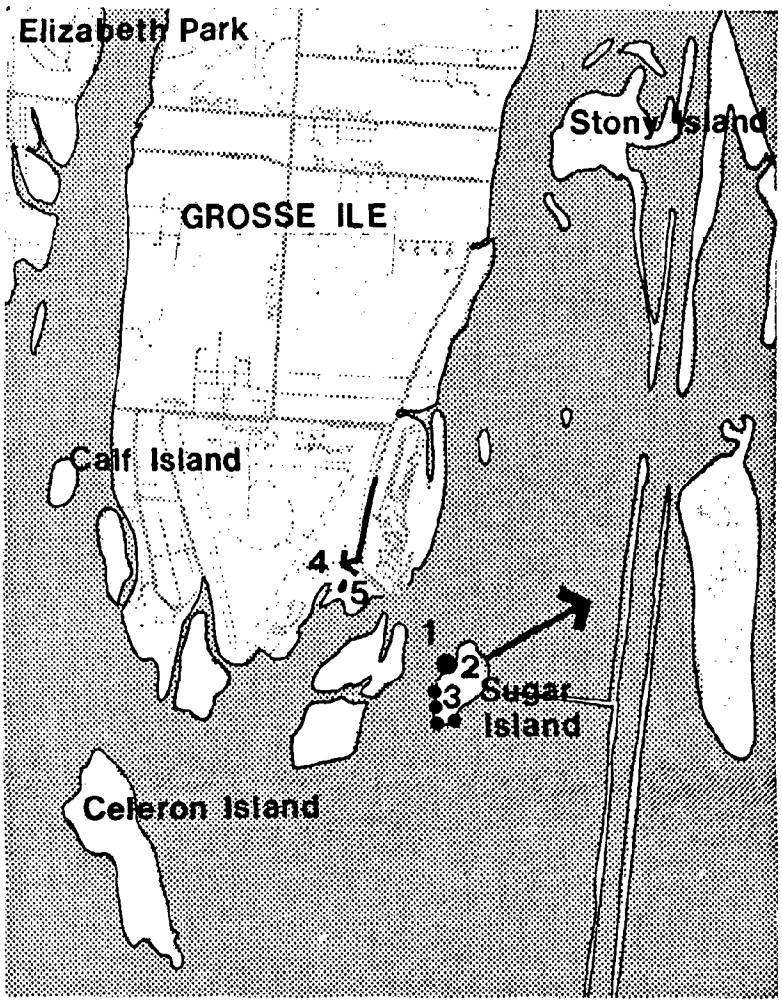
3. Day use facilities--picnicking, walking trails, bank fishing and restrooms.

At the southern tip of Grosse Ile and just east of the airport is a pleasant area consisting of an attractive pond, mature trees, an open area and vehicular access road. In recent years, the Michigan Department of Natural Resources has inspected the site and stated its willingness to assist with the development of a handicapped fishing facility. No action has yet been taken by Grosse Ile on this matter. Because fishing is the most common recreational activity seen on the river today, there would appear to be adequate need for such a facility. Implementation would require the following:

4. Vehicular access from existing roads.

5. Use of existing pond for children fishing and day use facilities such as picnic areas, restrooms and multi-use open space.

SUGAR ISLAND



Impact: Regional
Emphasis: Boat Destination
Priority: Moderate
Responsibility: Regional

Approach

Step 1

Determine a sponsoring agency for Sugar Island.

- Contact the State and the Huron Clinton Authority as potential sponsors.

Step 2

Identify the potential for acquisition in light of priorities with the sponsoring agency and within the region of recreational program.

- Review the long-term opportunities for creating a chain of islands as part of the recreation system and the role of Sugar Island within that system.

Step 3

Encourage development of a long-term use strategy which includes Sugar Island as an independent facility or as part of a larger island system.

- Seek assurance that Sugar Island will remain in its natural state, assuming it is not immediately acquired by the sponsoring agency.

Step 4

Encourage development of a detailed plan which includes design alignment and construction documentation once the island has been acquired.

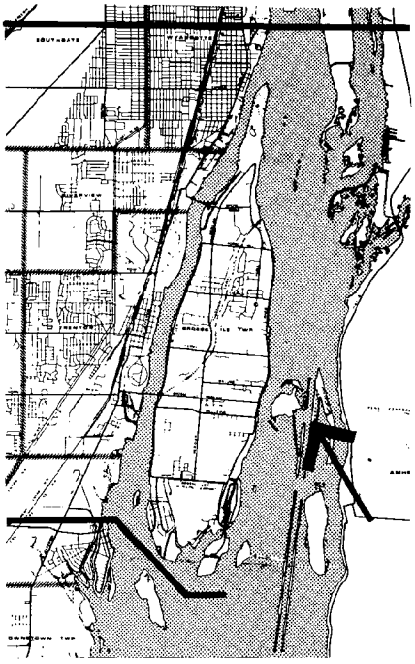
- Typical funding sources include:

  Land and Water Conservation Fund
  Urban Recreation and Recovery Funds
  Coastal Zone Management Funds

Step 5

Seek funds for implementation of the plan.

- Use the funding sources listed previously as a basis for determining the applicable programs to be pursued.



Transitional Zone

STONY ISLAND

This privately-owned American island is located directly east of Grosse Ile halfway between the U. S. and Canada and next to the Livingston Channel--the Downriver segment. Because of limited topographic variation, the size and shape of the island varies in accordance with the water level. Currently, the island supports two primary uses: a major egret nesting area and an equipment storage area for the Dunban and Sullivan Dredging Company. While surrounded on three sides by shallow water, a channel provides boat access on the north side.

Project Description

Due to the islands location, next to the Livingston Channel, special opportunities exist for the development of a major educational facility, which explains the Detroit River navigational/shipping system. The dredged materials which outline these main channels clearly illustrate that a meaningful opportunity exists for explaining about dredging and the ships that use these channels.

On the east side of the island, old dredging equipment is stored. There may be a possibility that this equipment could be acquired with the property and used to explain how the channels are maintained--past and present.

The egret nesting area is located at the northwest corner of the island. While high water levels make it difficult to walk the site the abandoned railroad berm provides a means for access. A nature trail and viewing platform as illustrated in the Guidelines Section are envisioned.

On-site improvements are:

1. Short-term boat tie-up.

2. Nature trail, fishing platforms and wildlife/ship viewing observation towers.

3. Historic dredging display.

Approach

Step 1

Determine a sponsoring agency for Stony Island.

- Contact the State and the Huron Clinton Authority as potential sponsors.

Step 2

Identify the potential for acquisition in light of priorities within the sponsoring agency and within the region of recreational program.

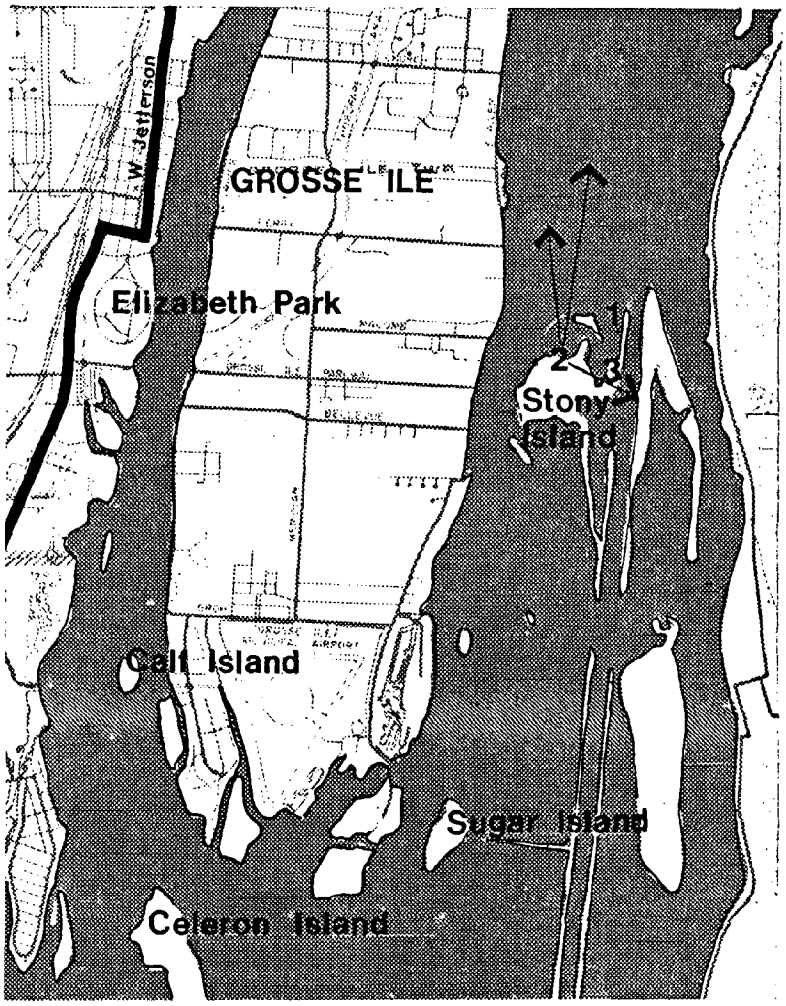
- Review the long-term opportunities for creating a chain of islands as part of the recreation system and the role of Stony Island within that system.

Step 3

Encourage development of a long-term use strategy which includes Stony Island as an independent facility or as part of a larger island system.

- Seek assurance that Stony Island will remain in its natural state assuming it is not immediately acquired by the sponsoring agency.

STONY ISLAND



Impact: Regional
Emphasis: Educational and Boat Destination
Priority: *Moderate*
Responsibility: Regional

Step 4

Encourage development of a detailed plan, which includes design alignment and construction documentation once the island has been acquired.

- Typical funding sources include:

  Land and Water Conservation Fund
  Urban Recreation and Recovery Funds
  Coastal Zone Management Funds

Step 5

Seek funds for implementation of the plan.

- Use the funding sources listed previously as a basis for determining the applicable program to be pursued.

FUNDING STRATEGIES

Successful implementation of each recreation project is dependent on a number of considerations. The availability of financial assistance, a feasible design concept, community support and agency interaction are each significant considerations in the development of any implementation program.

The purpose of this material is to present sources of financial assistance available to meet expected costs, including funding opportunities from federal, state, local and private sources. The various agencies offering assistance, the type of assistance available, and the type of projects eligible are each considered, along with general comments about each program.

Critical to the development of a successful strategy in seeking financial assistance is an evaluation of the recreation programs presented in this document in light of funding opportunities. Individual components of the programs should be classified on a priority basis. Components receiving a high priority rating should then be reviewed in light of the funding sources presented in this document, followed by those with a lesser rating.

Assuming a component of the recreation plan is matched with one or several alternative funding sources, each source should then be carefully reviewed using the accompanying comments as a basis for evaluation: (1) whether the funding source is available yearly or in one lump sum; (2) the preparations required for application to the funding source; (3) the length of time until receipt of funds; (4) whether the funding source requires local matching; and (5) the red tape involved in pursuing various funds. Several sources may be effectively pursued on an individual community basis, while others require some form of joint participation.

It is critical that a comprehensive funding approach be used. Each recreation project is likely to be funded on an ad hoc basis, with individual components receiving funds independently from the complete project.

Successful implementation of each recreation project can only be accomplished if the individual components of each project are linked together as part of a much larger plan. Variations can be expected in funding sources as existing programs are eliminated and new programs initiated. As this occurs, the list represented in this document will need to be updated so that a comprehensive range of funding assistance can be maintained.

FEDERAL FUNDING OPPORTUNITIES

AGENCY	PROGRAM	TYPE OF ASSISTANCE	AMOUNT AVAILABLE	ELIGIBLE PROJECTS	APPLICATION REQUIREMENTS	COMMENTS
Army Corps of Engineers; Department of Army	Beach erosion control projects; River and Harbor Act - 1960	Grant.	$1,000,000 per project.	Beach and shore erosion of public properties.	Must be federal interest in the program, and property must be in public ownership.	A preliminary and final document is prepared, and competition may take three to four years.
Army Corps of Engineers; Department of Army	Flood Control Act - 1948	Grant.	$2,000,000 per project.	Production of potential flood damage to property.	Must satisfy special environmental conditions.	Must be an independent project, and the process averages five years until completion.
Army Corps of Engineers; Department of Army	River and Harbor Act - 1960	Matching grants.	Variable.	Specific navigational improvements, entrance channels, turning basins and breakwaters.	Engineering feasibility and the potential economic benefits must be completed prior to project acceptance.	Downriver area has been considered for improvements, but cost sharing requirements on an individual basis have not been met. Funding procedures can take several years to complete.
Economic Development Administration - Department of Commerce	Public Works and Economic Development Act of 1965	Matching grant.	Nationally - $169,622,000	Acquisition or development of land for Public Works, including sewer and water extension, port facilities for industrial expansion and programs resulting in economic expansion.	Must relate to expansion or creation of long-term employment opportunities. Plans must conform with the area Economic Development Plan.	Applicant must show the need of project relative to others and the priority of program within the areawide plan.
Environmental Protection Agency	Federal Water Pollution Control Act - Section 208	Grant.	Variable.	Development and implementation of water quality management plans.	Must be determined as a need according to the areawide 208 plan completed by SEMCOG.	Detailed plans for specific areas, such as the Downriver communities, could be a second phase of the areawide 208 plan.

FEDERAL FUNDING OPPORTUNITIES

AGENCY	PROGRAM	TYPE OF ASSISTANCE	AMOUNT AVAILABLE	ELIGIBLE PROJECTS	APPLICATION REQUIREMENTS	COMMENTS
Department of Housing and Urban Development	Housing Act of 1964 - Housing Rehabilitation Loans	Direct loans.	$100,000 per non-residential property; $27,000 per dwelling unit.	Provides funds for rehabilitation of residential and business properties.	Must be within a block grant area or within an urban renewal program.	Loans have typically been approved with an average value of $11,000.
Department of Housing and Urban Development	Community Development Block Grant	Grant.	Statewide - $8,000,000 on annual basis for large metro communities; $4,000,000 annual for small communities.	Range of activities dealing with a community's living environment. Recreation activities include fishing piers, play areas and other park features.	Must demonstrate project will benefit low and moderate income families.	Small non-participating communities compete on a statewide basis annually. Thirty out of 200 small communities were granted funds. Large metro communities receive funds on a yearly basis, and both Ecorse and Wyandotte receive a portion of those funds through joint application with Wayne County.
Department of Housing and Urban Development	Urban Development Action Grant	Matching grant.	Variable.	Revitalization of the local economic base, reclaiming deteriorating neighborhoods, including land clearance, site improvements and rehabilitation of structures.	Must assist in revitalizing stagnating economies and reclaiming deteriorating neighborhoods.	Projects are funded on a one-time basis; private support must exist for the project; competition is nationwide and communities which have had good performance with federal programs are given preference in funding.
National Endowment for the Arts	National Foundation of the Arts and Humanities	Grant.	Variable.	Exemplary planning and design of cultural facilities.	Must stimulate use of public and private funds.	Local organizations can apply for funds; the average grant has been $15,000.

STATE FUNDING OPPORTUNITIES

AGENCY	PROGRAM	TYPE OF ASSISTANCE	AMOUNT AVAILABLE	ELIGIBLE PROJECTS	APPLICATION REQUIREMENTS	COMMENTS
Heritage Conservation and Recreation Service - Department of Natural Resources	Land and water conservation fund.	Matching grant.	Statewide - $6,000,000.	Construction of any public recreational facilities; land acquisition.	Community must identify recreational deficiencies in its park master plan and submit its request for state review.	Funds are expected to be cut in half for 1980, making competition for money keener than the past.
Heritage Conservation and Recreation Service - Department of Natural Resources	Urban Park and Recreation Recovery Program.	Matching grant.	Nationally - $150,000,000.	Rehabilitation grants for park landscapes, buildings, support facilities; innovation grants for improved recreation opportunities; recovery grants for coordination and assessment.	Must develop a five-year action recovery program which includes need, objectives, problems, opportunities, priorities and strategies.	85% of the fund is available to designated communities, including Wayne County; 400 jurisdictions have been designated; 15% of the fund is available to the remaining communities.
Division of Land Resources - Department of Natural Resources	Coastal Zone Management.	Matching grant.	$50,000/project.	Support design; engineering, feasibility analyses projects, and low-cost construction.	Based on relationship to the coast.	Detroit River Recreation Study funded by this program.
Michigan Department of Transportation	Non-motorized facility funds.	Grant.	1% of motor vehicle funds.	Construction of pedestrian pathways.	Funding in each community is based on the amount of motor vehicle monies collected.	Projects which utilize State Highway right-of-way are encouraged.
Division of Waterways - Department of Natural Resources	Waterways program.	Matching grant.	Variable.	Boat launching, marinas and other water-oriented capital improvements.	Property must be available and a need shown for capital facilities.	Preliminary study conducted to review feasibility.
Division of Fisheries and Wildlife - Department of Natural Resources	Urban Fisheries Program.	State general fund and grant.	Variable.	Construction of fishing facilities.	A showing of need within an urban setting has been the general basis for elevation.	The Downriver community of Ecorse is a participant in the fisheries program.
Office of Budget and Federal Aid - Department of Natural Resources	Kammer Recreation Land Trust Fund Act.	Grant or match.	Statewide - $3,500,000.	Acquisition of lands for recreational activities in urban areas.	Project approval has emphasized recreational sites with water opportunities.	The State favors projects which match funding rather than outright grant.

LOCAL FUNDING OPPORTUNITIES

AGENCY	PROGRAM	TYPE OF ASSISTANCE	AMOUNT AVAILABLE	ELIGIBLE PROJECTS	APPLICATION REQUIREMENTS	COMMENTS
Cities	General Obligation Bonds.	Bond issue from millage or budget for repayment.	Varies according to monies available.	Capital improvement projects.	Repayment strategy must be determined prior to bond issue.	Requires voter approval if millage used.
Cities	Revenue sharing.	Cash.	Varies according to Federal distribution methods.	Any program.	Controlled by accepting agency.	Unconditional funds, but highly competitive with other projects.
Cities	General budget.	Cash.	Varies according to City conditions.	Any program.	Based on local priorities.	Substantial funds for recreational programs are generally not available.
Cities	Revenue bonds.	Bond issue.	2% of City's assessed valuation.	Land acquisition and capital improvements.	Repayment strategy must be determined prior to issuance.	Does not require voters' approval.
Private	Universities, research foundations, conservation groups.	Interest free loans; technical aid, cash grants.	Variable.	Any program.	Determined by participants.	Provides alternative methods of supporting existing projects or financing new proposals.

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4 Guidelines

GUIDELINES

The recreational guidelines presented in this section illustrate approaches to frequently encountered Downriver situations. Because site specific solutions could not be prepared for each proposed site, typical approaches have been prepared. These are presented in order to generate local interest, establish an appropriate level of riverfront development, illustrate critical concepts, and guide community implementation. Guidelines have been prepared for three categories of concern. These include river linkages, riverfront treatments and observation/ educational facilities.

Typical linkage opportunities evident in the study area include both riverfront and inland approaches. Of concern are trail linkages along natural elements, such as minor riverways, urban walks connecting the river to commercial/residential areas, major promenades at strategic points along the river's edge, and inland walks joining separate riverfront areas. Typical approaches are presented for natural trails and riverfront promenades.

Riverfront opportunities which are frequently encountered include shoreline stabilization alternatives, screening of visually objectionable areas, treatment of public right-of-ways terminating at the river, and special confluence areas. Confluence areas and road ends are illustrated.

Observation/educational opportunities include approaches which explain the river's historic significance, current river uses, such as commercial shipping and industrial activities, and environmental conditions and relationships. Typical approaches are presented for each of these areas of concern.

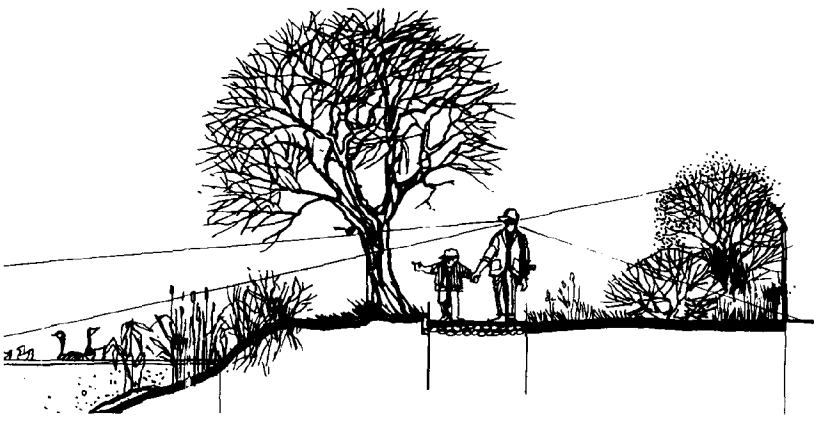
Natural Trails

Natural trail linkages may be located along rivers or major drainage and utility right-of-ways, abandoned railroads, and natural or wildlife areas. Such trails appropriately link inland areas to the riverfront and provide recreational opportunities in terms of bicycling, jogging, wildlife observation, photography, and cross-country skiing. Often such linkages can be coordinated within existing land use patterns and through a cooperative approach with existing land owners.

When preparing such trails, it is essential that participants and contiguous land owners feel confident that the trail can be adequately controlled. This typically includes not only security fencing, but also regular police surveillance. Maintenance concerns must also be taken into account. Design considerations include:

1. The trail area needs to be at least 30' wide; 50' is preferred.
2. If near a river bank or other natural feature, adequate room must be provided for protection of both the user plus the resource. The trail should be at least 7' back from a hazardous edge, and severe slopes should remain in natural cover, etc.
3. The trail should be a minimum 5' wide and stabilized with an appropriate surface material, such as asphalt, compacted stone or wood chips. Material selected should reflect anticipated foot, bicycle or skiing use.
4. Existing vegetation must be selectively thinned and unique specimens preserved.
5. A low maintenance level is anticipated in terms of grass cutting. However, since litter breeds litter, regular pick-ups are needed.

Appropriate locations for this approach are along the Ecorse and Huron Rivers, Grassy Island, and perhaps segments of Mud Island.

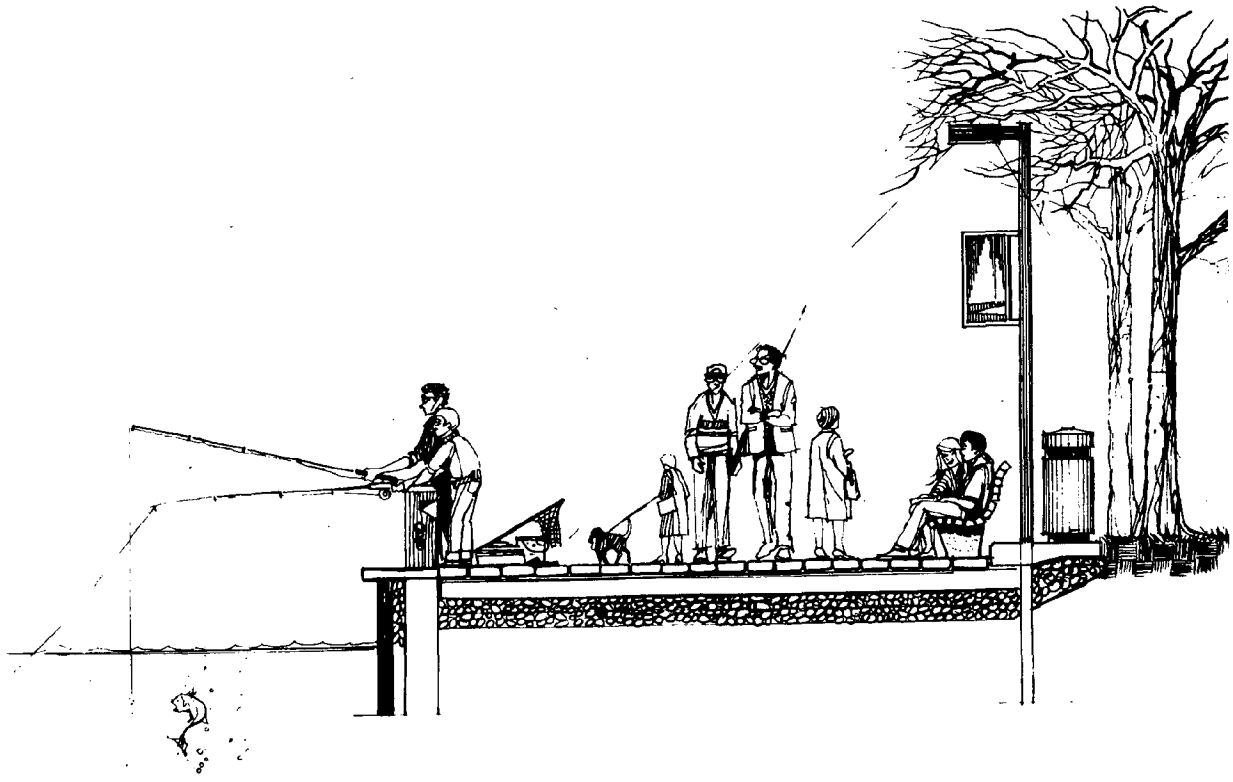


River Promenade

Riverfront promenades add excitement, attract people to the riveredge and unify water edge activities. Because of intensive use levels experienced along this interface, high development costs are warranted. While the following illustration depicts a concrete breakwall, properly placed rip-rap is also feasible and less expensive. There are three basic components to the promenade: the water edge, the walking area and the inland edge. Each of these has a specific function to play. Critical design considerations:

1. Connected barrier bollards, not chain link fence, is appropriate for defining the water's edge.
2. The promenade should be at least 15' wide, hard surfaced and well drained.
3. The inland edge should accommodate benches, lighting and waste receptacles. Decorative banners are also appropriate to lend color and to identify special use areas along the promenade. All elements should be vandal-proof.

