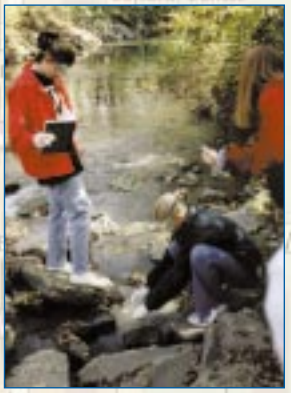
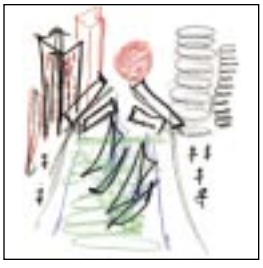
PEOPLE AND THE RIVER



PEOPLE AND THE RIVER

PERCEPTION AND USE OF CHICAGO WATERWAYS FOR RECREATION



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***CHICAGO Rivers* Demonstration Project**

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This is a publication of the *CHICAGO**Rivers*** Demonstration Project, a national model for the enhancement of urban waterways. It is a collaborative effort directed by the Friends of the Chicago River and the National Park Service, Rivers, Trails, and Conservation Assistance Program.

*CHICAGO**Rivers*** Demonstration Project

Friends of the Chicago River

Metropolitan Water Reclamation District of Greater Chicago

National Park Service, Rivers, Trails, and Conservation Assistance Program

Urban Resources Partnership of Chicago

U.S. Army Corps of Engineers, Chicago District

USDA Forest Service, North Central Research Station

U.S. Fish and Wildlife Service, Chicago Metro Wetlands Office

Friends of the Chicago River is the only non-profit organization dedicated solely to the protection and improvement of the Chicago River. The organization has become the single most influential voice for realizing the potential of the river's many resources. Since its inception in 1979, the Friends of the Chicago River has played a significant role in policy and planning for the promotion of public access and improvements to the river.

The National Park Service, through its Rivers, Trails, and Conservation Assistance Program, is responsible for developing national policies and programs concerning the conservation of the nation's river and trail resources. The Service also helps local communities and organizations create conservation plans for the development and protection of greenways, river corridors, and open space areas outside of the national parks.

FRONT COVER: Although a natural phenomenon (more or less), Chicago's waterways are much about people—those who live, work or play along its varied shores. These are the people who will—through care and common visions—determine the future of this great waterway. Views of the river and its people overlay a visitors map of the City and the main branch of the Chicago River. Clockwise from upper right, aerial view of Lake Michigan, the Chicago River and the City of Chicago (photograph by Richard E. Carter); North Mayfair neighborhood volunteers planting the Gompers Park wetlands along the North Branch of the Chicago River (courtesy of Chicago Park District); Glenbrook North High School students monitoring the health of area rivers (courtesy of Mike Piskel); and Urban Canoe Adventures (U-CAN) river guide trainees practicing their newly-acquired canoe skills (courtesy of Friends of the Chicago River).

TITLE PAGE: Residents participating in small focus groups (Chapter 2, Nearby Neighborhood Residents' Images and Perceptions of the River) were asked to express their feelings of the river through crayon drawings. The drawing shown characterizes a participant's impression of the Chicago River ("Main Branch") by depicting sailboats, bascule (movable) bridges and high-rise architecture.

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OVERVIEW OF *CHICAGO**Rivers*** DEMONSTRATION PROJECT

In 1979, *Chicago* magazine published an article entitled, "Our Friendless River" by Robert Cassidy, who pointedly described the need for individuals or an organization to develop a vision for the Chicago River's future and to care for it. In response to his compelling article, an overwhelming number of concerned citizens cried, "I care! What can I do?" This powerful article gave impetus to individuals forming the Friends of the Chicago River, an organization dedicated to the protection and improvement of the Chicago River system.

During the 1970's and 1980's, substantial improvements to water quality had been accomplished by the Metropolitan Water Reclamation District of Greater Chicago through the implementation of numerous pollution and flood control projects. These innovative projects have revived the ecological health of area waterways through increased fish populations, streamside vegetation and wildlife habitat.

Improved water quality, the scarcity of suitable open space, and the river's new-found "friends" spurred a renewed awareness of the Chicago River. Area residents began to view the waterways as important resources and community assets, and recognized the need for continued environmental improvements and the opportunity for increased recreation. Responding to this interest, the Friends of the Chicago River organized a series of public forums in 1991 and 1992 called "Voices from the Stream" to emphasize the river's attributes and identify opportunities for future improvements. Building on the results of these forums, a workplan for future river studies was completed by the Friends and the National Park Service.

INITIATION OF *CHICAGO**Rivers*** DEMONSTRATION PROJECT

Local efforts emphasized by the forums drew the attention of Congress, resulting in the initiation of the ChicagoRivers Demonstration Project in 1993. Established as a collaborative effort, project goals emphasize the development of an action plan for river enhancements, initiation of community-based activities and application as a national "model" for revitalizing degraded urban rivers. At its outset, project participants decided that the study area should encompass the North Branch of the Chicago River, North Shore Channel, Chicago River, South Branch of the Chicago River, Chicago Sanitary and Ship Canal, and Calumet-Sag Channel. Comprising 156 miles of natural and constructed waterways, this study area provides the diversity of corridor settings, land uses, population, and issues expected of a national model. In effect, the Chicago and Calumet River systems became a "classroom" for community organizing and river enhancements.

Comprehensive resource assessments encompassing a range of topics have been completed by many agencies participating in the project:

- Metropolitan Water Reclamation District of Greater Chicago provided existing water quality data, information on pollution and flood control activities, and assisted with a related U.S. Bureau of Mines study to assess contaminated river bed sediments and develop model techniques for reclamation.
- U.S. Army Corps of Engineers, Chicago District compiled data on land use, hazardous waste sites and sociocultural characteristics and conducted a telephone survey of recreation use and resident perceptions of the waterways.
- USDA Forest Service, North Central Research Station assessed existing recreational uses and perceptions of the river and identified desired changes expressed by a variety of area residents and organizations.
- U.S. Fish and Wildlife Service, Chicago Metro Wetlands Office conducted an inventory of existing habitat, fisheries and wetland areas and delineated priority areas for the future wetland and habitat improvements.

A parallel effort, conducted by the Friends of the Chicago River, involved community outreach and river constituency development. Using a variety of techniques, the outreach program has increased citizen awareness, strengthened the connection between people and the waterway, articulated "visions" for future river uses and enhancements, and established a grassroots constituency to support implementation.

Combining resource capabilities with citizen needs, an action agenda provides direction for developing future recreational uses and implementing specific resource enhancement projects throughout the waterway. Based on community "visions" for both the overall waterway and individual river reaches (sections), the implementation of various projects, policies and programs will provide an effective and comprehensive means of achieving future recreation facilities and resource enhancements.

Project efforts and effective constituency development have already led to specific demonstration activities involving wetland restoration, recreation development and environmental education. These initial actions have been greatly assisted by the Urban Resources Partnership program; local government including the City of Chicago Department of Environment, the Chicago Park District, the Forest Preserve District of Cook County, and the Lake County Forest Preserve District; neighborhood groups such as the North Mayfair Improvement Association and Chicago Youth Centers; and youth organizations such as "Fishin' Buddies!" Youth Fishing Club.

ABSTRACT

This report describes an interrelated set of social science investigations conducted for the ChicagoRivers Demonstration Project. The purpose of these studies was to understand how user and interest groups currently perceive and use the Chicago and Calumet River corridors, and how they would like to see the corridors improved for recreation and related values. An introductory chapter defines overall research objectives and presents a framework for identifying important groups, settings, and issues for study. Four subsequent chapters address these dimensions with respect to a) nearby neighborhood residents, b) on-site recreational users, c) resource experts, and d) recreation habitats. Three additional chapters briefly summarize support studies which assessed a) the outdoor needs of Chicago residents, b) the leisure needs and preferences of Chinese Americans living in Chinatown, and c) the recreational use of the Chicago River system by canoeists, kayakers and rowers. A final chapter summarizes and synthesizes findings from all these studies (as well as the findings from a metropolitan-wide telephone survey of area residents published in the ChicagoRivers Demonstration Project document entitled, "Resident Use and Perception of the Chicago and Calumet Rivers"), and suggests directions for corridor planning and management.