Appropriate locations for new or expanded promenades are at Ecorse Memorial Park, Bishop Park, Elizabeth Park and possibly Mud Island.



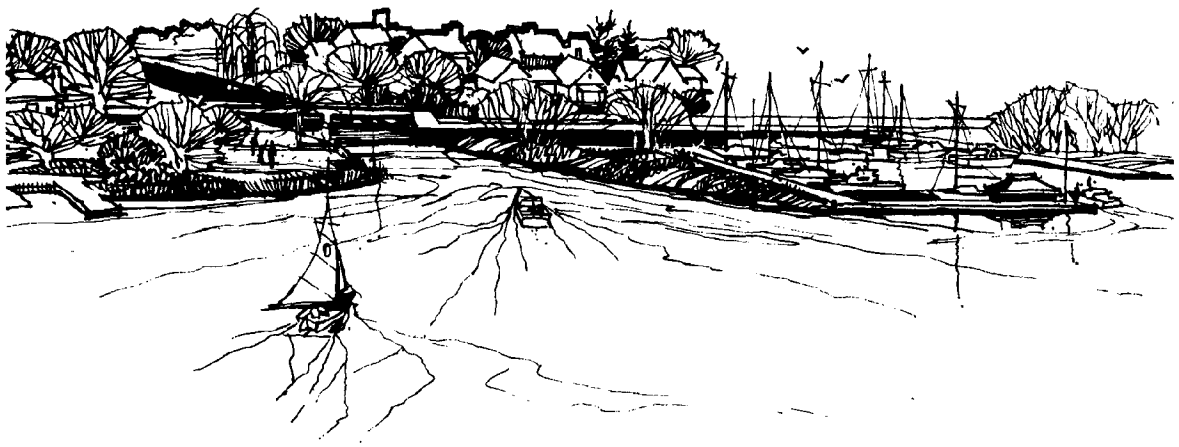
River Confluence

Within the study area, a number of smaller rivers and channels join the Detroit River. Too frequently these locations are appreciated for their development advantages without respecting their visual and scenic appeal. These areas offer very different environments from those encountered on the big river. This includes volunteer vegetation, calm water, a feeling of enclosure and human scale. Few confluence areas exist and, therefore, their development warrants careful evaluation. The Ecorse River provides a specific example of excessive river mouth development. Due to this development, boaters and people traveling Jefferson are hardly aware they are passing a special place in the river.

Design considerations include:

1. Preserving the river's natural edge as it joins the river.
2. Use trees and plant materials to accentuate this edge.
3. Encourage public access and provide overlook facilities when appropriate.
4. Accommodate an appropriate level of development without endangering the resource. In the accompanying sketch, a marina has been incorporated with access from both the major and minor rivers.

Areas of concern include Ecorse and Huron Rivers, River Rouge, and Elizabeth Channel.



Road End Opportunities

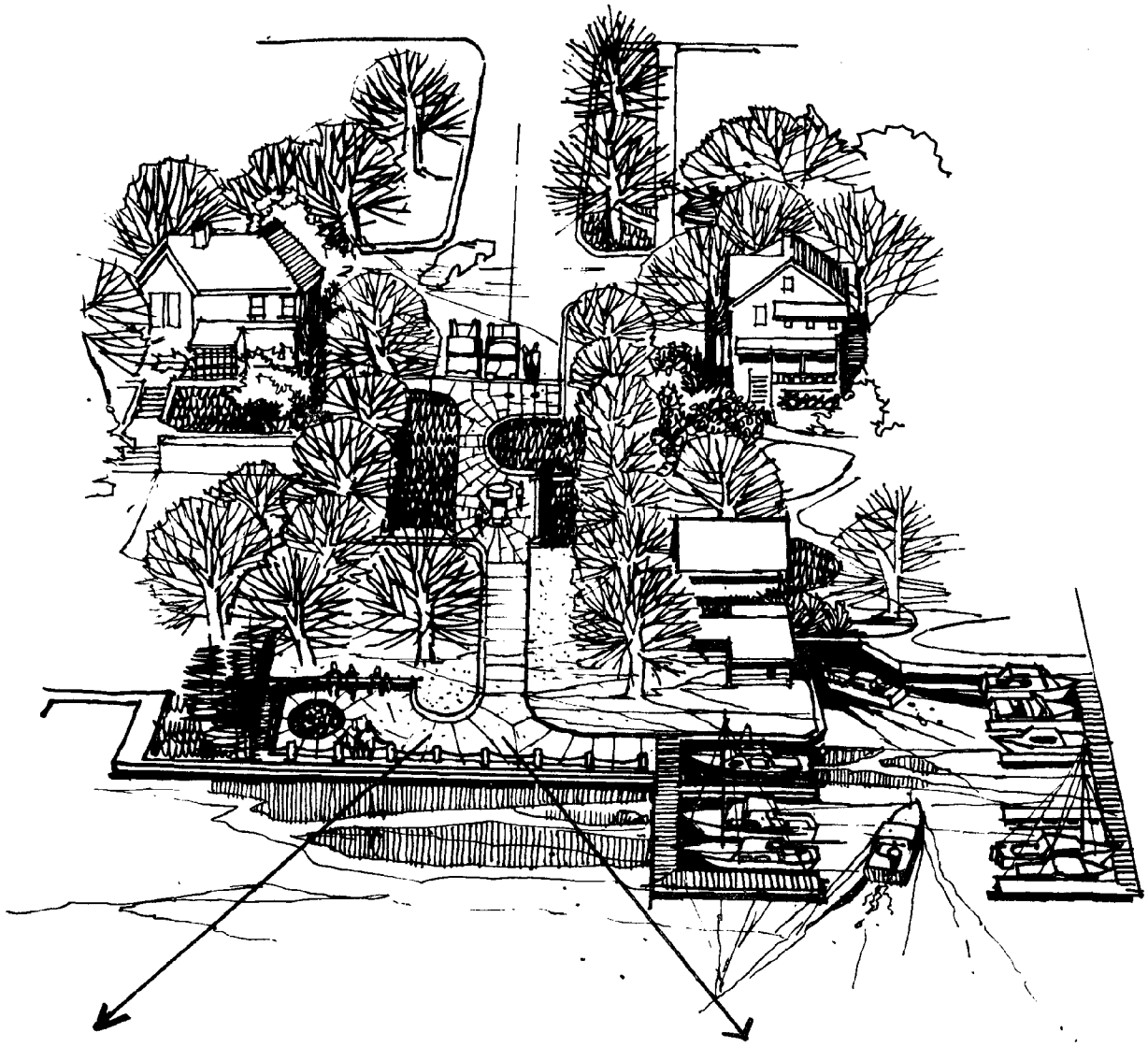
Roads in the Transitional Zone typically go to the river and just dead end. Litter, brush and mud frequently identify the riveredge. These areas detract from the local river experience.

Special opportunities exist for using these nodes as a technique for unifying the riverfront and providing neighborhood river opportunities. Development costs would be low since land acquisition is not necessary. Walks, parking areas, benches and shoreline stabilization are appropriate. The accompanying drawing illustrates the termination of a major collector street.

Critical design concerns include:

1. Vegetation should be used to screen neighboring residential properties, while special graphics identify this area as a river node.
2. Development level should accurately reflect anticipated use levels.
3. A variety of activities are provided, including fishing, sitting, informational displays.
4. The node is incorporated into the neighborhood through the use of similar paving materials and trees.

Such approaches are needed in Trenton, and occasionally in Wyandotte.

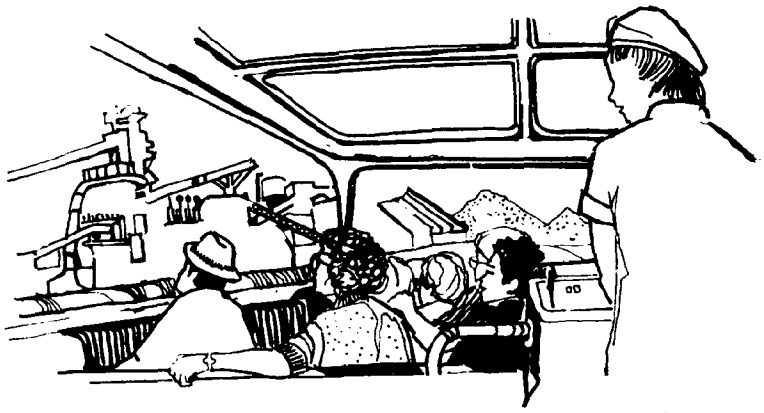


Industrial Observation

Industrial uses account for more than any other single riverfront use in both the Northern (80%) and Transitional (60%) Zones. A wide range of industrial activity occurs, providing special opportunities for educationally-oriented recreational facilities. To successfully respond to these opportunities will require the active industrial cooperation This assistance may include providing educational displays, plant tours, controlled access to key viewing areas, and visual access onto plant property.

Potential opportunities include both land and water-oriented approaches. Special boat tours can serve to emphasize the importance of the river, provide maximum control over visitors, and offer the public an opportunity to get out onto the river. Because the boat is able to approach ships and plants, it is a highly effective way to appreciate the scale of modern industrial facilities.

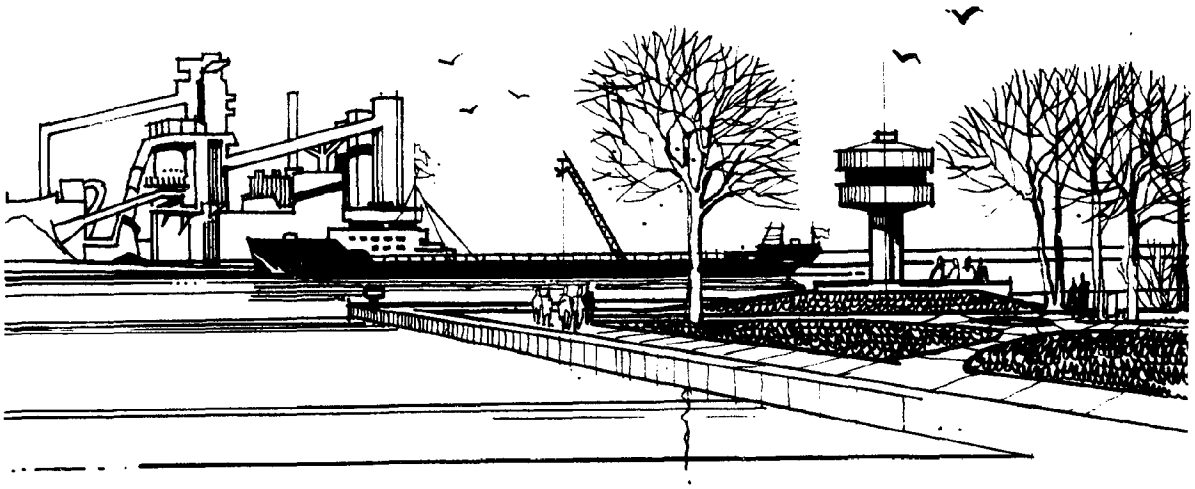
Land-based facilities can also play a major role in the interpretive process. Viewing areas typically are located along peripheral edges. As a result, an elevated viewing position will help compensate for the viewing distance. The accompanying illustration shows a major elevated observation facility. Protected from weather and the industrial atmosphere, visitors have the opportunity to see sophisticated audio-visual presentations.



Critical design concerns include:

1. Boat rides and elevated viewing areas emphasize different aspects of the industrial development.
2. A major public boat dock or elevated viewing area requires sufficient open space to encourage public access and to appropriately identify this as a special use area.
3. Car and pleasure boat access is an essential ingredient for a major viewing area.
4. Industrial plants have an opportunity to explain to local residents how their products are made, how they are helping the community, and how they are meeting their environmental responsibilities.

Appropriate areas for this level of commitment are the Rouge River Area, and in the vicinity of BASF Wyandotte, Great Lakes Steel, and McLouth Steel.



River Activities Yesterday and Today

Ship viewing and river watching are two of the most important existing recreational activities in the Downriver Area. Despite such interest, almost nothing has been done to inform visitors about life on the river. People are interested in the ships which travel this critical waterway. What are the different types of ships and how do their uses vary? How can the shipping line be identified? Where are these ships coming from and where are they going? What cargoes are they carrying, etc., are not unusual questions.

Equally important, yet even more forgotten, are historical points of interest. Items such as the 1889 World's Fair held at the Rouge River Area, early Potawatomi Indian settlements, Amherstburg, the Ecorse Rowing Club, etc. A terrific opportunity exists to relate Downriver events with displays and activities presented at Fort Wayne, Greenfield Village or the Wyandotte Historical Museum.

The following sketch illustrates a relatively straightforward method for presenting such information. A wide range of alternatives exist, including kiosks, display boards, audio presentations and informational walks. Whatever the format, there is no existing recreational facility on the riverfront which could not benefit from such an approach.

Critical design concerns are:

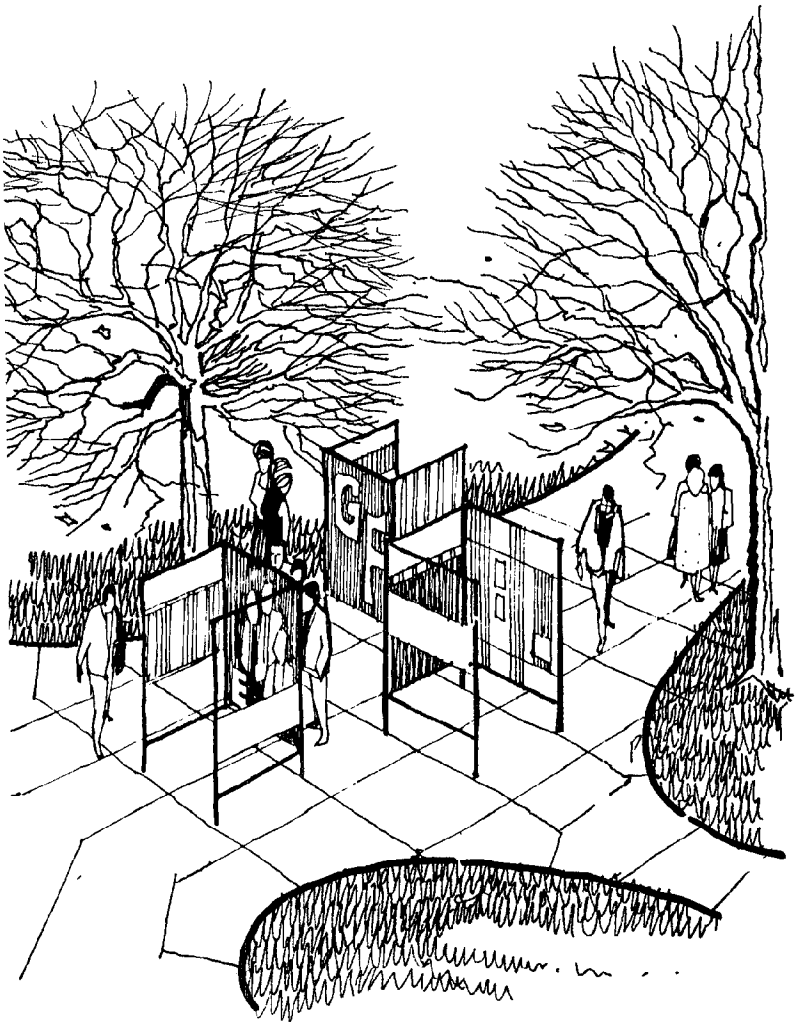
1. The display should be flexible to accommodate a wide range of information--historical, river-oriented, industrial, the Second Grade Art Contest, etc.

2. Content should be changed at least once a month.

3. The display must be conveniently located along major pedestrian routes.

4. It must be vandal and weatherproof.

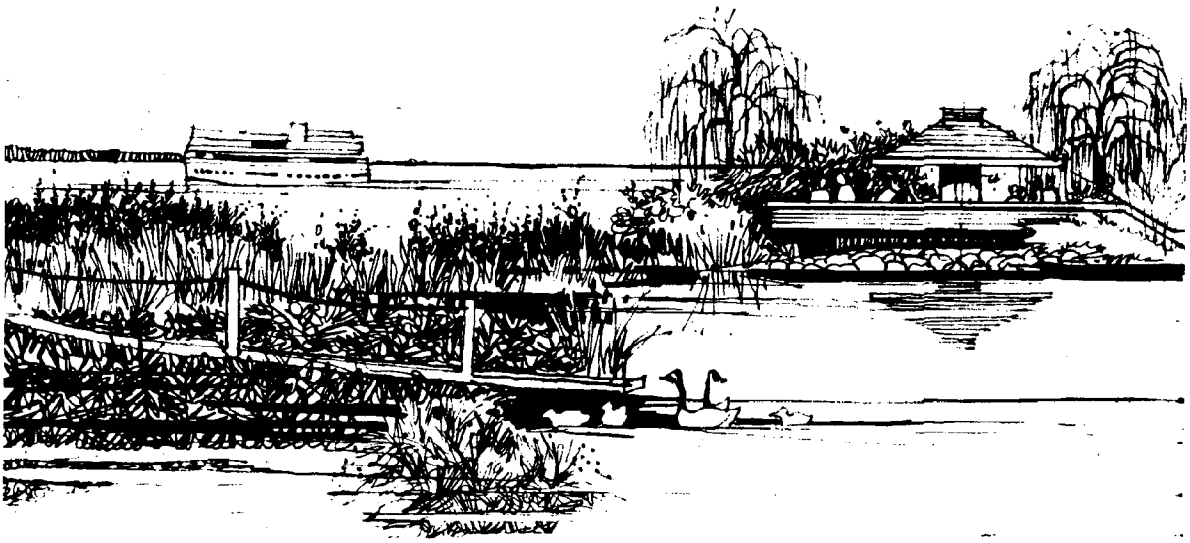
Such an approach is appropriate at both municipal and regional recreation facilities. These include Belander, Ecorse, Bishop and Elizabeth Parks, as well as the proposed recreation areas.



Wildlife Interpretation

Few natural habitats exist near the industrialized portions of the DCC. As a result, those which do exist are relatively unique. The Huron Clinton Metropolitan Authority is proposing a major interpretive facility at Lake Erie Metro Park, while the Michigan DNR provides similar opportunities at Pointe Mouillee. It would appear equally desirable for the DNR and the U. S. Fish and Wildlife Service, and even HCMA, to support such activities closer to major population centers. Grassy, Celeron and Stony Islands all have something special to offer. Trails, interpretive displays, observation blinds all offer appropriate recreational opportunities.

The following illustration shows a proposed observation shelter on Grassy Island. Such an approach deserves the support of the Fish and Wildlife Service. Numerous other less expensive opportunities are also feasible in order that the resource can serve both wildlife and man. Such opportunities warrant our attention.



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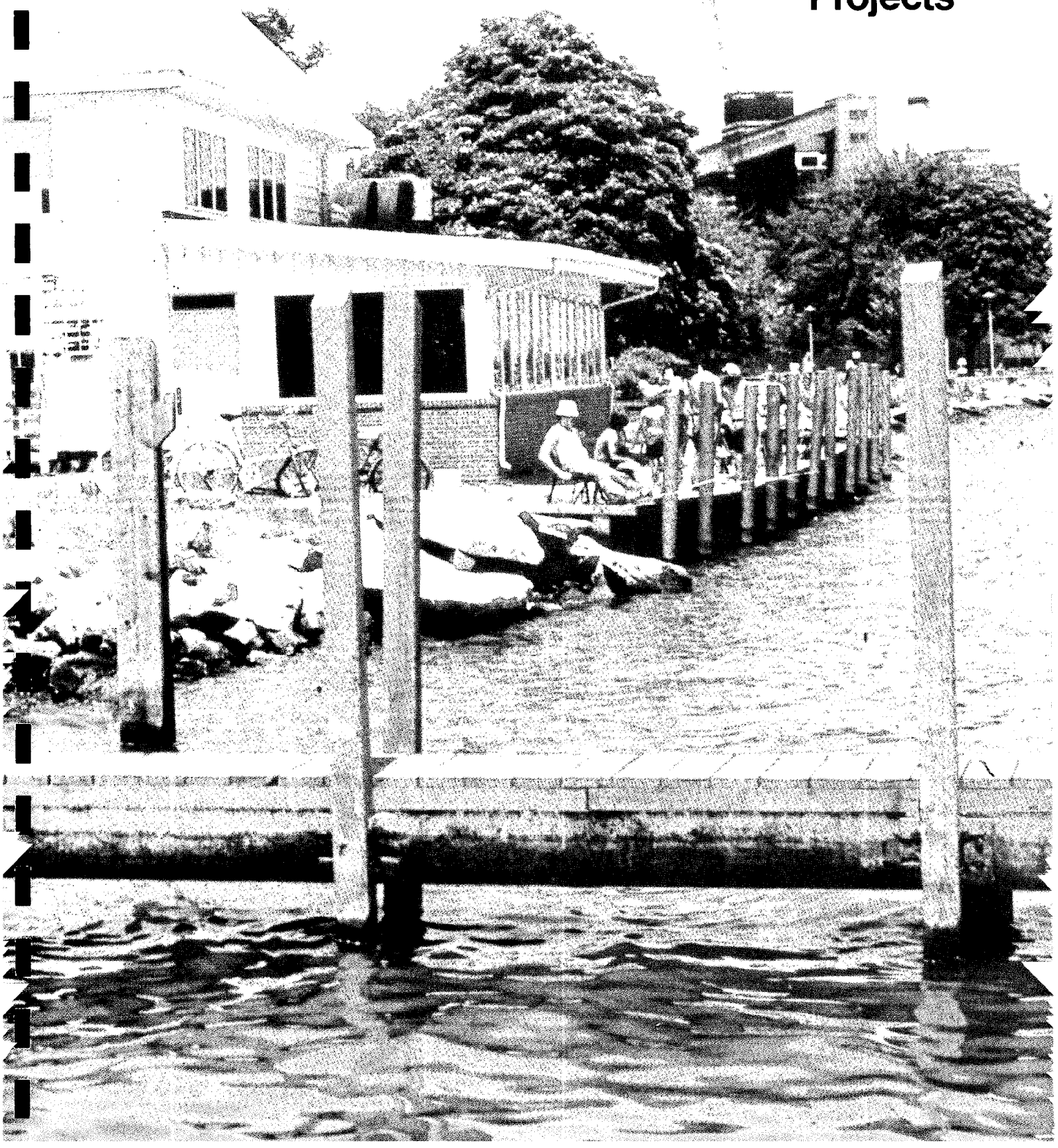
5 Priority Projects



PRIORITY PROJECT INTRODUCTION

Recreational Master Plan alternatives were discussed and revised during a Working Committee meeting, then presented to the Advisory Committee, which included a slide show followed by lunch and a boat tour of the study area. Evaluation forms were filled out by the committee members, which were then submitted to DCC and the project team. Follow-up discussions were conducted with representatives from key agencies and organizations. Based upon these discussions, project priorities were agreed upon and two high priority projects identified.