PREFACE

Back in 1992, when an aide to U.S. Congressman Sidney Yates asked us to get involved in a research project on the Chicago River, we knew little about the journey we had in store. The USDI National Park Service (NPS) and the Friends of the Chicago River (Friends) had recommended that our office, the Chicago unit of the Forest Service's North Central Research Station, "undertake a user needs and resource perception study of the Chicago River." The task seemed straightforward enough, and we felt the project fit well within our mission and capabilities in urban forestry and river recreation research. Without hesitation, we signed onto the fledgling "Chicago River Urban Multiple Objective River Corridor Demonstration Project," which in time would become known as "ChicagoRivers."

In early meetings with staff from NPS and Friends, we discussed what kinds of information were needed about user needs and resource perceptions. We were joined in these discussions by representatives from local and federal agencies in the Chicago area who would be addressing other resource concerns in the ChicagoRivers project. For the social component, key questions included: What images do people hold of the Chicago River? How do people perceive water quality, safety, aesthetics, and other issues? How do these perceptions affect use of the river and its associated lands? How is the corridor used, where, by whom, and for what? How can the corridor be improved for recreation and related values?

In these same sessions, we also defined the scope of the area to be studied. A decision was made to take on a 156-mile corridor that stretched from the headwaters of the North Branch of the Chicago River near the Wisconsin border, south to the mouth of the Calumet River near Indiana, and southwest along the Chicago Sanitary and Ship Canal to Lockport, IL. This would ensure that diverse settings, groups, and issues would be addressed.

Our "straightforward" study soon grew quite complex. It was obvious that a multiple-study approach was needed to gather information of sufficient breadth and depth. As principal investigators, we designed and implemented an interrelated set of studies to address key questions about user needs and resource perceptions, and we assembled a research team to help us carry out the studies. Four principal studies by the Forest Service would supply the primary base of information about groups, settings, and issues. The U.S. Army Corps of Engineers would take the lead on a fifth study, looking at corridor residents across the entire metropolitan region.

The principal Forest Service studies focused on nearby neighborhood residents, on-site recreational users, resource experts, and recreation habitats. In addition to these principal studies, we coordinated and helped fund three support studies that dealt with additional neighborhood communities along the river; with the Chinatown community area, where major new park development is planned; and with canoeists, kayakers, and rowers who have used the river.

Assembling this wealth of information was as much of a challenge as designing and implementing the studies themselves. The challenge was especially great for the qualitative studies, as we worked to make order out of the small mountains of interview transcripts on our desks. Because each study had unique information to offer, we decided to present each as an independent chapter, tied together with introductory and concluding chapters. The four principal studies by the Forest Service appear as full chapters in this technical report. Also included here are brief summary chapters for the three support studies. The Army Corps study of corridor residents appears in a separate volume in this technical report series.

This publication required the efforts of many people, not just the principal investigators. Those who conducted and assisted in the individual studies are identified in each of the separate chapters; we thank them all and hope that by bringing their work together we have added to the utility of their individual efforts. Any errors in reporting the findings of these studies are ours alone.

We also thank the ChicagoRivers partners and our colleagues at the Forest Service for contributing their time and ideas. We especially thank Wink Hastings of the National Park Service Rivers, Trails, and Conservation Assistance Program and Laurene von Klan of the Friends of the Chicago River for involving us in ChicagoRivers, and our Project Leader John Dwyer.

Finally, we thank the many hundreds of study participants who gave us their valuable time and spoke freely with us about their knowledge of and feelings for the Chicago River. We hope that this report produced from their contributions will work to improve the river they care for so deeply.

Paul H. Gobster and Lynne M. Westphal

Principal Investigators

CHAPTER 1

Introduction to People and the River

Paul H. Gobster and Lynne M. Westphal

BACKGROUND AND RESEARCH OBJECTIVES

Although we need to better understand the physical and biological environment of the Chicago and Calumet River corridors, in a region populated by more than 7 million people the ultimate success of the ChicagoRivers Demonstration Project will largely depend on how well we understand the social environment. Since long before the birth of Chicago, people have had strong ties to the Chicago and Calumet River systems, and these continue today. To understand them, the USDA Forest Service was asked to study how user and interest groups currently perceive and use the river corridor, and how they would like to see it improved for recreation and other values. We defined our overall research objectives as follows:

1. To identify and characterize the major constituent groups, settings, and recreational opportunities in the corridor.
2. To identify patterns of recreational use; perceptions of issues; and preferences for recreational activities, settings, and experiences.
3. To examine commonalities and differences in uses and perceptions of different areas along the river corridor.
4. To make recommendations for enhancing the river for recreation and related values and for improving river corridor planning and management based upon research findings.

FRAMEWORK FOR RESEARCH

As we developed a research plan to address these objectives, the scale and diversity of the corridor made it especially important to identify the key aspects about people and the river. These are discussed below through an analysis of groups, settings, and issues.

CONSTITUENT GROUPS

In a metropolitan area as large as Chicago, the range of Chicago River corridor user and interest groups is wide. In developing a plan for research, we worked with project staff of the National Park Service and Friends of the Chicago River to identify the major constituent groups that affect or are affected by management of the river corridor. We identified seven important constituent groups of two major types. The first group type included *those who use lands* (or could use them but currently do not) for recreation and related values. These groups reflect the current and potential *demand* for recreation and open space opportunities and include:

1. Residents of nearby neighborhoods and community areas
2. On-site recreational users
3. The "general public" of metropolitan Chicago

The second group type included *those who manage lands* along the river, or directly or indirectly provide opportunities for recreation. These groups reflect the current and potential *supply* of recreation and open space opportunities and include:

4. Public land managers
5. Non-profit recreation and environmental interest groups
6. Private commercial recreation providers
7. Commercial and industrial land and water interests

Little was known about how these groups currently perceived and used the corridor, or how they might react to future policies and plans for recreation and open space improvement. Nor was much available on a national scale, for most river recreation studies have taken place in wildland settings, providing little guidance to efforts in Chicago or other urban areas (Dwyer and Schroeder, 1982).

CORRIDOR SETTINGS

The 156-mile-long corridor of the Chicago River flows through the heart of Chicago's metropolitan area, linking pleasant suburban communities and lush forest preserves with a vibrant, growing downtown and a spectrum of urban residential, commercial, and industrial land uses. A series of photographs illustrating the diverse character of Chicago's waterways are located in a group of plates between pages 4 and 5. To study a corridor of this length and diversity, we had to devise a landscape sampling strategy that would help us understand the corridor as an overall system yet provide information of sufficient detail to guide planning and management efforts at the local level. For the ChicagoRivers assessment, the corridor was divided into 10 sections or "reaches," corresponding roughly to the different branches of the waterway. These reaches are listed below, and Figure 1.1 shows their location within the Chicago metropolitan region.

1. West Fork of the North Branch of the Chicago River
2. Middle Fork of the North Branch of the Chicago River (sub-reaches 2A & 2B)

STUDY REACHES[1]

Designation Number	Waterway ("common" name)	Length (nautical miles)
1	West Fork of the North Branch of the ChicagoRiver ("West Fork")	14
2A/B	Middle Fork of the North Branch of the Chicago River ("North Branch" or "Middle Fork")	24
3	Skokie River ("East Fork")	17
4	North Shore Channel ("Channel")	17.6
5A/B	North Branch of the Chicago River ("North Branch")	17.2
6	Chicago River ("Main Branch" or "Main Stem")	1.4
7	South Branch of the Chicago River ("South Branch") and South Fork of the South Branch of the Chicago River ("Bubbly Creek")	3.9
8	Chicago Sanitary and Ship Canal ("San-Ship" or "Canal")	8.2
9A/B	Chicago Sanitary and Ship Canal ("San-Ship" or "Canal")	22.5
10A/B/C	Calumet River, Little Calumet River ("Little Calumet") and Calumet-Sag Channel ("Cal-Sag"), collectively known as the Calumet Waterway System	29.8

[1]The waterways included in the ChicagoRivers Demonstration Project were divided into ten reaches (sections) to facilitate resource assessment and to establish common waterway sections for reporting study findings. For those investigations which required more specific study area delineation, subreaches were established and identified by a letter.