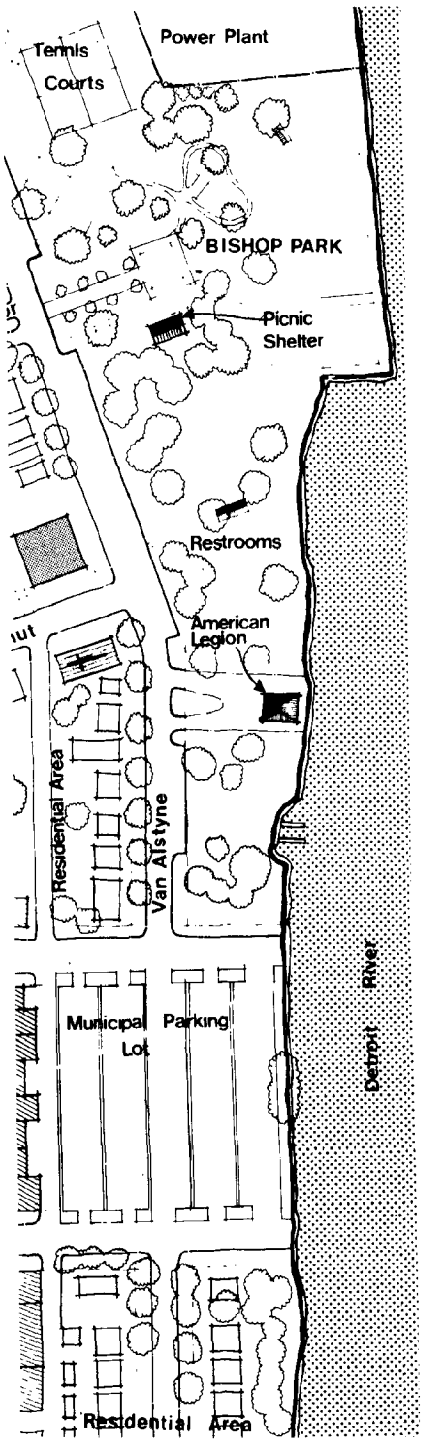
Selection of high priority projects were made according to (1) the need to pursue two very different sites in order to demonstrate a variety of approaches; (2) the existing level of community enthusiasm and support; (3) the community's ability to pursue funding opportunities and to quickly move toward project implementation; and (4) general endorsement by the Working and Advisory Committees.

Implementation of these criteria resulted in the selection of Bishop Park, Wyandotte and the Ecorse River Area as the high priority project areas. Once selected for closer study, the project team visited these sites and carefully noted existing conditions. Frequent trips were made to the municipal agencies in order to collect detailed information relating to ownership patterns, local needs, ongoing riverfront projects, local priorities, etc. Because of the lack of existing base sheets, 100-scale drawings were prepared.

At least two alternative plans were produced for each site. Workshop sessions were conducted also so that municipal and community leaders, DCC and CZM could review the plans and inject concerns inadvertently overlooked. This proved to be one of the most essential steps in the entire design process.

SCHEMATIC SITE PLANS

Schematic site plans are not final designs. They represent an important first step in a three step design process: 1. Schematic Design; 2. Final Design; and 3. Construction Drawings and Specifications. Schematic site plans identify potential activities, land use relationships and illustrate unique ways the site can be developed. In this project, these plans will provide a basis for evaluating local aspirations and hopefully stimulate new interest in riverfront recreation.



BISHOP PARK, WYANDOTTE

This site was selected because it offers an important opportunity to demonstrate how the riverfront can contribute not only to contiguous park areas, but how it can straightne the downtown character of a community. With Bishop's Municipal Park providing the nucleus of the proposed plan, other Downriver communities will hopefully be able to identify similar opportunities which their communities will decide to pursue.

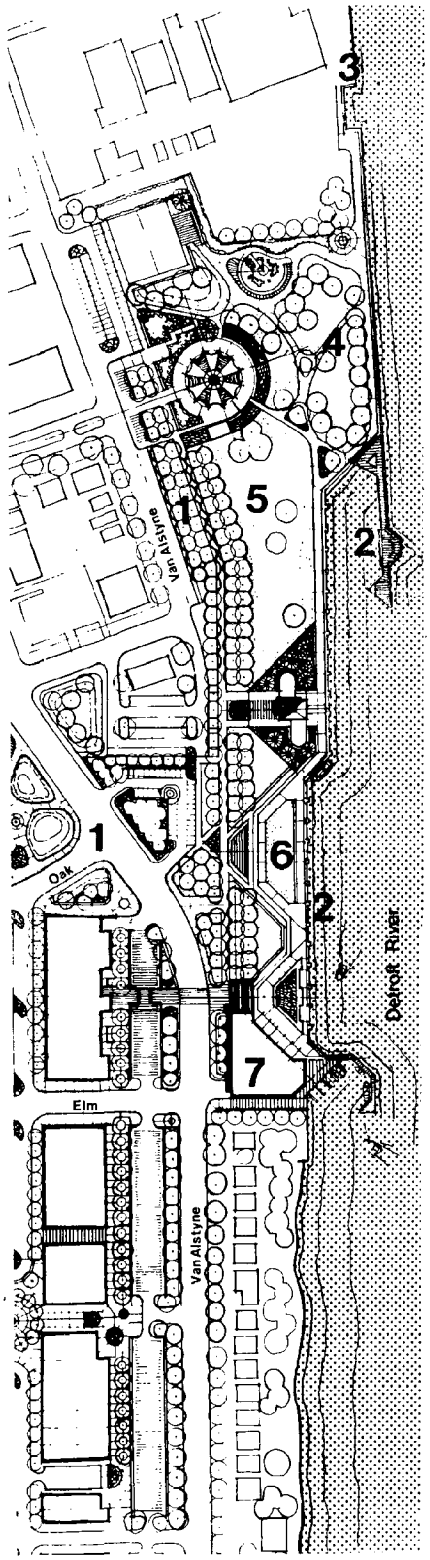
EXISTING CONDITIONS

This park currently presents an image of tall trees, expansive grass areas, and an exciting interface with the Detroit River. The restful setting provides an unique opportunity for residents to experience the river. Containing 12.2 acres, the site offers numerous day use opportunities. River watching, picnicking and particularly bank fishing are the major activities. Facilities include the children's play area, tennis courts, band shell, Bob-lo Boat concession, and a proposed handicapped fishing pier.

The site is delineated by the Detroit River on the east; Wyandotte Municipal Power Plant on the north; homes, high-rise apartments and a church across Van Alstyne Street to the west; and the existing municipal parking lot to the south. This facility currently provides approximately 290 spaces and is used by both shoppers and park visitors.

Currently, there are two development recommendations being pursued by the city which will affect the park area. The first is a proposed handicapped fishing pier. This 10' wide elevated pier is proposed to parallel the shoreline extending 400' south from the southern end of the ship dock. The Michigan DNR is supporting this effort through their Urban Fishing Program.

The second recommendation under consideration is the Van Alstyne/Biddle Road realignment project. Officially approved as part of the 1974 Master Plan, implementation will have a major impact on both the Central Business District and the Wyandotte-Detroit River edge. The plan proposes that Biddle Street (Jefferson) between Chestnut and Eureka be converted to a pedestrian mall and that regional traffic be diverted via a new connector down Van Alstyne Street. Certain parcels have already been acquired to accommodate this realignment.



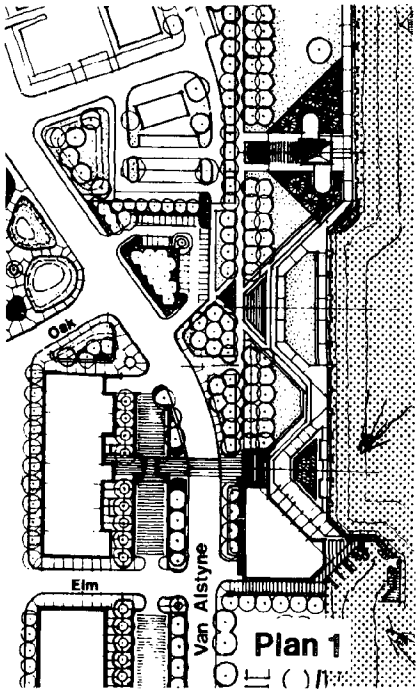
PROJECT RECOMMENDATIONS

In the past, Wyandotte has successfully interwoven new development into the existing urban framework without destroying community elements. This is particularly evident at Bishop Park where residential, recreational, and commercial uses all successfully interface. Because of this close interaction, it is difficult to strengthen one use without weakening others. In an effort to illustrate how the proposed Biddle Road realignment will relate to these elements, two alternative site plans are presented. These plans respond to the following concerns:

1. Illustrate how the Biddle Road realignment will affect riverfront uses.
2. Identify ways that the park can more effectively link the community with the Detroit River.
3. Unify both river and land edges of the park.
4. Provide a wider range of exciting recreational opportunities.
5. Strengthen and refurbish key sections of the park.
6. Explore ways to expand Bishop Park.

The following Schematic Plans recognize current use patterns and potential opportunities along the riverfront in the Bishop Park vicinity. These proposals can best be explained by identifying areas of primary concern. These are:

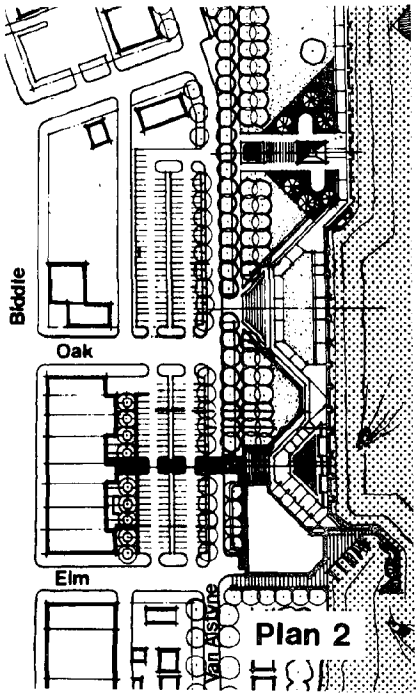
1. **Biddle Road Realignment**
2. **Pedestrian Promenades**
3. **Yacht Club Linkage**
4. **Day Use Area**
5. **Open Space Area**
6. **Special Events Area**
7. **Restaurant Area**



1. Biddle Road Realignment

Over the last year, there has been growing uncertainty regarding the proposed realignment project. Currently, Wyandotte residents are examining the issues carefully. They realize that the realignment will have significant impacts on numerous segments of the community. The road realignment and pedestrian mall was intended to stimulate commercial activity in the CBD. Store owners, however, are becoming concerned that such will not be the case. As of October, 1979, the Board of Directors of the Merchants' Association of Wyandotte publicly stated their opposition to the proposed realignment plan. Their decision reflected concern that the closing of Biddle Road to all vehicular traffic would encourage potential shoppers to simply bypass the downtown area. They have also suggested that automobile traffic continue to use Biddle, while truck traffic be diverted onto an inland street--away from the riverfront.

Because of this study's concern for the riverfront, two alternative schematic site plans have been prepared. The first illustrates how the proposed Biddle/Van Alstyne realignment could relate to existing land uses, while the second presents a status quo approach which assumes existing street patterns are preserved.

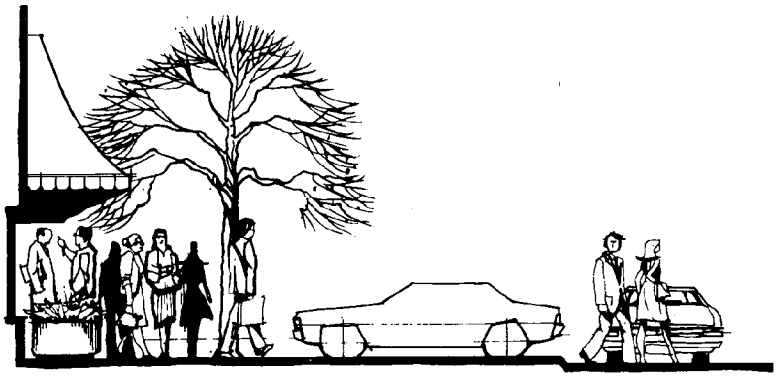


In order to clearly assess the impacts each alternative will have, both propose similar riveredge improvements at Bishop Park and that portion of the municipal parking lot east of Van Alstyne. Both include restaurant/boat tie up area, riverfront promenade, special events area, landscape panels, and the Van Alstyne walk. Significant differences do exist, however, along the urban edge. These differences can be described in terms of potential pedestrian linkages to the CBD, park expansion, parking capacity and impacts on residential areas.

Wyandotte's CBD is located one block off and less than two minutes walking distance from the river. It is the only Downriver community where boaters could have convenient access to an attractive and major shopping area. To respond to this opportunity will require that short term boat tie-up facilities be provided. A similar use currently exists next to the American Legion Building, and it is anticipated that these slips could be replaced with new facilities able to accommodate approximately 25 to 35 boats, not including the proposed restaurant tie-up area. It will be important to provide facilities which are not endangered by the river's surge or southeast wave action.

Access routes to the shopping area can be clearly defined and appropriately developed. In both approaches, special pedestrian corridors, landscaping, sitting areas, graphics, special paving material and colorful canopies are proposed. It is also suggested that shop owners maintain display kiosks along the route to remind visitors of shopping opportunities. It will be desirable that rear shop entrances be renovated to accommodate customer access from the river or from parking lots, as well as service functions.

Should abandoned Biddle be converted to a pedestrian mall, opportunities will exist along Oak Street to use open space as a basis for connecting downtown to Bishop Park. Plan 2. which acknowledges existing street patterns, relies exclusively on existing Oak and Elm Street pedestrian walks, and access to Biddle via rear store entrances. While Plan 1 obviously would encourage greater pedestrian movement between river and downtown, it substantially reduces parking opportunities in a critical area. The existing municipal parking lot provides approximately 330 parking spaces. In both instances, all existing parking spaces east of Van Alstyne street are removed. In Plan 1, the proposed Biddle/Van Alstyne connector cuts through the middle of the lot, while in Plan 2, no spaces are lost west of Van Alstyne. Both approaches require the loss of seven homes along the west side of Van Alstyne between Oak and Chestnut Streets (the church remains). Off-street parking is proposed for this site in both plans, but due to site configuration, Plan 2 offers 90 more parking spaces, as well as preserving the other half of the block for future development. Should Wyandotte, in the future, become interested in deck parking, the site on the east side of Biddle between Chestnut and Oak could offer many advantages. There are currently 436 parking spaces. Plan 1 allows for only 136 spaces, while Plan 2 allows 311 spaces. It is assumed that the loss of existing spaces could be compensated for in other areas of the CBD.



The following table identifies the effects these plans have on existing parking capacities:

Municipal Lot

Existing		329
Realignment	(Plan 1)	50
Status Quo	(Plan 2)	135

Proposed Off-Street Lot

Existing		---
Realignment	(Plan 1)	35
Status Quo	(Plan 2)	125

Van Alstyne Street Parking

Existing		107
Realignment	(Plan 1)	51
Status Quo	(Plan 2)	51

TOTAL

Existing		436 spaces	
Realignment	(Plan 1)	136 spaces	(-300)
Status Quo	(Plan 2)	311 spaces	(-125)

It has already been mentioned that both alternatives show the removal of the homes between Chestnut and Oak. This area unfortunately represents a critical centrally located area capable of accommodating riverfront growth. The residential area south of Elm along the river will be greatly affected by the Plan 1 realignment. Road widening, truck noise and traffic levels will force a change away from single-family use. The historic, well-maintained homes and quiet residential street which currently contributes to the special riverfront character evident in Wyandotte will be lost.

Alternative land use and vehicular circulation issues were reviewed by the project team. Using the alternative site plans as a basis for comparison, the following advantages and disadvantages are evident.

Plan I - Realignment Evaluation

Advantages

1. Trucks can be routed around rather than through the CBD.

2. Park can effectively be linked to the proposed mall and plaza areas.

3. Small parcels west of the park but east of the new road can become part of the park--providing major pedestrian links.

4. Public access to the riverfront is preserved.

Disadvantages

1. Historic residential area along Van Alstyne is severely threatened.

2. Potential park expansion into existing municipal parking lot is partially restricted.

3. Traffic noise levels and emissions more noticeable in Bishop Park.

4. Greater loss of existing parking spaces.

5. New route creates a barrier separating CBD from the River.

6. Approach conflicts with the concept that the Detroit River is a unique and special resource.

7. Restaurant parking cannot be accommodated contiguous to the proposed restaurant.

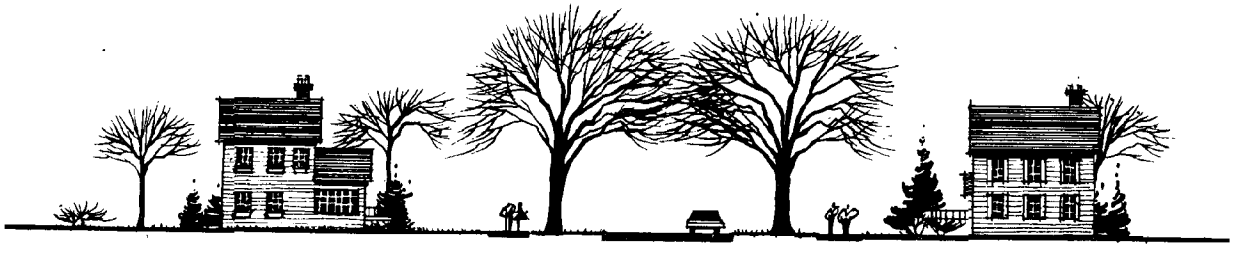
Plan 2 - Status Quo Evaluation

Advantages

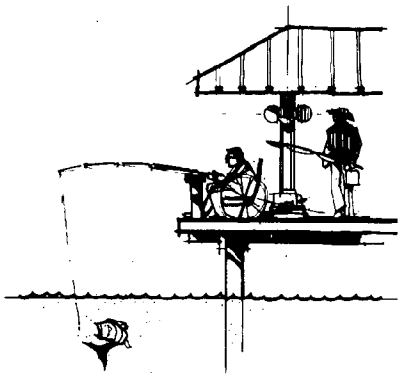
1. Detroit River is not infringed upon.
2. Public access to the riverfront is preserved.
3. Historic residential area south of park is preserved.
4. Entire parking lot area could be incorporated into the park--additional parking spaces would be lost.
5. Additional parking spaces could be created by removing the homes directly south of the church on Van Alstyne. (Both plans show these homes removed.)
6. Easier for river shoppers to reach CBD.
7. Distance reduces noise and emission impact on Bishop Park.
8. Restaurant parking is next to the building.

Disadvantages

1. Truck traffic continues along Biddle.
2. Pedestrian mall cannot be created unless vehicular capacity is reduced or truck route is relocated west of Biddle.



Based upon these comparisons, it is obvious that the proposed realignment will have a negative affect on Wyandotte's relationship with the Detroit River. Inland economic, circulation and general community repercussions obviously must also be taken into account. It is ultimately and rightfully the responsibility of local residents and their representatives to consider all impacts and determine which approach may strengthen community objectives. It is important that the community arrive at a decision as soon as possible so that related questions, such as restaurant and park development, can be efficiently dealt with.



2. Pedestrian Promenades

Two major promenades are proposed to link the park and encourage movement from one use area to another. The riverfront walk is proposed to extend from the Power Plant past the American Legion Building and along the entire publicly owned shoreline. Envisioned as a continuation of the existing ship dock walk with informational kiosks, sitting areas, brightly colored banners and boat tie-up area, this promenade will serve to attract visitors to the water's edge and to generate a feeling of activity and excitement. Because visitors come to Bishop Park primarily to experience the river, this land water interface is considered a critical park component. Therefore, this is a high priority area, both in terms of anticipated visitor use and also in terms of the quality and variety of facilities provided along its reach.

The handicapped fishing pier which is currently being considered by Wyandotte will be the first such facility in the Downriver Area. It will obviously and most appropriately encourage recreational participation by the handicapped. Because the pier will be supported on pilings extending over the river, it will be highly visible and in sharp contrast with the scale and mass of the riverfront promenade. Users will inevitably include not only handicapped fishermen, but most park visitors.

As a result, the handicapped fishing pier will contribute significantly to the river walk experience. It is important that the pier length reflect the scale of the park and contribute to the variety of activities without totally blocking land views of the river. It is, therefore,

suggested that the pier be about 250' in length. In order to accommodate group interactions, major sitting nodes are proposed on both river and land sides of the pier. These covered areas offer shade and protection from the weather.

Despite the availability of the handicapped fishing pier, it is still contemplated that bank fishing will continue to occur along the riveredge promenade. It is, therefore, important the promenade be at least 15' wide to accommodate fishermen and pedestrians.

The Van Alstyne promenade is proposed so that it will not only unify the park edge, but will help link the park to the surrounding urban environment. Large canopy trees, sitting areas and a 15' walk direct pedestrian movements from surrounding key access points into the park--guiding visitors to major points of interest. Street parking is proposed to be removed along Van Alstyne from Chestnut to Elm to provide maximum river visibility from outside the park and to encourage pedestrian access into the park.

3. Wyandotte Yacht Club Linkage

Bishop Park is separated from theYacht Club by the Municipal Power Plant. Just as park visitors enjoy watching the river and walking along its edge, so do they enjoy observing the hustle and bustle associated with marinas. Based upon initial responses from municipal leaders, it appears feasible to extend a river walk north from the park past the front of the power plant, terminating at an observation area overlooking the boat basin. It will obviously be necessary to restrict public access to the plant, but this can be accomplished in a manner which allows walking the water's edge. When the power plant is unloading coal from a freighter, all public access must stop. During such times, the river walk gate will be closed and all public access along the water temporarily halted. Since this occurs relatively infrequently, this should not be a major problem. This offers an exciting opportunity for industry and recreation to demonstrate their ability to work together.

4. Day Use Area

The day use area is located at the north end of the park. The existing tennis courts, the Superior Street entrance, existing picnic shelter and tot lot form the nucleus of the day use area. Revitalization is proposed at several key areas. It is recommended that a new entrance plaza or

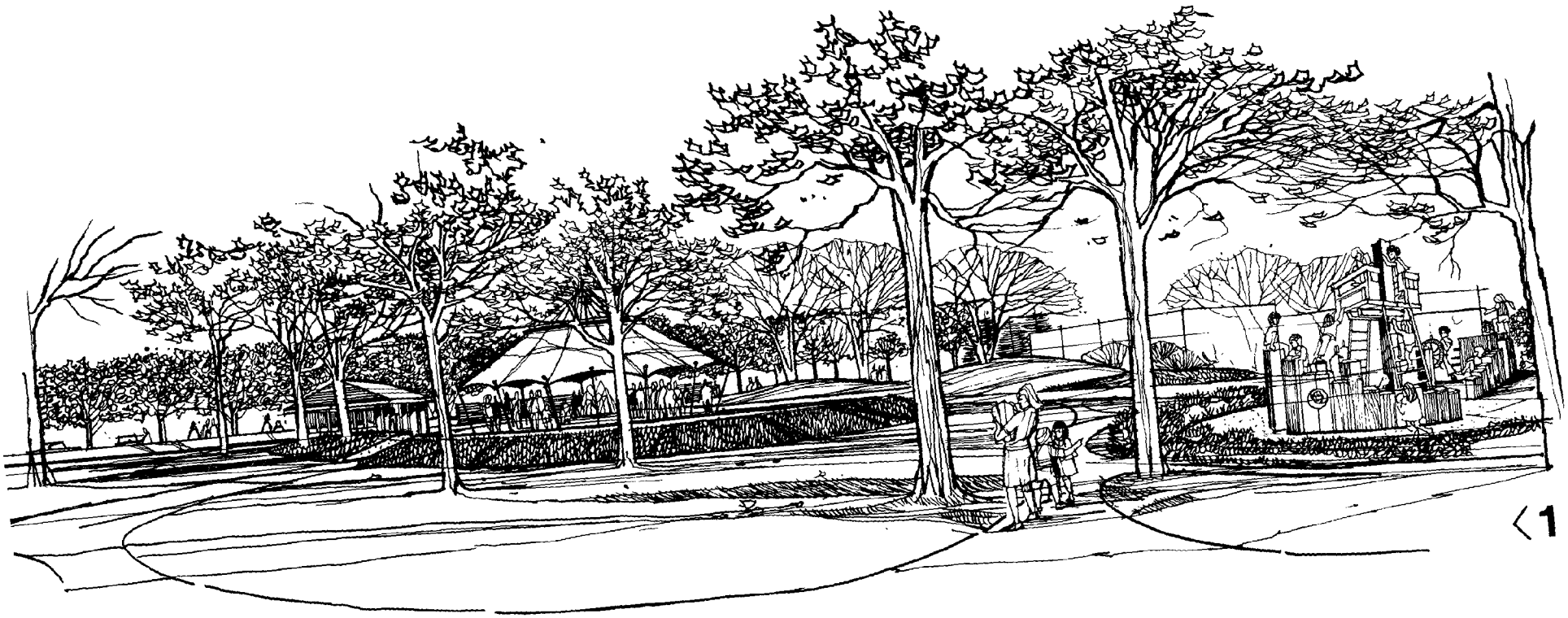
small group meeting area be created at Superior Street with a colorful canopy to welcome the visitor. This requires expansion and improvement of the existing hard surface area. A gentle earthform and edging with a sitting wall and new landscaping would create a moderate sense of enclosure. An informational kiosk at the plaza displays a schedule of special events occurring at the park and the community, as well as identifying park facilities and operational rules. Perspective Sketch I illustrates how this plaza might appear. The viewing position is shown on the schematic plan and is as if you are standing on the walk halfway between the river and the entrance plaza and looking northwest toward Van Alstyne Street.

Organized around the entrance zone are activity areas. The children's play area is relocated further away from the street and built into a series of earth mounds which extend outward from the tennis court slopes. This will reduce the apparent severity of the existing slope, while using the grade change to add excitement to the play area. Volleyball, multi-use play areas, an informational display explaining how the power plant functions, and the extension of the river walk behind the power plant leads visitors to the Wyandotte Yacht Club. When ships are unloading materials at the power plant, this walk is temporarily closed.

The power plant is in the process of increasing its use of coal and, therefore, an expanded coal storage area is needed. Initially, power plant officials considered expanding the storage area into the park, but later concluded such an approach would not be in the community's best interest. The loss of land in this area would have severely curtailed day use facilities.

5. Open Space Area

This area is currently responsible for creating the positive image visitors have of Bishop Park. In order to strengthen the essential natural character of this area, non-essential walks and older buildings are proposed to be removed and additional trees added. This centrally located area extends from the existing picnic shelter on the north to the proposed outdoor cafe concession proposed at the existing American Legion Building. Picnicking and river watching are proposed as the primary activities for this area.



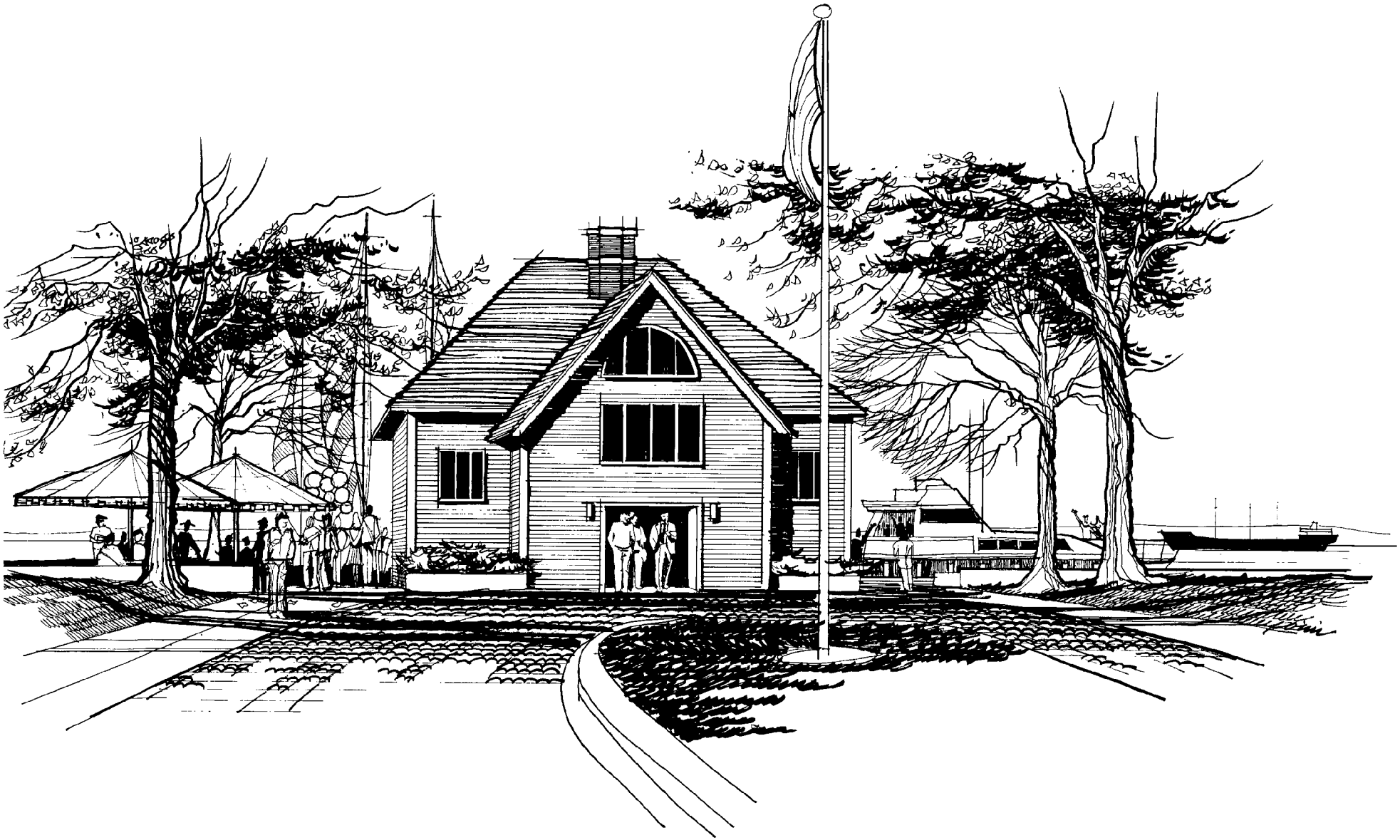
6. Special Events Area

This area extends from the American Legion Building south to the proposed restaurant area. It is proposed that the northeast section of the existing municipal parking lot be sacrificed to support this use. The facilities and activities proposed for this area are oriented toward more urban and intensive recreational uses which supplement those recommended for the open space and day use areas. New activities include outdoor sitting and eating areas, amphitheater, special display facilities and short term boat tie-up facilities.

It is proposed that the role of the municipally owned American Legion Building be modified. The City has leased the facility to the Legion for $1.00 per year rent. This facility can make significant contributions to the park by providing an outdoor cafe/sitting area, public restrooms (to replace the one proposed to be removed from the open space area), public meeting and activity rooms, and possible park operations office. It is apparent that additional building renovations will be required to accommodate these uses. It is also recommended that the American Legion continue to use the building but that priority first be given to public use, particularly during the day, on weekends and holidays throughout the recreational season. The sketch on the following page illustrates these uses.

The presentation/amphitheater area relates to the major parking lots proposed along Van Alstyne and serves as a major entrance to the park. The surrounding shade trees direct visitor views when entering the park to the park's major feature--the Detroit River. It also serves to connect the two major promenades.

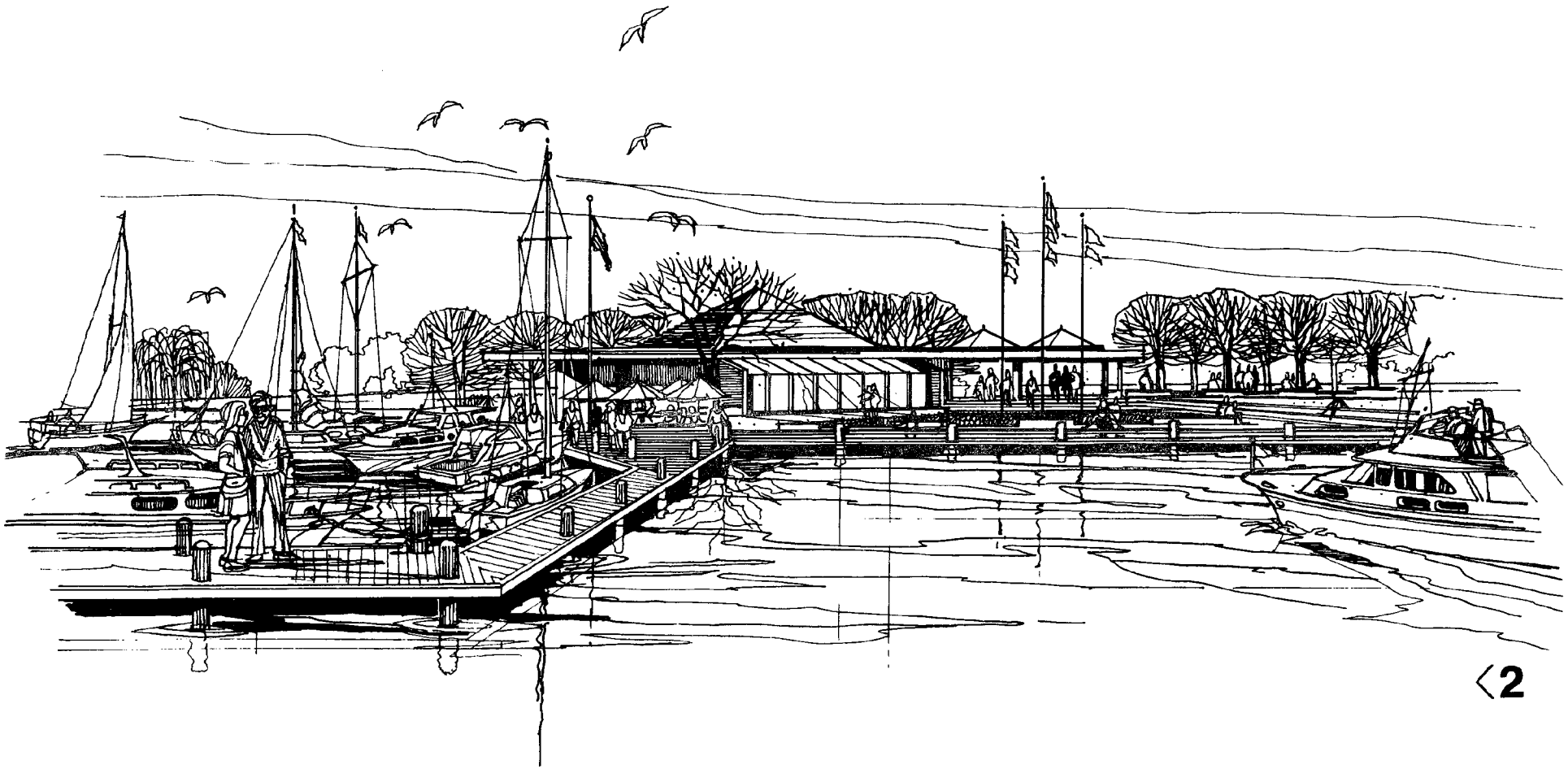
The amphitheater is proposed to be centrally located in the special events area halfway between the American Legion Building and the proposed riverfront restaurant. It contains a series of concrete benches/steps gradually sloping down to the presentation area which is a combination hard surface/grass area. Adequate space is available for public discussions, theatrical or dance presentations, gatherings, etc.

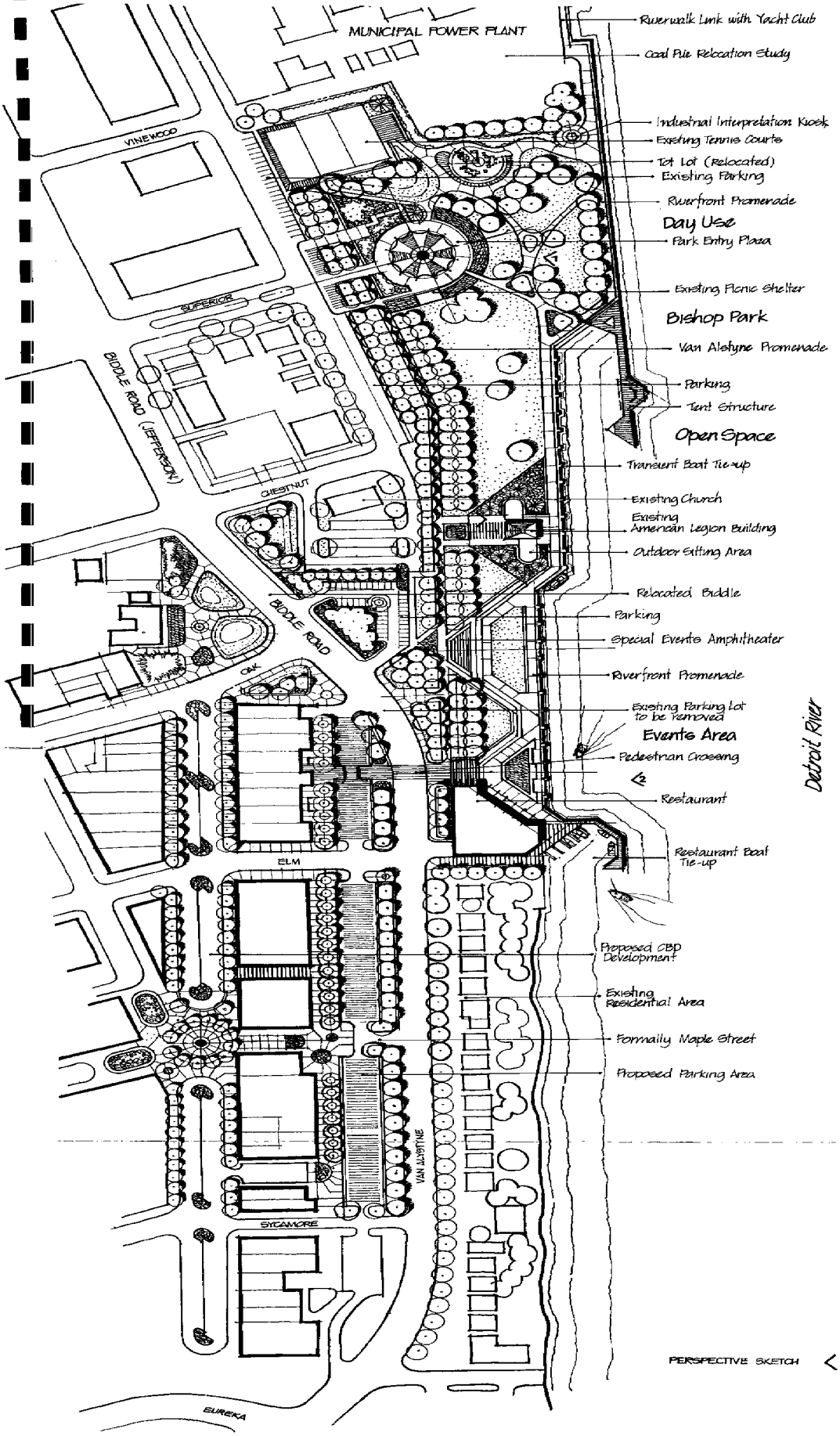


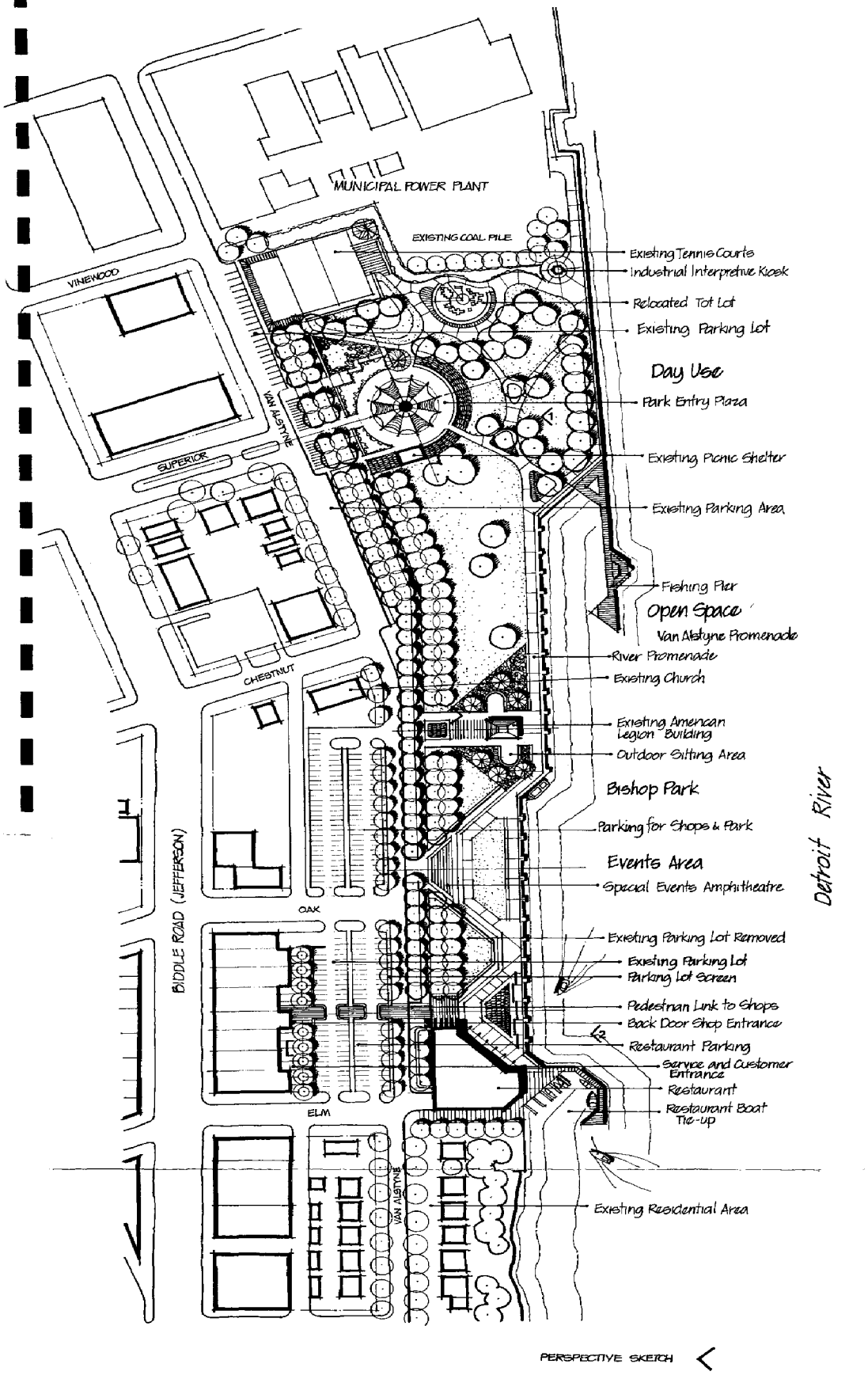
7. Restaurant Area

The Downriver Area needs a quality river-oriented restaurant. Wyandotte is in an excellent position to attract such a facility and the opportunity to incorporate a restaurant facility as part of its riverfront revitalization program. A restaurant developer desires to locate on the riverfront with convenient and adequate parking, and well-maintained and appropriate surrounding uses. The city can offer all of these attributes and has an opportunity to use the restaurant development to assist them in realizing many of these project objectives.

The restaurant is proposed to be built on the southeast quarter of existing municipal parking lot. At this location, the building will terminate the river promenades and public waterfront, serve to attract people to this end of the park, and screen park noises and lighting from the neighboring Van Alstyne residential area. Because restaurant customers will be arriving by both car and boat, the developer can be expected to build a private boat area, contribute to waterfront development in proximity to his building, and assist with parking lot renovations. It is, therefore, anticipated that the proposed restaurant will contribute to the city's riverfront reputation and generate visitor activity during periods of low recreational use--such as at night and during the winter months. It is also a highly effective means of incorporating private dollars into riverfront redevelopment activities. Perspective Sketch 2 illustrates how the restaurant would appear from an approaching boat.




MUNICIPAL POWER PLANT
VINEWOOD
SUPERIOR
BIDDLE ROAD (JEFFERSON)
CHESTNUT
BIDDLE ROAD
OAK
ELM
SYCAMORE
VAN ALSTYNE
EUREKA
Riverwalk Link with Yacht Club
Coal Pile Relocation Study
Industrial Interpretation Kiosk
Existing Tennis Courts
Tot Lot (Relocated)
Existing Parking
Riverfront Promenade
Day Use
Park Entry Plaza
Existing Picnic Shelter
Bishop Park
Van Alstyne Promenade
Parking
Tent Structure
Open Space
Transient Boat Tie-up
Existing Church
Existing American Legion Building
Outdoor Sitting Area
Relocated Biddle
Parking
Special Events Amphitheater
Riverfront Promenade
Existing Parking Lot to be Removed
Events Area
Pedestrian Crossing
Restaurant
Restaurant Boat Tie-up
Proposed CBD Development
Existing Residential Area
Formally Maple Street
Proposed Parking Area
Detroit River
PERSPECTIVE SKETCH



PERSPECTIVE SKETCH

IMPLEMENTATION PACKAGE

The following Implementation Package is composed of four segments--cost estimates, a phasing program, funding opportunities, and a suggested implementation procedure.

Cost Estimates:

It is anticipated that approximately 4.2 million dollars will be required to implement the proposed riverfront improvements. This includes the entire area east of Van Alstyne Street and the proposed parking lots and landscaping between the street and the commercial buildings. The costs involved with both alternatives approximately equal. These figures, however, do not include acquisition or development costs associated with the road realignment or mall development. It is important to note that these figures are expressed in 1979 dollar values and that a 25% contingency has been included because of the preliminary stage of design development.

1.	Demolition	$ 100,000

Saw cutting, curb removal, bituminous parking and road removal, walls and building removal.

2.	Open Space and Day Use Area	2,000,000

Sea wall, concrete walk and steps, curb and gutter, bituminous and special pavements, kiosks, seat and retaining walls, fill, lighting, fountain, tot lot, fishing pier, trees, topsoil and seed.

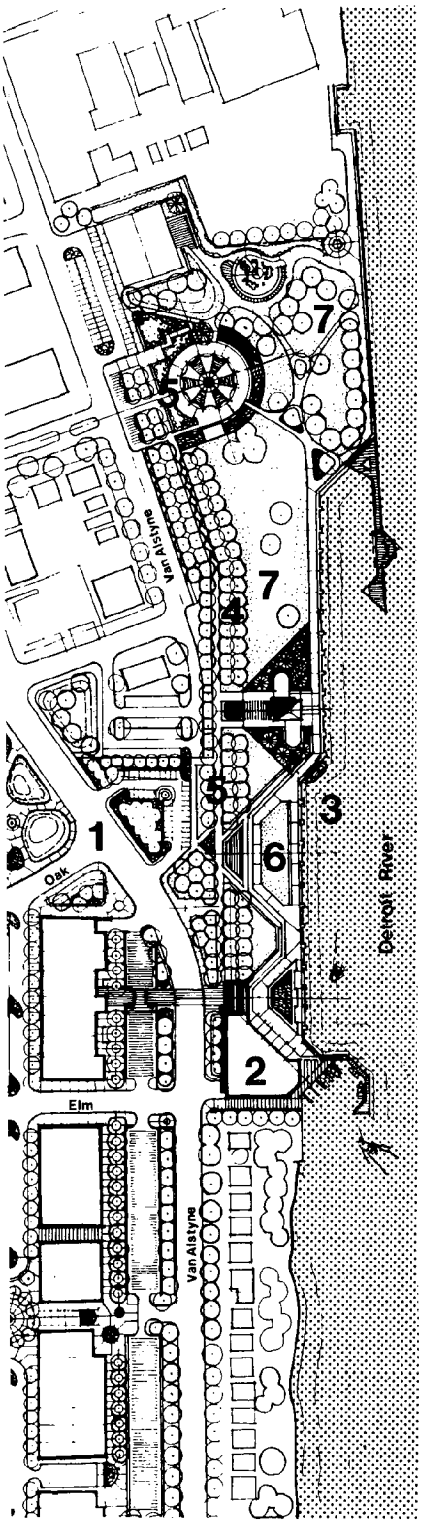
3.	Special Events Area	1,650,000
	(Excluding Restaurant Building)	

Curb and gutters, bituminous pavement, special pavement, concrete walls and steps, curb and seat walls, retaining walls, fill, canopies, lighting, trees, sod, topsoil and grass seed.

4.	Restaurant Area	401,000
	(Building Costs Are Not Included)	

Dock and sea wall, bituminous pavement, special paving, concrete walk and steps, curb wall, fill, lighting and trees are assessed to be public costs.

TOTAL	$4,151,000



Although the cost to the City diminishes over time, it is recommended that implementation occur over a maximum five to ten-year period. Beyond ten years, the likelihood of total plan implementation is significantly reduced. The City's proposed 1979-1980 budget allocates approximately $560,000 for recreational activities, with the majority of these funds being used for maintenance of existing programs and operating expenses. In order to complete the entire plan within the suggested time frame, between $123,000 and $205,000 will be required annually.

Phasing Program

Because of high construction costs, it is unusual for most communities to make this kind of commitment in one phase. It is, therefore, suggested that these costs be broken down into a series of specific projects reflecting the community's funding abilities. The priorities of projects obviously requires community endorsement. JJR, however, based on their knowledge of the riverfront, would like to initiate this process by suggesting the following sequence:

1. Settle the Biddle Street relocation question.
2. Continue with restaurant developer negotiations.
3. Develop riverfront promenade, short term boat tie-up facility and fishing pier.
4. Planting of canopy trees.
5. Development of the Van Alstyne promenade and day use entrance area.
6. Development of the special events area.
7. Renovation of day use area and open space area.

Estimated Annual Cost:

General costs the City can be expected to bear for implementation of the recommended plan are shown using a variety of time intervals. Because of the variance in the types of funds available, the following information is intended only to provide a rough guideline of what the City might allocate each year for implementation.

Funding sources can vary significantly in terms of required participation, ranging from complete funding to a 50% matching. The City would assume responsibility in an 80/20 match for the second figure, in this case 20%. Examples of typical funding sources and their cost sharing requirements are presented below:

Program	Agency/City
Land and Water Conservation	50/50
Urban Park and Recreation	70/30
Coastal Zone	80/20
Waterways	75/25
Urban Fisheries	50/50
Kammer	variable
Non-Motorized Vehicle	variable
Shoreline Stabilization	variable

The use of the term "variable" is intended to include a wide range of alternative funding options contingent on the program being pursued. The two primary funding sources for recreational projects are typically Land and Water Conservation Funds, and Urban Parks and Recreation Funds.