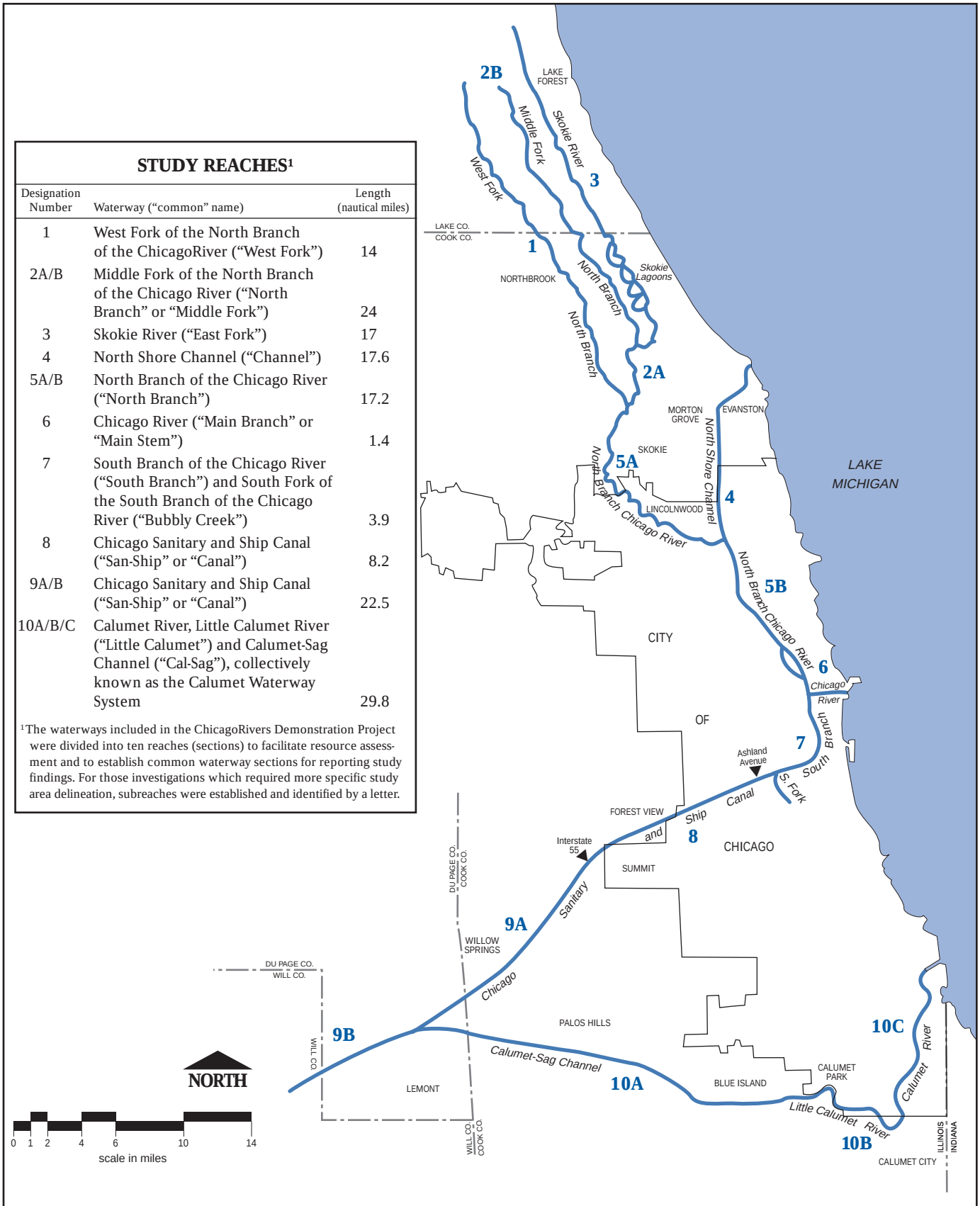


FIGURE 1.1
Map of study reaches

3. East Fork of the North Branch of the Chicago River or Skokie River and Lagoons
4. North Shore Channel
5. North Branch of the Chicago River (sub-reaches 5A & 5B)
6. Main Stem of the Chicago River
7. South Branch of the Chicago River
8. Chicago Sanitary and Ship Canal between South Bridge and Interstate Highway I-55
9. Chicago Sanitary and Ship Canal between Interstate Highway I-55 and Lockport (sub-reaches 9A & 9B)
10. Cal-Sag Channel, including portions of the Little Calumet and Calumet Rivers (sub-reaches 10A, 10B, & 10C)