Cost of Implementation Over:	Total Dollars Required
1 year	$4,100,000/yr.
5 years	820,000/yr.
10 years	410,000/yr.
15 years	273,000/yr.
20 years	205,000/yr.

Funding Opportunities:

Obviously, a wide variety of funding sources are available to the City for this project. At Bishop Park every effort has been made to identify both private and public development opportunities. The proposed restaurant and shop renovations are appropriate private responsibilities.

Based on JJR's past experiences and current funding opportunities, the following seven sources should prove to be the most fruitful. Specific Bishop Park improvement projects are identified for each funding source.

Agency	Program	Assistance
Heritage Conservation and Recreation, Department of Natural Resources	Land and Water Conservation Fund	Play and Picnic Facilities Promenade, Boat Docks, Restrooms
Heritage Conservation and Recreation, Department of Natural Resources	Urban Park and Recovery	Boat Docks, Walkways and Facility Renovation
Michigan Division of Land Resources, Department of Natural Resources		Support Design; Engineering Feasibility Analysis and Low Cost Construction Such As Trails and Informational Displays
Michigan Department of Transportation	Non-motorized Facility Funds	Jefferson Improvements
Michigan Division of Waterways, Department of Natural Resources	Waterways Program	Boat Docks
Michigan Division of Fisheries and Wildlife, Department of Natural Resources	Urban Fisheries Program	Fishing Piers
Michigan Office of Budget and Federal Aid, Department of Natural Resources	Kammer Recreation Land Trust Fund Act	Land Acquisition

Implementation Procedure:

Although funding opportunities suggest methods of implementing major components of the Bishop Park Plan, there are a number of steps which must be completed before reaching the funding stage. This section, as a continuation of the implementation package, describes specific steps necessary to reach this final stage. Implementation procedures are recommended, as well as the approximate time requried for completion of the process.

Step 1

Review the completed DCC Detroit River Recreation Study.

- This review should be conducted in light of the City's long-range goals and objectives.

Step 2

Evaluate community support for specific Bishop Park recommendations.

- This evaluation can be conducted formally or informally, depending on the objectives of the City.

Step 3

Review and revise (if appropriate) recommended priorities for development of Bishop Park.

- Utilize input received from various community groups and the general public as a basis for review.

Step 4

Seek decisions on all outside influences which will play a role in final park development.

- Pursue a decision on the Biddle Street realignment question.
- Continue restaurant negotiations.

Step 5

Obtain funds to support continued design refinement and construction documentation in the development of a Bishop Park Master Plan.

- Funding sources available for completion of the Master Plan, as well as technical assistance in the study of individual components of the Master Plan include:

  Land and Water Conservation Fund
  Urban Park and Recreation Recovery Program
  Coastal Zone Management
  River and Harbor Act
  Waterways Program

Step 6

Select a consultant for developing a detailed Bishop Park Master Plan.

- This document will specify the design approach for individual components of the Park Plan, as well as construction guidelines.

Step 7

Review Bishop Park Master Plan with appropriate permit agencies.

- The feasibility of several recommended programs will be contingent upon issuance of permits. Prior to any new construction, major replacement or remodeling which involves the waterfront, a permit must be obtained from two agencies. The Army Corps of Engineers requires a permit for the following activities:

Piers, docks, dolphins, mooring cells
Excavation, dredging, filling
Riprap and revetments, retaining walls, breakwaters and levees
Wiresor cables over the water; pipes, cables and tunnels under the water
Intake and outfall pipes and/or structures
Platforms, ramps, signs and fences

- The Department of Natural Resources, under the Submerged Lands Section, requires a permit for the following:

  Dredge or fill bottomland
  Construct, enlarge, remove or place a structure on bottomland
  Erect, maintain, or operate a marina
  Construct, dredge, commence, extend or enlarge an artificial canal, channel, ditch, lagoon, pond, lake, or similar waterway where the purpose is ultimate connection with any of the Great Lakes

  A joint application for both the Army Corps permit and the DNR permit may be submitted.

  In addition to the Federal and State permits necessary for construction, a wide range of local permits can be anticipated, including but not limited to a building permit, soil and erosion permit, and marinas utility/facility permits.

Step 8

Refinement and acceptance of the Park Master Plan, including construction documentation for Phase I.

- Final discussions should occur regarding development and implementation of the Park Master Plan using public and community input as a basis for evaluation.

Step 9

Preliminary confirmation of potential construction funding opportunities.

- Appropriate funding agencies are contacted and given the opportunity to suggest and comment about the implementation potential of each component.

Step 10

Preparation of a funding application package for submital to appropriate agencies.

- Each phase is evaluated in light of community priorities, funding opportunities and relationship to the overall Master Plan.

Step 11

Application to agencies for construction funds for the initial development effort of the Bishop Park Master Plan.

- Funding opportunities for specific components of the Master Plan should be pursued, using as a basis the sources suggested earlier in this document.

Step 12

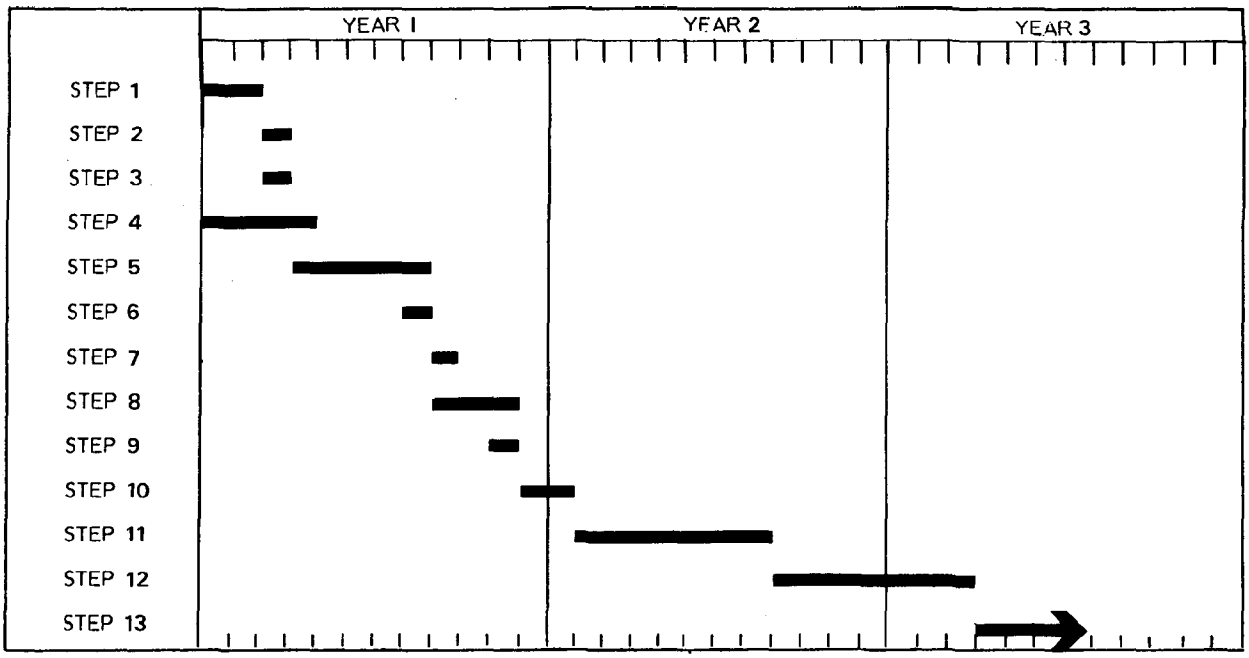
Initial Construction

- This step involves selection of a contractor and beginning construction.

Step 13

Each subsequent phase to be implemented should repeat the process, beginning with number 10 and continuing through number 13 until the process is complete and the park fully developed.

An estimate of the time necessary to complete each of the steps identified as part of the implementation process is presented below. The primary function of this time chart is to identify activities or steps which can be undertaken simultaneously during the implementation process. Time required for completion of each step is subject to change, however, depending on funding, the City's abilityto supply matching funds, and the reviewing agency's funding procedures. It is also assumed that steps 10 through 13 will be repeated as each phase of the plan is pursued.



Step 1 Detroit River Recreation Study Review

Step 2 Evaluate Community Support

Step 3 Approve Project Priorities

Step 4 Regional Review and Discussion

Step 5 Obtain Funds for Final Design

Step 6 Consultant Selection

Step 7 Review Proposed Plans with Permit Agencies

Step 8 Complete Park Plan

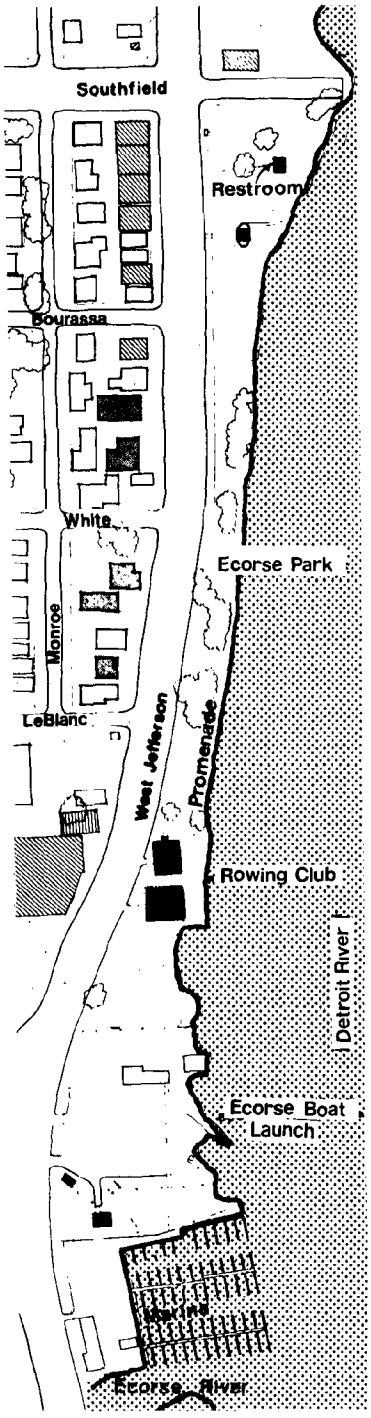
Step 9 Confirm Potential Funding Sources

Step 10 Prepare Funding Package

Step 11 Apply for Construction Funds

Step 12 Contractor Selection

Step 13 Initiate Following Phases



ECORSE RIVER AREA SELECTION

The Ecorse River Area was selected as a priority project because of the intensive need for additional recreational facilities in the northern zone where population densities are the highest and income levels typically low. Opportunities exist for both municipal and regional participation and for highly innovative design approaches.

EXISTING CONDITIONS

The area referred to as the Ecorse River Area lies between West Jefferson Avenue and the Detroit River, extending southward from M-39/Southfield Road down to include the Ecorse River.

Within this zone, there are numerous facilities and land uses which establish the parameters of the proposed schematic site plan. These include Ecorse Memorial Park, Municipal Boat Launch, Ecorse Rowing Club, Senior Citizen's Park, the Ecorse River and Mud Island.

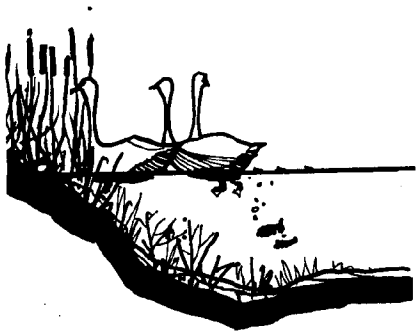
Ecorse Memorial Park, formally a Wayne County facility, is owned and operated by the City of Ecorse. The open space character of this site provides a much needed contrast to the surrounding urban/industrial environment. Composed of only two acres, the park provides access to 1,450' feet of the Detroit riverfront. The effective use of this site is severely restricted not only because of its size, but also its configuration. Because of its very long yet narrow shape, uses are currently restricted to bank fishing, river watching, and the July 4th boat races. While a tremendous riverfront recreational need appears to exist within the community and area, low income residents frequently do not have the resources or inclination to travel to the only existing alternative--Elizabeth Park.

Carter's Restaurant and the recently constructed Great Lakes Steel Management Club separate Memorial Park from the Great Lakes Steel plant on the north. West Jefferson Avenue which forms the eastern boundary of the park has a strong negative impact on the public open space. Coming within 80' of the water's edge, use of this major truck route generates visual, noise and emission problems which are evident throughout the park.

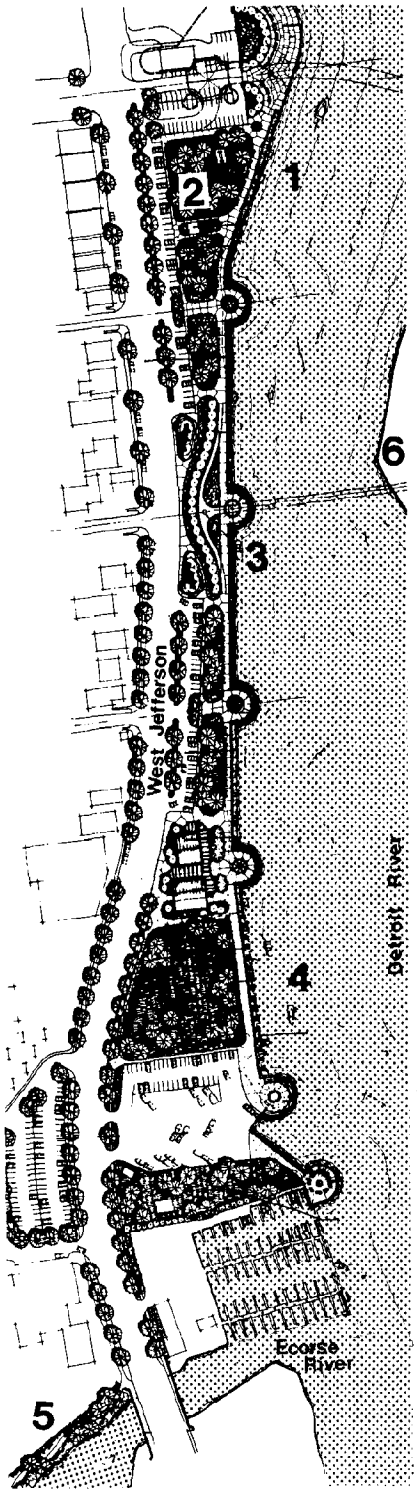
At the southern end of the park is one of the oldest rowing clubs in the country. The privately operated Ecorse Rowing Club represents an appropriate riverfront activity. The Club has two buildings--an older brick building and a quonset hut. The sitting of these buildings is unfortunately so close to West Jefferson, they discourage road shoulder pedestrian travel.

The Ecorse Municipal Boat Launch is composed of a 40 car/trailer parking lot and double boat launch. The contiguous Senior Citizen's Park provides boaters and seniors with needed open space and restroom facilities. The public boat launch area is 600' south of the Park and separated by 12 intervening, privately-owned parcels and the Rowing Club.

The Ecorse River empties into the Detroit River separating Wyandotte from Ecorse. Unfortunately, the confluence area loses much for its scenic/visual significance because the Ecorse Boat Basin's docks protrude out into the mouth of the river. Typically, 30' wide and contained by gentle sloping banks overgrown with volunteer vegetation, the river, once inland, divides into northern and southern branches. Continuing, the river makes contact with five inland DCC communities.



Mud Island is an 18.5 acre former Army Corps of Engineers disposal area. Volunteer trees join with dense undergrowth to contribute to the Island's natural appearance--softening its geometric shape and rip rapped edges. Located in the northern segment of the DCC where population pressures are the most severe and recreational opportunities the most limited, Mud Island offers visual appeal, island mystique and a large undeveloped area in close proximity to Memorial Park. As a result, the Island presents an unique opportunity to accommodate not only local but certain regional recreational facilities.



PROJECT RECOMMENDATIONS

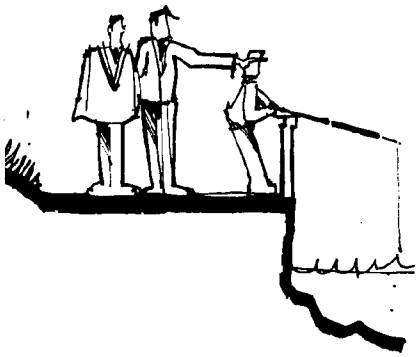
During the Master Planning phase of this project, it was determined that the Ecorse River Area should function as a regional facility. It was recommended that existing Ecorse Memorial Park continue as a municipal facility, but that island development become the responsibility of a regional agency. In review meetings with Ecorse municipal leaders and the Great Lakes Steel representative, it was agreed upon to emphasize mainland development. This decision was the result of unresolved Mud Island ownership claims by the City and Great Lakes Steel, the need for regional agreement on Mud Island development, the need for mainland improvements, and to facilitate project implementation. At the review meeting, three alternative mainland plans and three alternative Mud Island Plans were presented. Community concerns and preferences were noted and a final mainland schematic site plan was prepared. A final Mud Island scheme was not selected, and as a result, two of the alternative Mud Island plans appear in this report.

The mainland schematic Site Plan presented for your review reflects the following concerns:

1. To increase municipal recreational opportunities.
2. To identify opportunities for immediate implementation.
3. To recommend ways to incorporate public riverfront areas into the local and regional fabric.
4. To recommend revitalization techniques needed to demonstrate a local commitment to the Detroit River.
5. To establish a basis for evaluating local and regional recreational interest for Mud Island development.

The proposed plan recognizes six special areas. These areas reflect existing use patterns and future opportunities. They are as follows:

1. **Riverfront Promenade**
2. **Day Use Area**
3. **Open Space/Linkage Area**
4. **Boating Area**
5. **Ecorse River Trail**
6. **Island Use**



1. Riverfront Promenade

While seven different activity areas are identified, it is important to realize that these areas are intended to blend and work together. A riveredge promenade is proposed to extend along the entire public edge--from Southfield Drive to the privately owned Ecorse Boat Basin. This major walkway is envisioned not only as a means for attracting visitors to the river, but to link together the major use areas within the park. As park visitors stroll the water's edge, they will be exposed to a wide range of exciting recreational opportunities, all of which are intended to increase visitor awareness of and interest in the Detroit River. Because of the limited land available, it is proposed that the shoreline be straightened and that areas lost in recent years to erosion be claimed. It is also suggested that the existing promenade be cantilevered out over the water to allow minimal walking area. With limited area available, emphasis is placed on passive activities including a special event area, fishing nodes, informational/educational kiosks and river displays, picnicking, river watching, and strolling. Perspective Sketch I illustrates the type of excitement the promenade can contribute to the park.

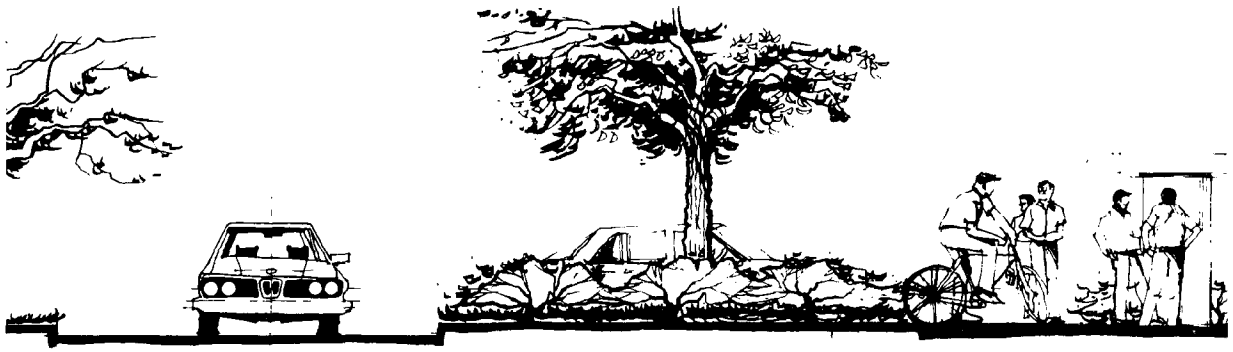
2. Day Use Area

Proposed to contribute to the existing day use activities currently occurring at the north end of the park, it is anticipated that picnicking and fishing will continue as the major activities. To supplement these opportunities, a riverside special events plaza is proposed at the end of Southfield Road. Visitors, standing on land or sitting in boats, can all enjoy special programs such as theatrical performances, talent shows, etc. To ensure boaters and land visitor participation, short term boat tie-up facilities and an enlarged off-street parking lot is proposed close to the plaza area. Renovation of the public restrooms and relocation of the War Memorial to a more prominant location are proposed.

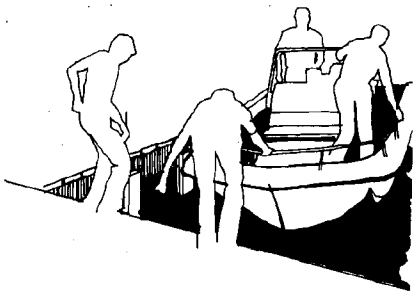
It is also recommended that Carter's Restaurant be replaced with a new facility, in tune with riverfront revitalization efforts, both at the park and at the Great Lakes Steel Management Club.

3. Open Space/Linkage Area

Jefferson Avenue, as it passes through Ecorse, comes closer to the river than anywhere else in the study area. Jefferson has four moving lanes, a turning lane and parking along both sides of the street. Because of its width, the park--when visible between parked cars--appears even smaller than it actually is. To compensate for this visual distortion, to increase the park's actual width in key areas, and to provide safer parking facilities, it is proposed to move the curbline out into Jefferson to include the existing parking lane inside the park. Perpendicular parking in concentrated bays is then proposed to maintain total capacity while opening up critical entrance and viewing areas. Approximately 90 to 100 spaces can be accommodated. Increased automobile parking is also proposed at the existing boat launching area where approximately 45 new spaces can be provided. Modifications are also proposed for the lot at the end of Southfield and just north of the Ecorse River. These improvements will help sustain the loss of continuous street parking on the west side of Jefferson. Street trees are proposed along the west side to make people traveling Jefferson aware they are passing through a park area. Recognizing that the riverfront area is currently deficient of parking spaces, JJR believes additional capacities could only be achieved at the price of futher and inappropriate encroachment upon the riverfront. Therefore, future lots may be required west of Jefferson to support recreational, commercial and residential uses.



The open space area, being centrally located, provides access to both ends of the park. Therefore, the proposed plan acknowledges that internal park circulation along the promenade is this zone's most critical function. To supplement this responsibility, sitting areas, plant materials, kiosks and informational displays--such as an historic time line illustrating critical stages in the growth and development of the river and Mud Island--add interest to the walk.



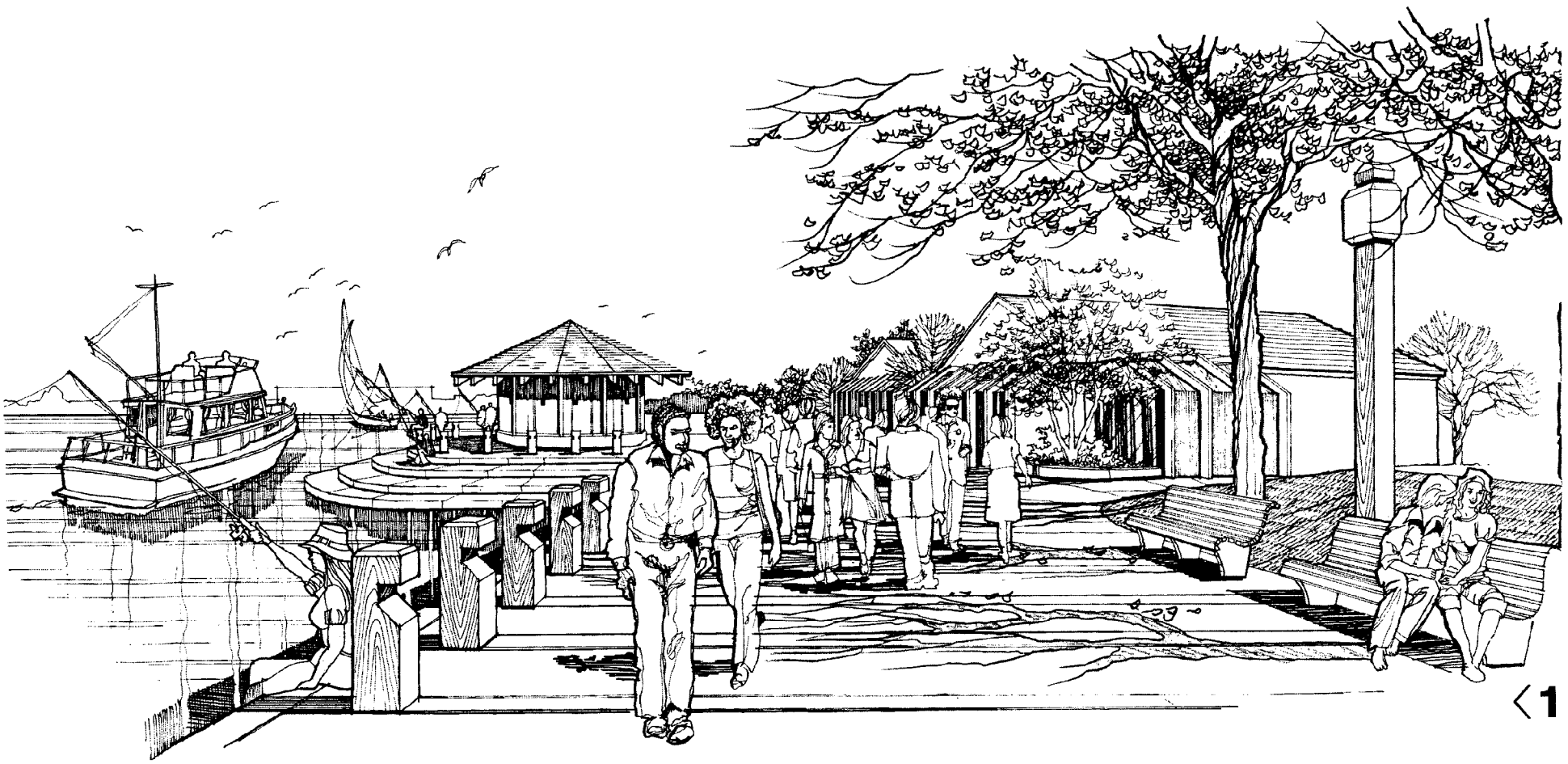
4. Boat Area

The boat launch, Rowing Club, and Ecorse Boat Basin are all located at the south end of the park. Through acquisition of 12 private lots, the entire shoreline from Southfield Road to the Senior Citizens Park will be in public ownership. Through the cooperation of the Rowing Club, a park visitor will have continual access to the riverfront along the full length of the proposed recreation area. This represents a 35% increase in the overall length of the river walk and provides a basis for unifying the entire facility.

Strolling along the river walk, visitors will pass between the River and the Rowing Club buildings. To maintain the proposed level of quality throughout the facility, it will be necessary to revitalize the Club's buildings and tie Club activities into the overall park plan.

The Perspective Sketch which appears on the following page shows how this integration could be handled. In the background on the right-hand side is the Rowing Club facility. The existing quonset hut has been replaced and the old brick building refurbished. A "greenhouse" addition has been added to unify the two buildings and to allow visitors to view the sculls and shells that are stored in the greenhouse facility. A fishing node is shown projecting out into the river. In this particular instance, the fishing node also serves as a launching platform for racing craft. The small building on the fishing node contains informational displays explaining the Club's history, achievements and general descriptions of racing techniques, etc.

The 12 parcels proposed for acquisition can immediately be used as a picnic and general day use area. Should future needs require, space is available for either a special events building or expanded boat launch parking.



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5. Ecorse River Trail

The Ecorse River is a natural drainage system which begins more than ten miles inland and flows into the Detroit River. Stormwater runoff and industrial discharges are carried by the river and contribute to the water's murkiness. The river is an important element and essential to the regional drainage pattern, as well as an interesting visual element. As efforts continue to improve the river's water quality a trail system can be created along its edge to provide a pedestrian and bicycle link between inland communities and parks and the Detroit River. As the river forks and extends inland, it passes through Ecorse, Wyandotte, Lincoln Park, Melvindale and Southgate. Preliminary contacts by DCC staff suggest that such an approach would appropriately fit into existing community open space. Lincoln Park, for example, provides a perfect opportunity to connect their existing community park to the Detroit River by means of an Ecorse River Trail. Not only would such an approach make the Detroit River accessible to numerous communities, but it would do so in an attractive, pleasing manner. The trail would not only provide a means of safe access, but also would support recreational uses such as bicycling, jogging, and walking.

Special care will be needed in certain locations, as vehicular bridges cross the Ecorse River. Adequate clearance is usually not available for the trail to pass under the bridge. Therefore, special crossings will be needed to allow people using the trail to safely cross at street level. Another concern is the major railroad corridor just west of Jefferson. Because trail users will have to cross this corridor, special crossing controls will be needed.

Vegetation along the Ecorse River must be selectively thinned, the area cleaned out, and a meandering path incorporated into the bank topography. It is anticipated that a 40' easement would be adequate to accommodate the trail which could begin on the north side of the Ecorse River along Great Lakes Steel property. A security fence would be needed to discourage trail users from entering Great Lakes property.

Because the trail will prove beneficial to not only the residents of Ecorse, it is proposed that all the communities it passes through should contribute financially to its development, upkeep and surveillance.

6. Island Use

In the northern third of the study area, little opportunity exists for mainland recreation. Because of pockets of shallow water which exist opposite Ecorse, the U. S. Army Corps of Engineers deposited dredge materials and created Grassy and Mud Islands. Grassy Island is currently functioning as a National Wildlife Refuge operated by the U. S. Fish and Wildlife Service.

When considering the possibility of creating new islands, it is important to note that it is not automatically environmentally unsound. Obviously, trade-offs would occur, but the historic precedence of the two existing islands, the need for additional waterfowl habitats along the Flyway, and the need for additional recreational land and water depths of one and two feet for relatively large areas all suggest that environmental investigations would be meaningful. It should be pointed out that if new islands are formed, location and configuration would be determined by currents, water depths, natural habitats, respect for the existing shipping channel, etc. A recently completed study by the Coastal Zone Laboratory entitled Riverfront Capabilities Expansion Analysis appears to give credence to such an approach. Whatever the eventual outcome, it will be desirable to coordinate uses and activities on the islands.

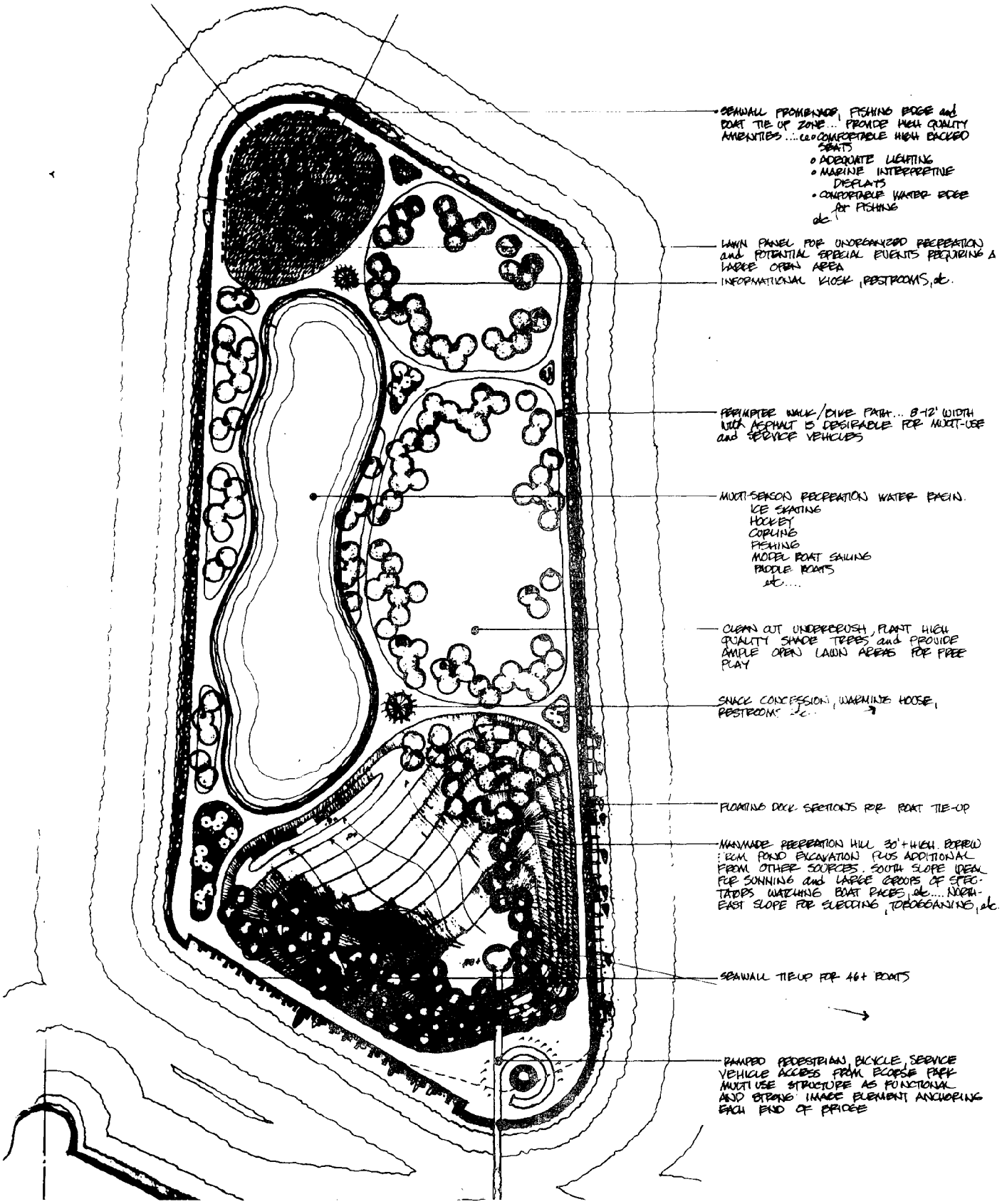
Regardless of how the man-made island question is resolved, it is proposed that Grassy Island continue to function as a wildlife area. It is suggested that additional trees be planted and appropriate development occur in terms of boat tie-ups, trails and observation areas to explain to the public Grassy Island's wildlife importance. In conversations with the U. S. Fish and Wildlife Service, they were very enthusiastic about such an approach. Unfortunately, budgetary constraints will probably delay such activity in the near future.

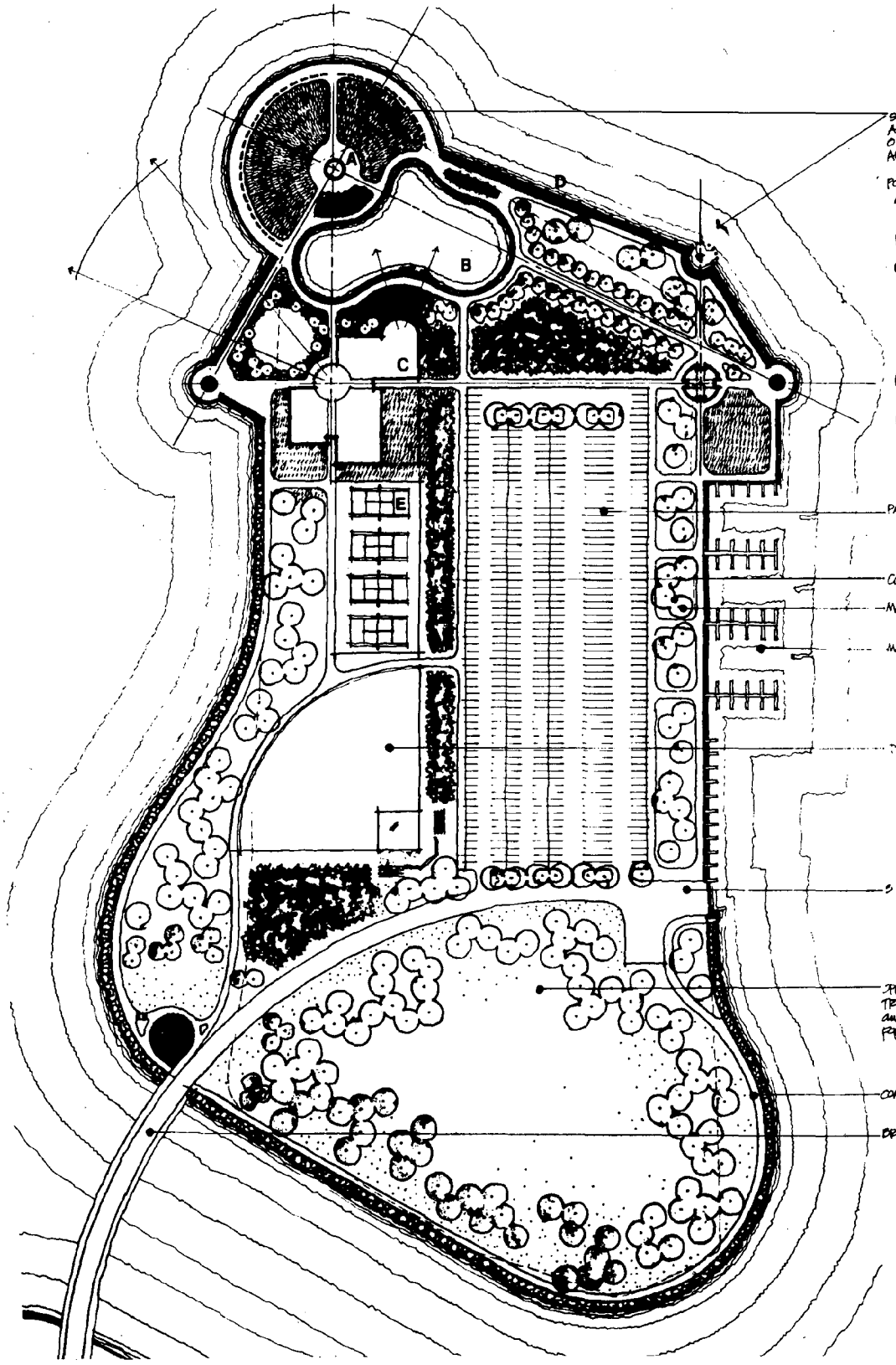
Mud Island represents a very special recreational opportunity. Because of the island's size and proximity to the mainland, it offers an opportunity to develop a regional recreational facility in a highly urban and intensively developed area. Unfortunately, because of the sea gull nesting area and the celery beds, the island is viewed by wildlife experts as having significant value. It will be beneficial to investigate discussions between concerned parties so that a clearer understanding of alternatives can be developed. It should also be noted that the feasibility of creating additional islands may play a big role in resolving this dilemma.

Because of this and unresolved questions regarding current ownership, etc., no finalized schematic site plan is presented. Instead, two of the three alternatives originally prepared are included for review.

The first plan which appears on the following page provides only pedestrian access to the island. The bridge is centrally located on the mainland to maximize accessibility. Island opportunities include a small inland pond for children's fishing, model boat sailing, etc. The resulting dredged materials are collected at the end of the elevated access bridge to provide a panoramic view of the river and possibly a winter sliding hill. The perimeter walk encourages exploration of the island. Freighter information kiosks/displays are located on the east side of the island next to the shipping channel.

The second Mud Island Plan maximizes island development which results in a Belle Isle environment. Vehicular access is provided directly off Southfield Road. The elevated bridge leads directly to a large consolidated parking lot. A major marina with wet slips, boat launch area, generous open space, a ball field, island trails and a private club with tennis and handball courts, restaurant/bar, etc., are proposed. It is assumed that private development dollars will play a major role in achieving this program.


SEAWALL PROMENADE, FISHING EDGE and BOAT TIE UP ZONE... PROVIDE HIGH QUALITY AMENITIES ....e.g. COMFORTABLE HIGH BACKED SEATS
• ADEQUATE LIGHTING
• MARINE INTERPRETIVE DISPLAYS
• COMFORTABLE WATER EDGE for FISHING
etc.
LAWN PANEL FOR UNORGANIZED RECREATION and POTENTIAL SPECIAL EVENTS REQUIRING A LARGE OPEN AREA
INFORMATIONAL KIOSK, RESTROOMS, etc.
PERIMETER WALK/BIKE PATH... 8-12' WIDTH WITH ASPHALT IS DESIRABLE FOR MULTI-USE and SERVICE VEHICLES
MULTI-SEASON RECREATION WATER BASIN.
ICE SKATING
HOCKEY
CURLING
FISHING
MODEL BOAT SAILING
PADDLE BOATS
etc....
CLEAN OUT UNDERBRUSH, PLANT HIGH QUALITY SHADE TREES and PROVIDE AMPLE OPEN LAWN AREAS FOR FREE PLAY
SNACK CONCESSION, WARMING HOUSE, RESTROOMS etc.
FLOATING DOCK SECTIONS FOR BOAT TIE-UP
MANMADE RECREATION HILL 30'+ HIGH BORROW FROM POND EXCAVATION PLUS ADDITIONAL FROM OTHER SOURCES. SOUTH SLOPE IDEAL FOR SUNNING and LARGE GROUPS OF SPECTATORS WATCHING BOAT RACES, etc.... NORTH-EAST SLOPE FOR SLEDDING, TOBOGGANING, etc.
SEAWALL TIE-UP FOR 46+ BOATS
RAMPED PEDESTRIAN, BICYCLE, SERVICE VEHICLE ACCESS FROM ECOPSE PARK MULTI USE STRUCTURE AS FUNCTIONAL AND STRONG IMAGE ELEMENT ANCHORING EACH END OF BRIDGE



SPECIAL EVENTS RIVERFRONT "PENINSULA" INCORPORATING A MULTITUDE OF RECREATIONAL and DOWNRIVER ORIENTED FACILITIES WITHIN A STRONGLY ARTICULATED SITE and LANDSCAPE FABRIC.

POTENTIAL OPPORTUNITIES INCLUDE:

A - BAND SHELL/OBSERVATION ENCLOSURE with SURROUNDING LAWN FOR LARGE GROUPS

B - REFLECTION POND FOR SKATING, MODEL BOAT COMPETITIONS, etc

C - FULL SERVICE DOWNRIVER COMMUNITY CENTER
- Meeting rooms
- Crafts
- Basketball / Play Courts
- Dining
- Museum / Park Interpretive Displays
- etc.

D - AMPLE STEP DOWN SEAWALL LENGTH FOR BOAT TIE UP, FISHING and SITTING CLOSE TO THE WATER

E - TENNIS COURTS (could be formal ice hockey rink in winter)

PARKING FOR 430 CARS + 70 CARS with TRAILERS

CONIFEROUS BOSQUE

MARINA FOR PICNICKING

MARINA FOR 40 - 100 BOATS

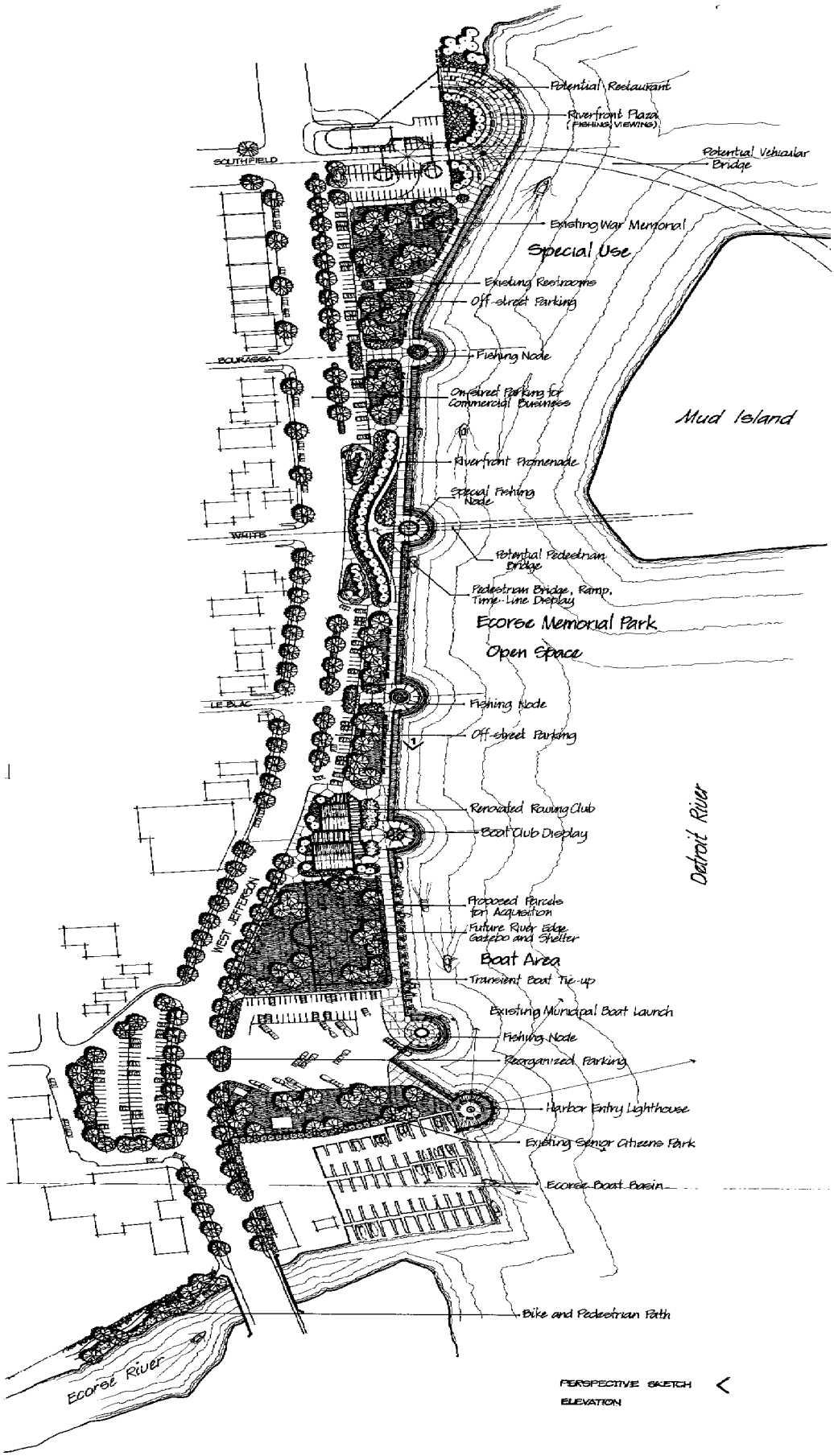
TOURNAMENT SOFTBALL FIELD

3 LANE BOAT LAUNCHING

OPEN LAWN WITH SURROUNDING SHADE TREE PERIM. FOR FREE PLAY, PICNICKING and OVERFLOW SPECIAL EVENT PARKING FOR 300 + CARS

COMPLETE WALK SYSTEM

BRIDGE TO MAINLAND at FOOT OF SOUTHFIELD


Potential Restaurant
Riverfront Plaza
(Fishing, Viewing)
Potential Vehicular Bridge
SOUTHFIELD
Existing War Memorial
Special Use
Existing Restrooms
Off-street Parking
Fishing Node
BOURASSA
On-street Parking for Commercial Business
Mud Island
Riverfront Promenade
Special Fishing Node
WHITE
Potential Pedestrian Bridge
Pedestrian Bridge, Ramp, Time-Line Display
Ecorse Memorial Park
Open Space
LE BLANC
Fishing Node
Off-street Parking
Renovated Rowing Club
Boat Club Display
Detroit River
Proposed Parcels for Acquisition
Future River Edge Gazebo and Shelter
WEST JEFFERSON
Boat Area
Transient Boat Tie-up
Existing Municipal Boat Launch
Fishing Node
Reorganized Parking
Harbor Entry Lighthouse
Existing Senior Citizens Park
Ecorse Boat Basin
Bike and Pedestrian Path
Ecorse River
PERSPECTIVE SKETCH
ELEVATION

IMPLEMENTATION PACKAGE

The following Implementation Package is composed of five segments--cost estimates, phasing program, funding opportunities, a suggested implementation procedure, and an economic evaluation of recreational land acquisition.

Cost Estimates:

To implement the mainland recommendations illustrated in the proposed plan will require approximately 6.1 million dollars. This does not include land acquisition costs, the Ecorse River walk or Mud Island development. Expressed in 1979 dollar values, this figure includes a 25% contingency which reflects appropriately the current level of design refinement.

1. River Walk Promenade $4,000,000
   (Southfield to Senior Citizen's Park)

Demolition, fill, sheet piling, finger piers, boardwalk, concrete walk, lighting, street furniture, shelters, fishing nodes, trees.

2. Day Use/Open Space Areas 720,000

Restroom renovation, canopy and accent trees.

3. West Jefferson Avenue Renovation 670,000

Demolition, saw cut, curbs, concrete and bituminous walks and paving, drainage, canopy trees.

4. Rowing Club Revitalization 720,000

Removal and replacement of quonset hut, greenhouse structure.

TOTAL $6,110,000

Estimated Annual Cost:

Costs to the City are shown using a variety of time intervals. Because of the variance in the types of funds available, the following information is intended only to provide a rough guideline of what the City might allocate each year for implementation.