Although these reaches are useful for understanding many environmental resource issues and problems, in some cases they may not always be the best way to understand people's perceptions and uses of the corridor. For example, the Skokie Lagoons is a unique area within Reach 3, and information from those who use or live next to this area may not relate to people's perceptions and uses of the rest of the Skokie River. For these reasons, the studies in this technical report used reaches as an underlying division for corridor sampling purposes, but in some studies neighborhoods or sites were the main defining units of the landscape due to the nature of the group studied.

ISSUES

The diversity of constituent groups and river settings signaled to us that people's perceptions and uses of the corridor might also be diverse. In the case of the Chicago River, it was likely that people's perceptions and uses could differ as a function of the area or reach along the corridor; might depend on their awareness, knowledge, or familiarity with the resource; and might encompass a wide range of issues from water quality, to safety, to aesthetics. People's perspectives on river corridor issues could also be affected by the constituent group to which they belonged. For example, a public land manager responsible for safeguarding recreational users might have a different perspective on safety than a recreationist with preferences for hiking or canoeing in natural surroundings.

With these considerations in mind, we devised a core set of questions that could be asked of key constituent groups. For particular groups, these questions could be rephrased or additional questions could be asked. The core questions covered the following topics:

1. Knowledge, awareness, and significance of the resource.
2. Use of the resource: activities, physical and social patterns of use.
3. Preferences for river settings: likes and dislikes, favorite places and favorite place attributes.
4. Perceptions of social and physical problems: water quality, aesthetics, recreation and facility maintenance, safety, and access.
5. Perceptions of resource change.
6. Suggestions for improving the river for recreation and other values.

RESEARCH METHODOLOGIES

To address this complex interrelationship of settings, groups, and issues, we needed a research strategy that would provide comprehensive and in-depth knowledge of people's perceptions and uses, and a useful base of information for planning and management. Out of discussions with ChicagoRivers partners, we designed a series of interrelated studies using methods appropriate to the settings, groups, and issues under investigation. These principal studies included:

1. **Focus Groups with Nearby Neighborhood Residents (Chapter 2, pages 5-48):** We brought together groups of residents who lived on or very close to the river, from diverse reaches and neighborhoods throughout the corridor. The principal objectives of this study were to identify residents' awareness, perceptions, and uses of the river corridor in their neighborhood, and to solicit their ideas and opinions about improving the corridor for recreation and related resource values. Investigators used a variety of structured and open-ended focus group techniques to elicit perceptions on issues, probe these issues in-depth, and to encourage open discussion of ideas and solutions. Nearly 100 adults and teens participated in the study, in 11 focus groups. Nine focus groups were held at key residential locations throughout the corridor. To provide a basis for comparison and contrast with nearby neighborhood residents, two additional groups were held with residents from the greater metropolitan area who did not live near the river.
2. **On-site Survey of Recreational Users (Chapter 3, pages 49-78):** We interviewed park and open space users in diverse activities and settings along the corridor. The principal objectives of this study were to identify the full range of activities that take place in and near the river, and to understand how different places along the river corridor provide different activities, settings, and experiences. Nearly 600 recreationists were interviewed at important sites along 6 of the corridor's reaches.
3. **Face-to-Face Interviews with Resource Experts (Chapter 4, pages 79-159):** We conducted in-depth personal interviews with a cross section of people who influence the recreational use of the corridor. The purpose of these interviews was to understand what types of recreation opportunities take place along the corridor, and how these activities relate to physical and social characteristics of the resource. The major groups from which participants were selected included public land managers, non-profit recreation and environmental interest groups,

private commercial recreation providers, and commercial and industrial land and water interests. In all, we conducted 38 formal and informal interviews with 55 people, representing 33 agencies, organizations, and companies.