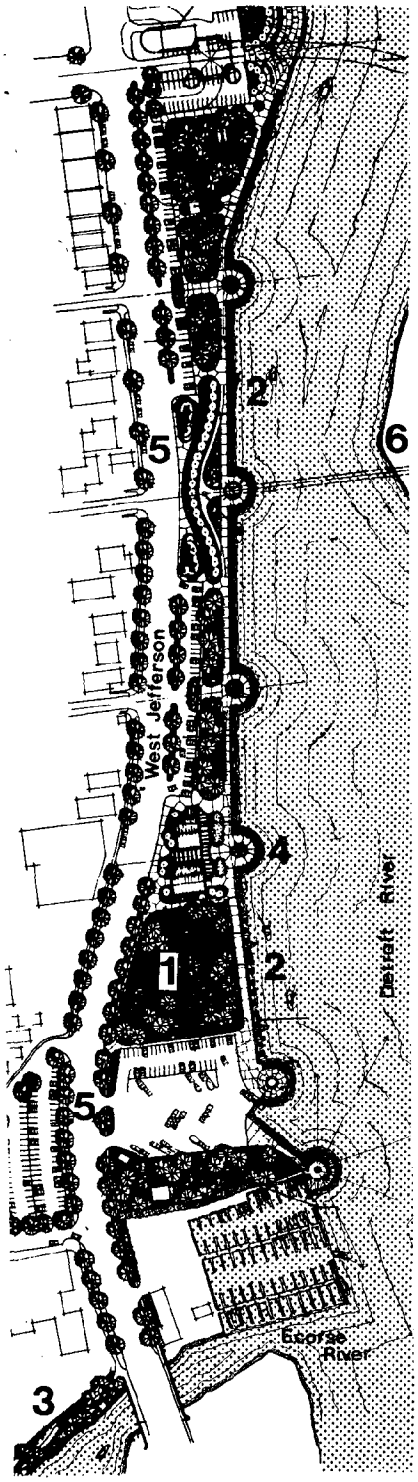
Funding sources can vary significantly in terms of required participation, ranging from complete funding to a 50% matching. Examples of typical funding sources and their cost sharing requirements are presented below.

Program	Agency/City
Land and Water Conservation	50/50
Urban Park and Recreation	70/30
Coastal Zone Managemetn	80/20
Waterways	75/25
Urban Fisheries	50/50
Kammer	variable
Non-Motorized Vehicle	variable
Shoreline Stabilizaiton	variable

The use of the term "variable" is intended to include a wide range of alternative funding options contingent on the program being pursued. The two primary funding sources for recreational projects are typically Land and Water Conservation Funds, and Urban Park and Recreation Funds.

Cost Implementation Over:	Total Dollars Required
1 year	$ 6,100,000/yr.
5 years	12,000,000/yr.
10 years	610,000/yr.
15 years	406,000/yr.
20 years	305,000/yr.

Although the cost to the City diminishes over time, it is recommended that implementation occur over a maximum five to ten-year period. Beyond ten years, the likelihood of total plan implementation is significantly reduced. The city's proposed 1979-1980 budget allocates approximately $450,000 for recreational activities, with the majority of these funds being used for maintenance of existing programs and operating expenses. In order to complete the entire plan within teh suggested time frame, between $183,000 and $305,000 will be required annually.



Phasing Program:

To facilitate implementation, the 6.1 million dollar program has been broken down into a series of implementation projects. These projects are listed below according to JJR's interpretation of local interests and professional experiences. These priorities will need to be carefully reviewed by the community.

1. Land acquisition of 12 lots south of the Rowing Club
2. Shoreline stabilization and promenade development
3. Ecorse River trail development
4. Rowing Club improvements
5. Jefferson Avenue improvements
6. Mud Island resolution

Funding Opportunities:

The following programs are recommended as the best opportunities to obtain State and Federal funding assistance. The name of the agency, program and Ecorse River Area proposed projects which could be funded through that program are summarized below.

Agency	Program	Assistance
Heritage Conservation and Recreation, Department of Natural Resources	Land and Water Conservation Fund	Play and Picnic Facilities Promenade, Boat Docks, Restrooms
Heritage Conservation and Recreation, Department of Natural Resources	Urban Park and Recovery	Boat Docks, Walkways and Facility Renovation
Michigan Division of Land Resources, Department of Natural Resources		Support Design; Engineering Feasibility Analysis and Low Cost Construction Such As Trails and Informational Displays
Michigan Department of Transportation	Non-motorized Facility Funds	Jefferson Improvements
Michigan Division of Waterways, Department of Natural Resources	Waterways Program	Boat Docks
Michigan Division of Fisheries and Wildlife, Department of Natural Resources	Urban Fisheries Program	Fishing Nodes
Michigan Office of Budget and Federal Aid, Department of Natural Resources	Kammer Recreation Land Trust Fund Act	Land Acquisition

Implementation Procedure:

The sequence to be followed in pursuing implementation of the Ecorse River Area Plan is similar in many respects to the process established for Bishop Park. As was discussed previously, specific actions are necessary which complement and build upon the strategies found in this document. The following section recommends steps the City should follow in the implementation process, using this document as a foundation.

Step 1

Review the completed DCC Detroit River Recreation Study.

- This review should be conducted in light of the City's long range goals and objectives.

Step 2

Evaluate community support for specific Ecorse Plan recommendations.

- This evaluation can be conducted formally or informally, depending upon the objectives of the City.

Step 3

Review and revise (if appropriate) recommended priorities for development of Ecorse River Area.

- Utilize input from various community groups and the general public as a basis for review.

Step 4

Seek decisions on all outside influences which will play a role in final park development.

- Begin discussions concerning the ownership and use of Mud Island.
- Review the park plan with the Huron Clinton Metropolitan Authority, and agree upon individual roles and responsibilities in plan implementation.
- Begin negotiation for acquisition or use of the waterfront lots owned by Great Lakes Steel.
- Contact the Rowing Club regarding their role in plan development.
- Review the implications for West Jefferson Boulevard with Wayne County.

Step 5

Obtain funds to support continued design refinement and construction documentation in the development of an Ecorse River Area Plan.

- A number of funding sources are available for completion of the Master Plan, as well as technical assistance in the study of individual components of the Master Plan. Alternative sources include:

  Land and Water Conservation Fund
  Urban Park and Recreation Recovery Program
  Coastal Zone Management

Step 6

Select a consultant for developing a detailed Ecorse River Area Master Plan.

- This document will specify the design approach for individual components of the Plan, as well as construction guidelines.

Step 7

Review Bishop Park Master Plan with appropriate permit agencies.

- The feasibility of several recommended programs will be contingent upon issuance of permits. Prior to any new construction, major replacement or remodeling which involves the waterfront, a permit must be obtained from two agencies. The Army Corps of Engineers requires a permit for the following activities:

  Piers, docks, dolphins, mooring cells
  Excavation, dredging, filling
  Riprap and revetments, retaining walls, breakwaters and levees
  Wiresor cables over the water, pipes, cables Mud Island, and tunnels under the water
  Intake and outfall pipes and/or structures
  Platforms, ramps, signs and fences

- The Department of Natural Resources, under the Submerged Lands Section, requires a permit for the following:

Dredge or fill bottomland
Construct, enlarge, remove or place a structure on bottomland
Erect, maintain, or operate a marina
Construct, dredge, commence, extend or enlarge an artificial canal, channel, ditch, lagoon, pond, lake or similar waterway where the purpose is ultimate connection with any of the Great Lakes

A joint application for both the Army Corps permit and the DNR permit may be submitted.

In addition to the Federal and State permits necessary for construction, a wide range of local permits can be anticipated, including but not limited to a building permit, soil and erosion permit, and marinas utility/facility permits.

Step 8

Refinement and acceptance of the Park Master Plan, including construction documentation for Phase I.

- Final discussions should occur regarding development and implementation of the Park Master Plan using public and community input as a basis for evaluation.

Step 9

Preliminary confirmation of potential construction funding opportunities.

- Appropriate funding agencies are contacted and given the opportunity to suggest and comment about the implementation potential of each component.

Step 10

Preparation of a funding application package for submittal to appropriate agencies.

- Each phase is evaluated in light of community priorities, funding opportunities and relationship to the overall Master Plan.

Step 11

Application to agencies for construction funds for the initial development effort of the Ecorse River Area Master Plan.

- Funding opportunities for specific components of the Master Plan should be pursued, using as a basis the sources suggested earlier in this document.

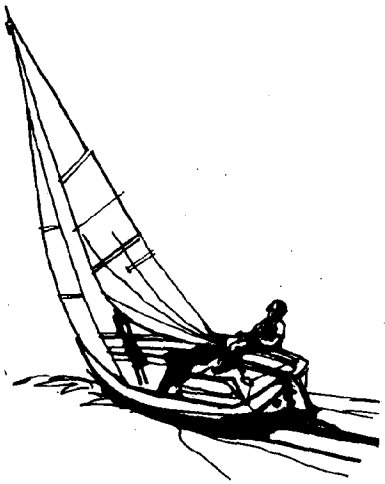
Step 12

Initial Construction

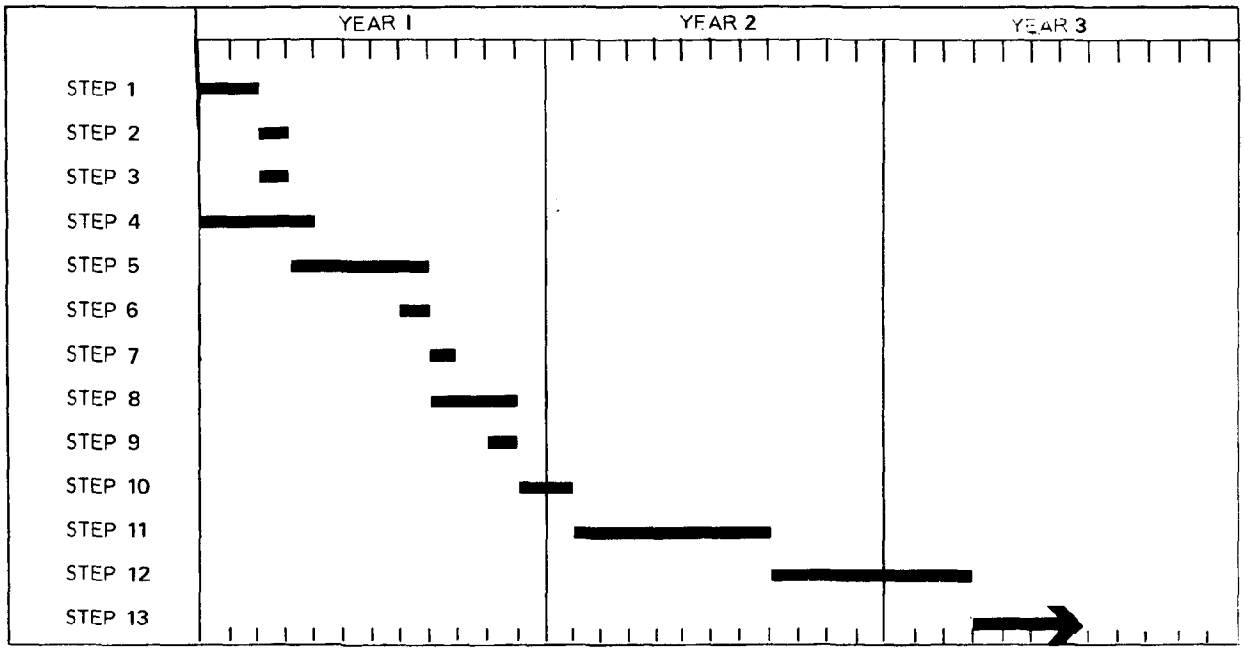
- This step involves selection of a contractor and beginning construction.

Step 13

Each subsequent phase to be implemented should repeat the process, beginning with number 10 and continuing through number 13 until the process is complete and the area fully developed according to Master Plan recommendations.



An estimate of the time necessary to complete each of the steps identified as part of the implementation process is presented below. The primary function of this time chart is to identify activities or steps which can be undertaken simultaneously during the implementation process. Time required for completion of each step is subject to change however, depending on funding, the City's ability to supply matching funds and the reviewing agency's funding procedures. It is also assumed that steps 10 through 13 will be repeated as each phase of the plan is pursued.



Step 1 Detroit River Recreation Study Review

Step 2 Evaluate Community Support

Step 3 Approve Project Priorities

Step 4 Regional Review and Discussion

Step 5 Obtain Funds for Final Design

Step 6 Consultant Selection

Step 7 Review Proposed Plans with Permit Agencies

Step 8 Complete Park Plan

Step 9 Confirm Potential Funding Sources

Step 10 Prepare Funding Package

Step 11 Apply for Construction Funds

Step 12 Contractor Selection

Step 13 Initiate Following Phases

ECONOMIC IMPACTS OF LAND ACQUISITION AND UTILIZATION

Introduction

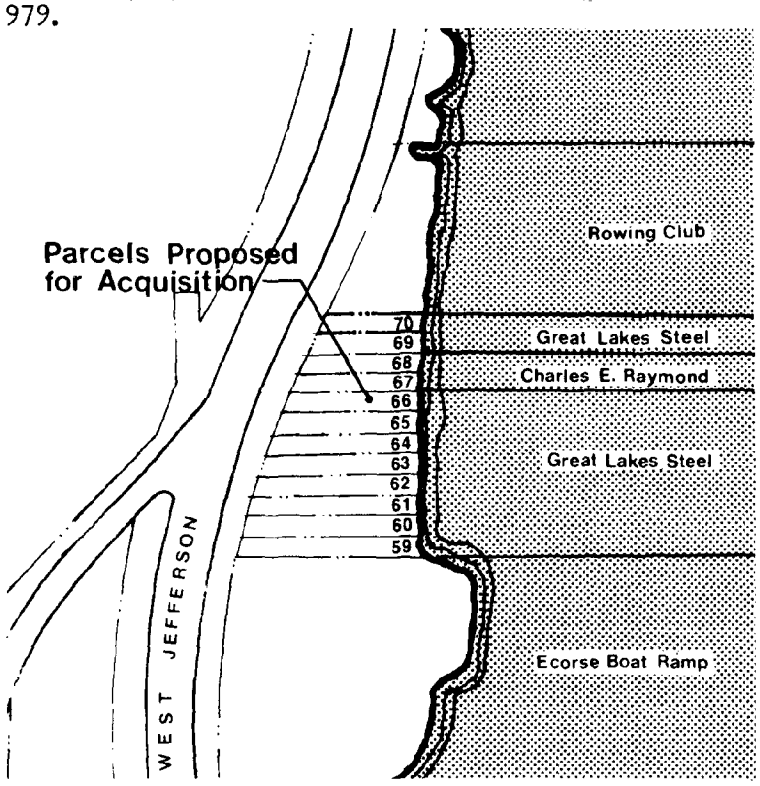
The charge for this analysis is to evaluate the potential economic benefits that could be derived from alternative uses of the 12 parcels proposed for acquisition in the Schematic Site Plan. The purpose of this type of analysis is to give local decision makers a broader understanding of the probable impacts of alternative development. This information can then be used in deciding on the relative merits of different projects.

We are, in essence, conducting a highest and best use evaluation of the subject site from the perspective of the general public. In conducting this type of analysis, we will first speculate as to the potential uses of the subject site, then we shall proceed to evaluate the benefits to the greater community of each of the identified uses. In attempting to perform this analysis, several problems arise which prevent definitive conclusions from being reached. These problems include defining what types of use may arise, the lack of specific projects to evaluate for each type of use, and the difficulty of evaluating dissimilar types of benefits. Even if these problems are overcome and a "best" use is determined from the viewpoint of the public, it should be realized that it may remain beyond the powers of the public to bring that use into existence.

The potential benefits of each type of development are described in the following analysis. Which type of development is found to be in the best interests of the public depends on the public's evaluation of the relative value of each benefit. What is more important--more jobs, more homes, or improved access to the Detroit riverfront? Surveys can be conducted which assess a community's evaluation of the relative merit of different types of benefits. More frequently, however, the final weighting in this type of evaluation rests with the public's decision makers, those elected and appointed individuals entrusted with the responsibility of protecting and improving the welfare of the public.

Site Description

The subject site under consideration consists of approximately 1.2 acres of land fronting on the Detroit River located within the corporate limits of the City of Ecorse. The site consists of twelve separate subdivided parcels, with ten of the parcels under the ownership of the Great Lakes Steel Company. The 1979 state equalized value (SEV) for the subject site is $34,510. If the state equalized value accurately reflects 50% of the market value, then the subject site would have a current market value of approximately $69,000. Local property taxes on the site were assessed at a combined rate of 60.98 mills in 1979 with property taxes for the site totaling $2,100 for 1979.



The site is roughly rectangular in shape with approximately 300' of frontage on the Detroit River and 350' of frontage on West Jefferson Avenue. The site is currently vacant and unimproved, except for the existence of a small, dilapidated structure. Some small water craft are being stored on the site. All of the parcels are zoned for commercial use, and the site is servicable by all utilities. It is not believed that any of the parcels are available for private acquisition.

The site location has several unique characteristics which are of significance. Natural features include 300' of Detroit riverfront, the Ecorse River a few hundred yards to the south, and Mud Island located a few hundred yards offshore. Within one-half mile north and one-half mile west of the site are the heavy industrial operations of Great Lakes Steel Company. The general vicinity of the site is a crucial transition zone between the successful business district of the City of Wyandotte to the south, and the commercial activity corridor of the City of Ecorse to the north. This transition zone establishes the image for travelers entering Ecorse from the south and could, therefore, play an important role in defining the character and vitality of the Ecorse business district. Finally, the site and its adjacent land area offers one of the few visual access points to the Detroit River from Jefferson Avenue in the Downriver area. The importance of this feature is enhanced by its non-industrial use.

Economic Potential

1. Heavy Industry

There are several advantages for heavy industry in locating on a riverfront. Use of water transportation for the movement of raw materials and finished products is an important advantage to many heavy industrial operations. Use of water in industrial processes and for cooling purposes is also considered critical in many industrial operations. These types of heavy industrial uses include, for example, steel manufacturing and fabricating, metal working, manufacturing of chemicals and allied products, and the mixing and distribution of limestone, glass, clay and concrete products. Many of these operations are currently in evidence along the Detroit riverfront.

The subject site is not, however, considered an appropriate location for heavy industry for the following reasons. The waterfront, roughly 300' in length, would not permit the docking, loading or unloading of commercial vessels. The site, therefore, does not offer the advantages of water transportation. The site, approximately one acre in size, is not of sufficient size for the type of heavy industry which would utilize the advantage of water resources for processing and cooling purposes. Finally, the site does not offer the possibility of rail access, another important requirement for heavy industrial use. Given the above considerations, it is not felt that the site would support a heavy industrial use. Accordingly, no benefits from this type of use have been evaluated.

Area Location

The site is located near the southern boundary of the City of Ecorse at the end of the commercial business corridor which extends along West Jefferson Avenue. Two structures owned by the Ecorse Rowing Club are located on the parcel of land north of the site. This land, adjacent to Ecorse Park, is owned by the City of Ecorse. Contiguous to the southern boundary of the site is also municipal property. The southern site is the Ecorse Municipal Boat Launch and the Ecorse Senior Citizen's Park.

The commercial activity located in the vicinity of the site is composed primarily of bars and liquor stores and is of lower quality than other commercial areas in Ecorse. Located west of the site, off West Jefferson Avenue, is a stable residential neighborhood. The neighborhood is solid in character, well kept up, and shows evidence of periodic new construction. Most of the structures are single-family detached houses, with a few small apartment structures interspersed. A railroad corridor parallel to West Jefferson Avenue forms the western boundary of the residential neighborhood with several light and heavy industrial firms located contiguous to the railroad corridor, between the rail lines and the residential neighborhood.

2. Light Industry

With the availability of utilities, the subject site could potentially support a light industrial operation. The site could accommodate a facility ranging upwards in size of 25,000 gross square feet. Several types of operations could utilize a facility of this size including, for example, small scale warehousing, assembly operations, and manufacturing. The benefits to the community of having this parcel developed for light industrial use are two-fold: the strengthening of the economic base and the increase in the tax base. A small scale operation, utilizing a facility of 25,000 GSF, could employ between five and twenty-five full time employees, depending on the type of operation. The employment gain would add income to the community which is spent and respent many times within the local community. These incomes are locally spent on such items as housing, food, clothing, retail purchases, and leisure time activities. All of these expenditures help to support other jobs and other incomes within the community. Depending on the nature of the operations, the addition of industry can also attract other support industries and, consequently, the economic benefits they

provide. A firm which cuts sheet metal into forms usable in other areas of manufacture increases the demand for steel (and employment in the steel industry) and also enhances the locational advantages of the area for its material users.

The addition to the tax base depends, once again, on the type of operation under consideration. For evaluation purposes, we have assumed construction of a 25,000 square foot facility at a total cost of $875,000, using a construction cost per foot of $35.00. The amount of taxable personal property depends on the type of operations conducted. A survey of prototypical operations in Ecorse indicates that taxable personal property ranged from $0.10 per GSF to $6.05 per GSF. Using an average of $3.00 per GSF, the facility could have taxable personal property of $75,000. In sum, a light industrial operation, as discussed above, could add $475,000 to the local tax base (evaluated at one-half market value). This would represent an increase in the local tax base of less than one-quarter of one percent, but would contribute almost $29,000 in additional local property taxes.

Although it is possible that the site could be used in light industrial operations, it is not believed likely. The site offers no distinct advantages for this type of use to justify the high land expense, $69,000 at a minimum. The site is physically constrained, offers little room for employee parking needs, would have loading and unloading access problems, and allows no possibility for future physical expansion of operations. There are other sites available throughout the Downriver region which offer more favorable attributes for light industrial development.

3. Residential Use

With good design and landscape treatment, the site is well suited for residential development. Although residential waterfront development tends to aim at high price brackets, housing prices and rental rates in the surrounding Ecorse/Wyandotte area would argue for more moderately priced housing. The site could accommodate a 20-unit residential development, which might be sold as condominiums or could be developed as rental units. Using a construction cost of $40,000 per unit, the site could conceivably support an $800,000 residential development. This would represent a net increase to the local tax base of $400,000 and would generate approximately $24,400 in additional local property tax revenues.

The benefits of residential development are mostly private in nature. Residential development at this site would add 20 units of housing to the local housing stock. It would also increase the local property tax base and local property tax collections. The increase in resident population, although small, would lend support to the area's retail base. The permanent job creating aspects of residential development are, however, minimal.

We could expect this type of development to create at best the equivalent of one full-time position. This would encompass the management, maintenace, repair and supervision needs of the development. The secondary income and employment benefits to the community would be small since the residential development would not generate any significant primary income or employment gains for the community. If appropriately developed, we could expect that the visual and aesthetic appeal of the area would be enhanced to a certain degree which should be considered a benefit to the community at large.

4. Commercial Development

From a private development standpoint, the highest and best use of the site would most likely be in commercial use. Two possibilities can be initially suggested for the site, some form of marina or restaurant development.

The public and private marinas which are located along the Detroit riverfront attest to the level of recreational boating activity which takes place throughout the region. While providing waterfront access, insufficient land is available for parking and support facilities. Existing site configurations also serve to discourage marina development. Development of a boat basin at this site would necessitate construction of extensive breakwaters. Given the limited extent of the waterfront, not enough slips could be developed to justify these costs.

The site is, however, ideally suited for a quality restaurant establishment. Several examples of large, successfully operating restaurants can be found along the Detroit riverfront. The subject site could accommodate a 10,000 GSF facility with ample window exposure on the waterfront allowing for the operations of a full service restaurant and cocktail lounge. The site would also provide sufficient parking area. Using a seating capacity of 250 persons, it is estimated that a successful full service lunch and dinner operation could employ the equivalent of 25 full-time people. The job creating aspects of this type of operation would generate the

secondary income effects for the community as discussed previously. It is estimated that such a restaurant facility could add $300,000 to the local tax base. This is based on an estimated cost of construction of $50.00 per square foot, and an estimate of real property costing $10.00 per square foot. This addition to the tax base would generate additional local property tax revenues of approximately $18,300 annually.

Restaurant operations provide services which are directly used by the public. Restaurants do not develop strong linkages with other regional economic activities. As such, a restaurant operation would not provide the opportunity for strengthening the economic base that other types of operations might offer. A restaurant development at this site might provide other benefits to the community. With appropriate landscaping, development of this site would improve the visual quality and image appearance of the area. A good, local restaurant also increases leisure opportunities in the local area, which can improve a community's perception of the quality of life.

5. Public Recreational Development

As is apparent, the site is well suited for public recreational development. Located between two municipal land holdings, public acquisition would permit recreational development, while enhancing and expanding the recreational opportunities that could be offered by the surrounding municipal sites. The benefits of public recreational development are numerous. They are, however, difficult to quantify, particularly when measured against the more readily measurable, tangible benefits of private development.