4. **Landscape Suitability Analysis for "Recreation Habitats" (Chapter 5, pages 161-172):** We collaborated with Charles Nilon of the School of Natural Resources at the University of Missouri to study how metropolitan demographics and land use variations combine to affect existing and potential recreation opportunities along the river corridor. Computer-based Geographic Information System (GIS) models were used to define and map the potential suitability of corridor areas for recreational use and neighborhood access.

5. **Telephone Survey of Corridor Residents (ChicagoRivers Demonstration Project publication entitled "Resident Use and Perception of the Chicago and Calumet Rivers"):** We collaborated with David Wallin of the U.S. Army Corps of Engineers, who conducted a telephone survey of metropolitan Chicago residents who lived near the corridor. The purpose of the study was to capture a large-scale, statistically representative sample of residents that could provide quantitative information on river awareness, perceptions, uses, and ideas for improvement for every river reach. The sample included some information on non-users, but was focused mainly on those who had used the river in the previous 12 months. Two hundred of the 1,221 adult river users in the sample were riparian residents; of the rest, about half lived within 2 miles of the river corridor and half lived 3 or more miles away from the corridor.

In addition to these Park Service-funded efforts, the Forest Service also helped fund and direct three support studies that provided further information on particular groups who use or live near the Chicago River:

6. **Focus Group Study of Chicagoans' Open Space Needs (Chapter 6, pages 173-176):** We collaborated in the design of a study to understand the open space needs of City of Chicago residents. The study was directed by Kathleen Dickhut of Openlands Project, and conducted by the Metropolitan Chicago Information Center by Steve Diller and Dan Stolze. It was done to provide information for planning and project development under CitySpace, a joint venture of Chicago's Department of Planning and Development, the Chicago Park District, and the Forest Preserve District of Cook County. Two focus groups were held in each of seven community areas included in the sample (one of teens, the other of adults). Four of the seven areas were adjacent to the Chicago River corridor, and information from these eight focus groups provided additional insights into people's perceptions and uses of the South Branch, North Branch, and Calumet River reaches.

7. **Face-to-Face Personal Interviews with Chinatown Adults and Adolescents/Group Interviews with Chinatown Children (Chapter 7, pages 177-179):** We cooperated with Tingwei Zhang of the Department of Urban Planning and Policy at the University of Illinois at Chicago on a study that focused on the open space needs of residents within Chicago's Chinatown community. Chinatown, an ethnically homogeneous neighborhood of Chinese Americans located near the South Branch of the Chicago River, ranks among the lowest of neighborhoods in the city in terms of available park acreage. More than 200 residents ages 13 and older were interviewed face-to-face in homes, shops, and community organization buildings around the Chinatown area. Among the questions, respondents were asked about their ideas for development of a proposed new 12-acre park by the Chicago Park District along the South Branch in Chinatown. A second sample of 39 children ages 5-12 were asked to draw pictures of their "ideal park" setting along the river and to discuss what they included in their ideal setting.

8. **Mail Survey of Chicago River Canoeists, Kayakers, and Rowers (Chapter 8, pages 181-182):** We helped supervise and fund a master's thesis project by Joan O'Shaughnessy, under the direction of William Howenstine of the Department of Geography and Environmental Studies at Northeastern Illinois University in Chicago, which looked at the use patterns and perceptions of people who had recently paddled the Chicago River. More than 130 canoeists, kayakers, and rowers from club and organization mailing lists responded to the mail survey. This study provided valuable information on an important user group that is represented in only small numbers in the other surveys described above.