The benefits to be gained from public development of the subject site accrue to a significant extent from the increased flexibility and opportunities gained from treating the combined municipal properties as a unified element. Currently, Ecorse Park only provides limited passive recreation opportunities to the local community. This limited use pattern is not a result of the lack of recreational demand, but rather is caused by the small size of the site and limited extent of physical development. The municipal site south of the subject parcel also receives limited use. The Ecorse Public Boat Launch serves a small group of recreational users, those citizens which own recreational craft. The locational aspects of the Senior Citizen's park and its lack of linkages with surrounding activities also results in a condition of underutilization.

Public acquisition of the site permits the physical linkage of Ecorse Park with the Boat Launch and Senior Citizen's Park site. This would provide the unifying element for the coordinated development of an expanded Ecorse Recreation Area. Physical improvements, expanded acreages, and lengthened walking distances would increase and enhance the recreational opportunities currently provided. The population center served by the park would expand, and increased public usage can be expected. The park would begin to serve more of the Downriver Area as it offered unique recreational opportunities not available elsewhere. It is important to note that increased usage would not be limited to the newly acquired subject parcel. Rather, it is also fair to expect that utilization levels would increase for Ecorse Park, the Boat Launch and property. The acquisition of the parcel may permit the eventual recreational development of Mud Island and/or an interpretive trail along the Ecorse River. These opportunities are also considered when evaluating the benefits derived.

The acquisition of the subject parcel for public use would clearly generate recreational benefits for the community at large. Public participation in fishing, picnicking, walking, visual interpretation, and historic interpretation activities serve to improve public well-being. These benefits would be shared by neighborhood users and users from the Downriver area. As recreational use of the area increases, so do the benefits to be derived. The benefits are not, however, limited to recreational users. The improved visual quality of the area will benefit the residents that live and work in the area. The improved aesthetic appeal of the area can improve the community's perception of the quality of life. Frequently, these types of improvements to the environment are reflected in higher neighborhood property values and consequently an improved tax base.

The direct job creating aspects of this type of development are not considered significant. At best, one full-time equivalent position would be created by the increased need for management and maintenance of the grounds and facilities. Indirect income and employment benefits could, however, become significant. If activity use levels increased considerably, then commercial business activity in and around the area would increase. The increase in business would be felt by those commercial establishments which service recreationists and consumers in general. The boat shops in the vicinity would enjoy increased business levels as Ecorse Park becomes a destination point for more recreational craft. Fish and tackle shops would also share in the increased

activity at the park, as would surrounding restaurants, retail stores and gasoline stations. Increased local business activity increases local incomes, employment, property values and tax revenues.

It is conceivable that improved business prospects in the vicinity of the new park development could attract new businesses to the small commercial district near the park. Vacancy rates would decline, and a better mix of business may result. The recommended park improvement program could also be used as the lead element in an overall improvement program for this important entry district. New signage, street furniture and landscaping, combined with an investment strategy to revitalize and upgrade the vicinity's commercial zone, could prove successful. Improving the visual and aesthetic quality of this key entry zone could, therefore, provide impetus in an effort to revitalize further sections of the Ecorse commercial district further north on West Jefferson Avenue, an additional benefit to consider.

Summary and Conclusions

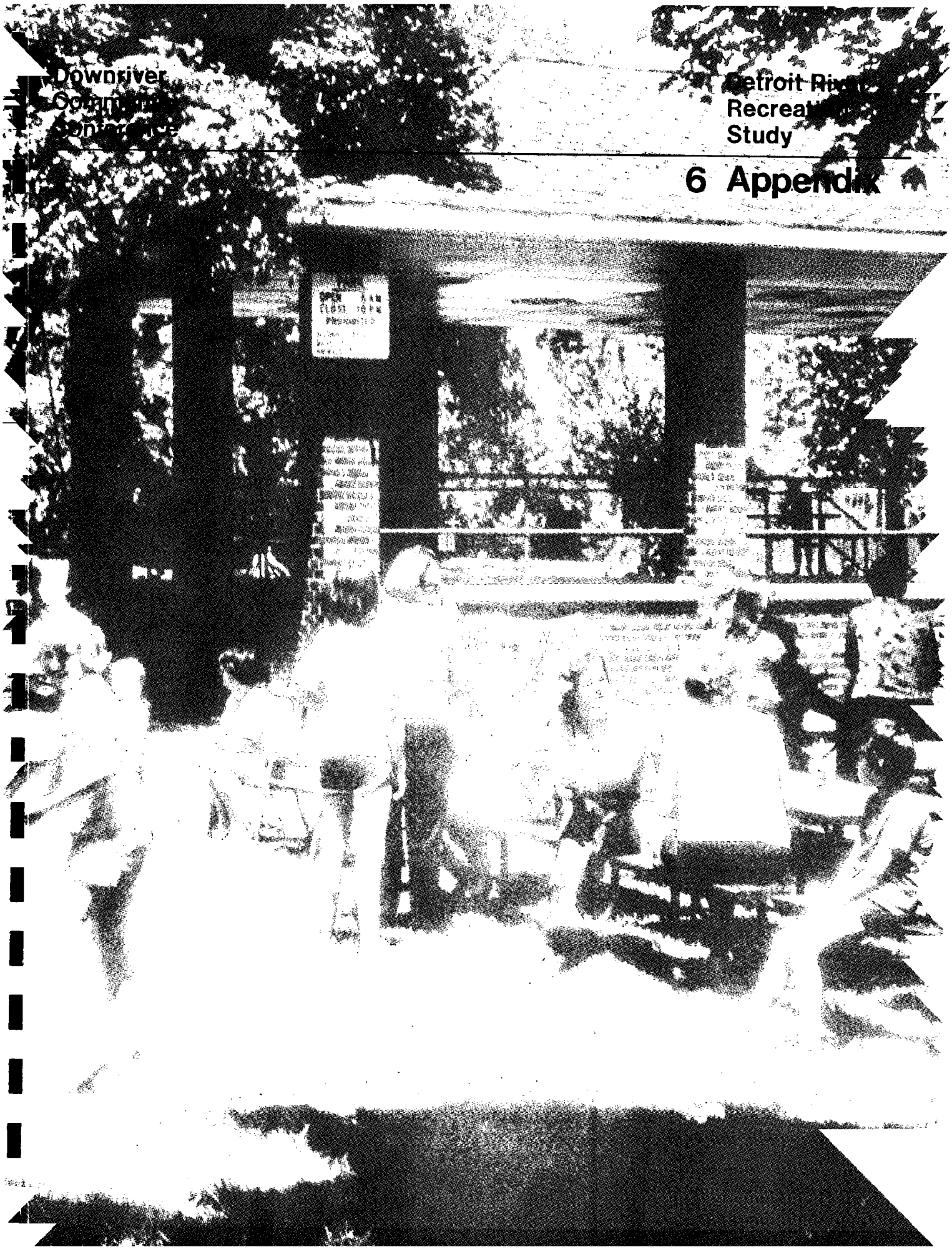
The table that follows presents in summary fashion the pertinent information developed in the evaluation. The analysis has been devoid of a discussion of costs. This does not imply that costs are not a factor. Two types of costs need recognition: the costs of providing public services for any type of use, and the opportunity cost of not capturing the benefits of an alternative use. With the exception of public recreation, the costs of providing public services (police, fire, schools) for each of the uses discussed are assumed to be roughly the same. Use of municipal water supplies and waste water treatment would differ greatly among uses, but the services are paid for by metered user charges. The costs associated with providing recreational services at the subject site need to be considered in light of other uses of the municipal budget. They are not, per se, directly related to the site itself, rather the services the municipality is providing. The same argument holds for the cost of acquiring and improving the site. It is not pertinent to the question of the highest and best use of the site.

The opportunity cost of any particular use is the loss in benefits from an alternative best use. If the best use of the subject parcel is selected, then the opportunity costs are minimized. The choice facing public decision makers is whether to acquire the subject site for public use or allow the property to remain in private ownership for private use. If the site remains in private ownership, indications are that it will remain undeveloped for some time. In an undeveloped state, the site remains reserved for future use while contributing to the local tax base. If privately developed, the most likely uses would be residential or commercial. The probable benefits from these uses have been discussed. If the site is publicly acquired, then the public stands to gain from the benefits derived from public use. By evaluating the benefits of each of these alternative paths, it is hoped that this analysis has given public decision makers the appropriate tools by which they can decide what is the highest and best use of the subject parcel from the public's perspective.

HIGHEST AND BEST PUBLIC USE - SUMMARY EVALUATION

Type of Development	Likelihood of Development	Potential Addition to Tax Base	Potential Increase in Local Tax Revenues	Potential Direct Job Creation	Potential Indirect Job Creation	Other Economic Benefits	Non-Economic Benefits
Heavy Industry	Minimal. Waterfront not adequate site too small, no rail access.	Would be significant	Would be significant	Would be significant	Could be significant depending on actual use	Can help attract/ retain related industries	--
Light Industry	Low. High per acre cost compared to other sites, no room for future expansion.	$475,000	$29,000	5-25	Depends on type of light industry. Good overall.	Can help attract/ retain related industries	--
Residential Use	Possible. Site is well suited for modest to moderately priced residential development.	$400,000	$24,000	1	Nil	May give some support to neighborhood residential values	Increase housing stock
Commercial	Likely. This is probably highest and best use from a private investor viewpoint. Restaurant/lounge facility could operate at site. Marine not likely due to physical site constraints.	$300,000	$18,300	25	Modest. Some support for local supplier industries.	--	Provide additional entertainment opportunities. Somewhat improve area image.
Public Recreation	Proposed	$(34,500) Reduction in base.	$(2,100) Reduction in taxes.	1	Modest to good depending on increase in visitor activity levels	Improved image may increase property values. Increased activity would increase business for local commercial base. Could be used to lead area revitalization strategy.	Permit expanded and more efficient use of surrounding municipal properties. Increase area and regional recreational opportunities. Protection of scarce Downriver non-industrial water frontage. Improved area aesthetics and image. Improved community well-being.

6 Appendix



DEVELOPMENT CHARACTERISTICS

Industrial development in Downriver Wayne County is of greatest concern. Because of its proximity to major transportation facilities such as freeways, rail, airports and shipping facilities, and substantial amounts of industrial-zoned land, the Downriver is considered one of the largest industrial centers in the United States.

The fourteen communities exhibit three major characteristics: mature, developing or rural. River Rouge, Ecorse and Melvindale represent older industrial-oriented cities with aging physical facilities, declining population and housing stock.

Wyandotte, Lincoln Park, Southgate, Trenton and Allen Park are mature but stable communities which are fully developed, but have little or no vacant land for new development. Housing, community facilities, and industrial facilities are also aging. The older Downriver communities have the most extensive revitalization needs, particularly for commercial, industrial and housing revitalization.

Brownstown Township, Riverview, Flat Rock, Woodhaven and Grosse Ile are developing communities with extensive vacant areas, but increasing demands for public services and utilities. Pressures for retaining land for community facilities and industrial uses compete with the needs to upgrade predominantly rural facilities.

Downriver Wayne communities have been declining in population since 1970 due to declining household sizes and restricted development policies. Future trends indicate substantial population losses in a few older communities with smaller increases for developing communities. Many communities can anticipate increases in smaller households.

Downriver communities tend to attract more family-oriented households (average household size is 3.70) when compared with other Southeast Detroit communities. Because of the area's economic base, they tend to have higher than average incomes, although several communities have high percentages of low and moderate income families. Unemployment is also low in the Downriver Area, with the exception of the City of Ecorse where unemployment exceeds 9%.

Detroit Riverfront Uses

The Detroit riverfront is primarily used for two purposes: industrial development north of Grosse Ile Parkway and open space/floodplains to the south.

Industrial development within the riverfront is the highest concentration in the United States. It consists of the massive steel plants, marine terminal operations, Ford Motor Company, sewage treatment plant, and salt mines in Dog Island to BASF Wyandotte and McLouth Steel in Gibraltar. Transportation facilities are also developed to serve the industrial areas, including railroad spurs, and docking facilities.

Several industries along the riverfront use the water for processing and shipping needs (Detroit Edison, Chrysler Corporation, Monsanto, BASF, Great Lakes Steel, McLouth, Firestone Steel Products and Pennwalt).

Floodplain and other sensitive environmental areas characterize the riverfront south of Grosse Ile Parkway. The offshore islands, particularly in Gibraltar, are developed for water-oriented residential uses. Pointe Mouillee, the Lake Erie Metro Park, as well as large tracts of vacant but marshy lands, occupy the riverfront.

The Detroit River is monitored yearly by the Michigan Department of Natural Resources for violations in exceeding fecal coliform, phenol and iron. Combined sewer systems, industrial discharges and surface runoff attribute to the violations in iron, phenol, fecal coliform, and nutrient concentrations.

PLANS AND POLICIES RELATED TO THE RIVERFRONT

Numerous levels of government, from federal to local municipalities, have plans and policies which affect the Detroit River in the DCC area. While it is impossible and unnecessary to discuss all of these plans and policies in detail here, these efforts have been reviewed and significant policies and trends are included--emphasis being given to recreation plans and policies. The policies and plans which concern the riverfront generally fall into two categories: (1) those which relate to the riverfront at the DCC or larger regional level; or (2) those which relate to smaller portions of the riverfront, namely individual communities.

Plans and Policies Concerning the Entire Riverfront

Most of the policies and recommendations concerning the DCC riverfront area are contained in two recently completed reports which cover the entire Wayne County riverfront: (1) The Land and the River, and (2) People and the River. Numerous policy documents have been promulgated by the Southeast Michigan Council of Governments (SEMCOG) covering housing, land use, water pollution control, municipal services and facilities, and recreation. Policies contained in these documents are generally of broad regional nature which set overall regional objectives in terms of numbers, call for regional cooperation, or require interpretation by local governments in their planning and development review efforts.

SEMCOG's 1990 Regional Recreation and Open Space Plan contains several goals concerning the effective utilization and preservation of the region's natural resources in a regional system of recreation and open space. These goals address mainly the provision of regional open space and recreation through future development in rural areas. Several specific objectives are promulgated which set numerical targets to achieve. The most significant of these is the provision of 20 miles of Great Lakes' shoreline for "public use as parks, scenic overlooks, pedestrian and bicycle paths, boating access points, shore fishing areas and marinas, including the entire Detroit River bank from the Ambassador Bridge to Windmill Point."

Most of the recommendations and policies contained in The Land and the River and People and the River concerning recreational development provide the basis for this recreational master plan and current efforts by Detroit to improve access along its riverfront. Involvement by the Huron-Clinton Metropolitan Authority and especially the Michigan DNR are needed to help in supplying regional recreation needs. The DNR should participate as the major funding mechanism as municipalities cannot be expected to bear the entire financial burden for developing a regional park. The riverfront, wetlands and islands should be protected, conserved and developed appropriately to meet regional citizen needs. Visual access and physical links to current parks and recreational sites need improvement. Riverfront park programming, especially organized activities, needs to be expanded. A framework and conceptual approach must be developed which can be used by individual communities to implement riverfront recreation policies and plans through their recreation and master planning efforts.

Municipal Policies and Plans

In general, communities in the northern portion of the DCC riverfront have fewer opportunities to develop recreation on the riverfront due to large, long-established industrial properties occupying most or all of riverfront locations. Plans and policies promulgated by these communities reflect this lack of potential, recommending no new future uses for the riverfront. Ecorse and Riverview are the most prominant examples of this approach. River Rouge also has few potentials for recreational development, although it is currently negotiating with the Detroit Edison Company to purchase easements for portions of its land on which to develop recreational uses.

The State of Michigan Coastal Zone Management Program summarizes existing state policies for several types of coastal areas and sets forth goals and action programs to achieve these goals for each coastal area. The types of coastal areas addressed include: (1) areas of natural hazard to development; (2) areas sensitive to alteration or disturbance; (3) areas fulfilling recreational or cultural needs; (4) areas of economic potential; and (5) areas of intensive or conflicting uses. The Detroit riverfront in the DCC area contains all of these areas and hence, the Michigan DNR will be active in future riverfront matters through its proposed programs.

Regional riverfront land use policies recommend maintaining logical land use patterns which have developed over time and are waterfront dependent. The most important of these patterns should center on industrial development, housing patterns, and recreation facilities. Floodprone areas should be acquired to prevent future development, and existing structures, especially housing, should be floodproofed.

Future industrial development on the riverfront is encouraged through recommendations for aggressive search and marketing actions for potential industry relocation. Recommended actions include research on the economic impact of industrial prospects, active use of the industrial data bank prepared, monitoring present occupancy of waterfront-related sites, and offering industrial financial incentives through existing legislation.

High density residential development on the riverfront is considered a positive contribution due to the lifestyle it offers and its addition to the community tax base and, hence, should be encouraged. Housing market potentials have been assessed. The area with the greatest potential is Grosse Ile Township; areas with intermediate potential are Gibraltar, Brownstown Township, Wyandotte, Riverview and Trenton; and areas with minimal potential are River Rouge and Ecorse. The areas within these communities where highest market potentials exist are near to existing viable residential areas with similar socio-economic character and amenable environments based on visual character, employment opportunities, services and public facilities.

Three communities currently have mixed land use patterns on the riverfront, a riverfront CBD location, and maintain the mixed use concept on the riverfront in future plans. These communities are Wyandotte, Trenton and Gibraltar. Trenton and Wyandotte are mature, stable communities where master planning efforts recommend revitalization of the Central Business District, developing open spaces on the riverfront near the CBD, and redevelopment of housing areas to higher densities near the CBD. Gibraltar is a rapidly growing community whose master plan recommends minor upgrading of its CBD to retain economic viability, maintaining current neighborhoods in the southern portions of the city, expansion of its marina, and maintaining the northern riverfront area as open space. All of these communities represent viable areas for development of major recreational uses.

Grosse Ile Township is a residential island which is developing at a moderate pace. Most of its shore areas are currently developed as low density residential areas with a thin strip of open space along the immediate shore. Larger tracts of land are to remain open space on the north and south ends of the island. Citizen attitudes, low availability of land suitable for recreational development, and access problems leave little potential for development of regional recreational uses on Grosse Ile.

Brownstown Township currently has large undeveloped areas along the riverfront. The northern portion of the riverfront is slated for future industrial development, while the southern portion is zoned low density residential. Part of this area has already been developed, and the master plan recommends the remainder be maintained as open space. Although Township officials have planned for much future industrial and residential expansion, obtaining riverfront land for recreational use seems feasible as such large land tracts are undeveloped.

Most of the islands in the Detroit River are entirely undeveloped. A number of these are under dispute as to who actually controls them, while others are under the protection of the DNR. Islands that lie close to the mainland are usually developed for residential uses. More isolated islands are generally to be maintained as open space, where master planning efforts have considered them. These isolated islands, thus, represent a resource which can be tapped for water-oriented recreational development.

In summary, recreational and master planning efforts by individual communities treat the Detroit riverfront in widely varying terms. Some recognize the potential of the riverfront as a unique resource on which to live, work, do business and play. Others have resigned themselves to loss of the riverfront for any use other than a site for heavy industries and, hence, maintain their tax base. Regional studies and planning efforts recognize the lack of understanding and coordination among riverfront communities leading to the ineffectual use of the Detroit riverfront as a unique resource of regional importance. Documentation of regional concerns consequently recommends a plan of scope encompassing the entire DCC riverfront and an approach which involves and coordinates all DCC riverfront communities.

RIVERFRONT LAND USE

	Residential		Commercial		Industrial		Government		Recreation		Vacant		Total	
Detroit River	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres
River Rouge					1.8	595.0			.1	9.4			1.9	604.4
Ecorse					1.6	424.0			.4	8.8	.2	.2	22	433.0
Wyandotte	1.6	12.8	.2	6.8	2.2	516.0	.4	24.8	.2	8.2	.1	1.0	3.7	596.6
Riverview					1.0	1.9					.2	30.0	1.2	229.0
Trenton	1.5	16.0	.1	2.0	2.8	590.0	.1	5.5	.7	170.0	.3	40.0	4.5	823.5
Gibraltar	1.7	33.0	.1	5.5							1.0	278.0	2.8	316.5
Brownstown Township	.7	12.5							2.3	1,370.0	.4	210.0	3.4	1,592.5
Grosse Ile Township	11.2	730.0		378.0					2.1	175.0	2.4	508.0	19.6	179.1
SUBTOTAL	16.7	789.9	.4	392.3	9.4	2,126.9	.5	30.3	5.8	1,741.4	4.4	1,067.2	39.3	6,386.5
Rouge River					3.3	159.0							3.3	159.0
River Rouge					12.7	2,285.9							42.6	6,545.5

Includes Airport

Source: Office of Economic Expansion, Michigan Department of Commerce. Page 33.
Parents for Progress.
The Land and the River. 1976.

DOWNRIVER COMMUNITY CONFERENCE

POPULATION TRENDS

	1970	1977	1980	1990
Allen Park	40,690	37,200	32,587	30,752
Brownstown Township	7,078	16,400	39,981	50,187
Ecorse	17,523	15,600	14,554	12,083
Flat Rock	5,680	6,850	9,763	11,915
Gibraltar	3,322	4,590	4,747	4,246
Grosse Ile Township	7,799	8,750	8,546	9,557
Lincoln Park	52,966	48,500	45,792	40,394
Melvindale	13,784	12,800	12,931	10,496
River Rouge	15,919	14,200	14,147	12,950
Riverview	11,342	13,600	11,507	11,715
Southgate	33,904	34,500	33,935	31,237
Taylor	69,997	77,300	86,295	78,992
Trenton	24,037	24,000	23,612	22,260
Woodhaven	13,083	8,800	29,480	39,717
Wyandotte	40,969	36,600	35,245	31,795
TOTAL	358,093	359,690	402,522	398,196

Source: SEMCOG Small Area Forecasts
Population and Occupied Dwelling Units in Southeastern Michigan. 1977.

DOWNRIVER COMMUNITY: DETROIT WATERFRONT COMMUNITIES

(RIVER ROUGE, ECORSE, WYANDOTTE, RIVERVIEW, TRENTON, BROWNSTOWN TOWNSHIP, GROSSE ILE, GIBRALTAR)

	1970	1977	1980	1990
River Rouge	15,919	14,200	14,147	12,950
Ecorse	17,523	15,600	14,554	12,083
Wyandotte	40,969	36,600	35,245	31,795
Riverview	11,342	13,600	11,507	11,715
Trenton	24,037	24,000	23,612	22,260
Brownstown Township	7,078	16,400	39,981	50,287
Grosse Ile Township	7,799	8,750	8,546	9,557
Gibraltar	3,322	4,590	4,147	4,246
TOTAL	127,989	133,740	151,739	155,293
% of Downriver Population	.36	.37	.38	.39

OCCUPIED DWELLING UNITS AND LAND AREAS

Occupied	Dwelling Units	Areas
Allen Park	12,000	7.2
Brownstown Township	5,500	22.8
Ecorse	5,350	2.7
Flat Rock	2,170	6.7
Gibraltar	1,500	4.4
Grosse Ile Township	2,760	10.4
Lincoln Park	16,600	5.9
Melvindale	4,610	2.7
River Rouge	5,100	2.4
Riverview	4,110	4.4
Southgate	10,900	6.8
Taylor	23,800	23.6
Trenton	7,600	7.4
Woodhaven	2,600	6.6
Wyandotte	13,100	5.6
TOTAL	117,700	119.6
Riverfront Communities	50,220	

DETROIT RIVER RECREATION STUDY

ADVISORY COMMITTEE

1. **Legislators - State**

   Honorable James DeSana

   Honorable George Hart

   Honorable Matthew McNeely

   Honorable Thomas J. Anderson

   Honorable Jeffrey D. Padden

   Honorable Alfred A. Sheridan

2. **County Officials**

   Maurice W. Roach

   William Sullivan

   Edgar Harris

   Clarence R. Young

3. **Organizational Representatives**

   Dr. Howard A. Tanner

   Donald Juchartz

   Charles Younglove

   Robert Bryan

   Joseph Stermer

   John MacGinnis

   Chuck Lewis

   Chris Shafer

   Max Hilton

   Lester R. Nichols

   Norton L. Berman

3. **Organizational Representatives** - continued

Ken Underwood

James P. Curran

Harriet Saperstein

Susan Navoyosky

George Kadar

4. **Wayne County**

Joseph Crea

Arthur Gibson

Nathan Johnson

Joseph Evanski

Leonard Goodall

Eleanor Lawson

Kermit Mead

Thomas Neenan

Clyde Palmer

John Stock

5. **Local Representatives**

Charles Horn

James Feudner

Larry Davidson

Dan Bielski

Mayor Richard Manning

William Kreger

K. Wayne Knox

Frank Wendrowski

Larry Fitch

6. **Local Planning Commission**

Ray Bennett

Mel Laginess

Jack Kesterson

William Ames

Arloe Mills

Richard Bohl

7. **Riverfront Businessman's Associations**

James Outland

Virgil Ciungan

Arthur Laing

Dan Oaks

James Zanglin

8. **Industrial Representatives**

William Murphy

Arthur Warmuskerken

Robert Artz

Robert Heineman

William Kelly

George Mathews

Charles Mueller

William Reeves

Damon Lindley