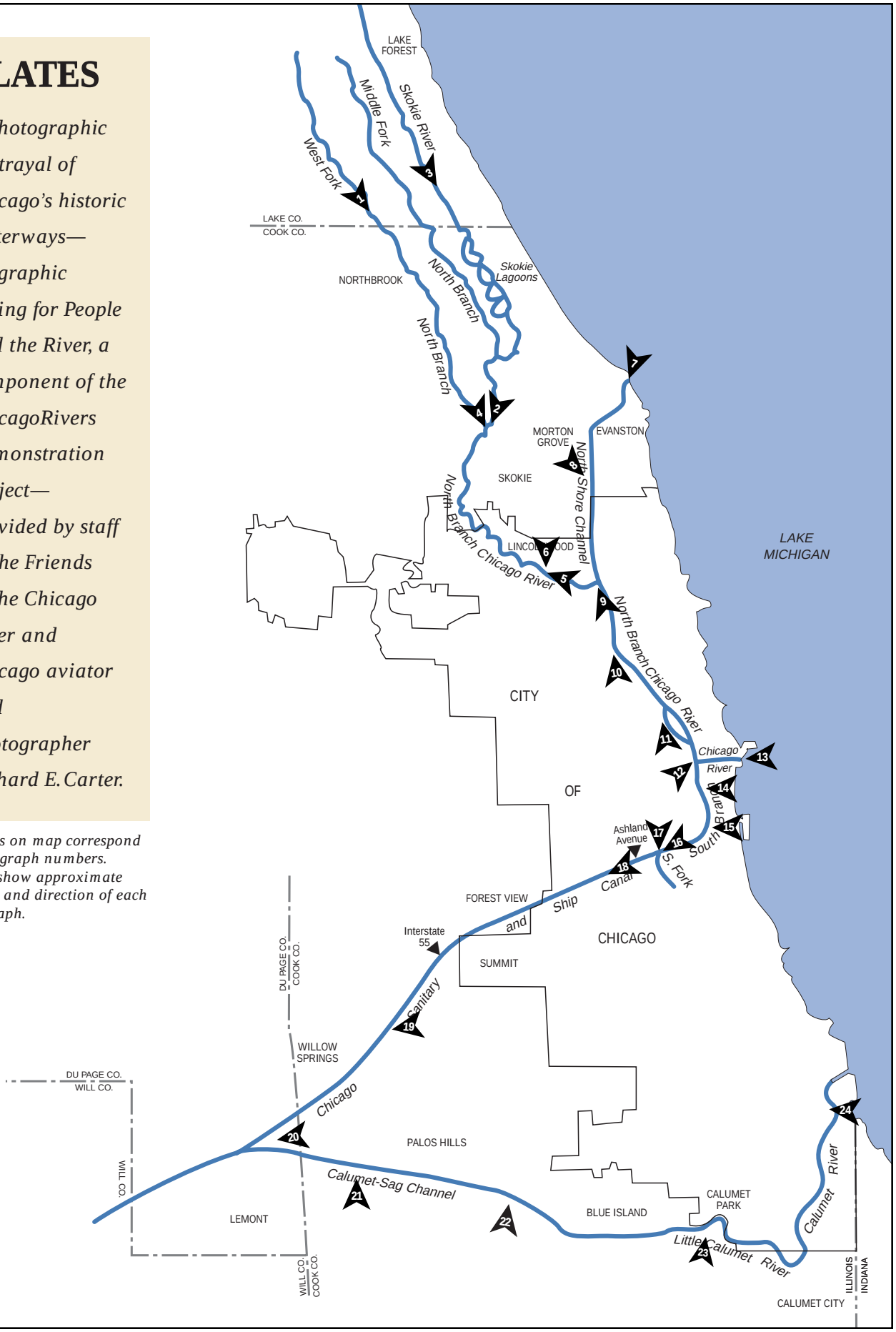
LITERATURE CITED

Dwyer, John F., and Schroeder, Herbert W. (1982). Urban river recreation: new challenges and opportunities. *Naturalist*, 43(2): 6-11.

PLATES

A photographic portrayal of Chicago's historic waterways—geographic setting for People and the River, a component of the ChicagoRivers Demonstration Project—provided by staff at the Friends of the Chicago River and Chicago aviator and photographer Richard E. Carter.

Numbers on map correspond to photograph numbers. Arrows show approximate location and direction of each photograph.



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1. West Fork of the North Branch of the Chicago River

This view of the West Fork, taken near Lake Cook Road in Deerfield, illustrates the reason area residents refer to the water course as the "ditch."

(Courtesy of the Friends of the Chicago River)

2. Middle Fork of the North Branch of the Chicago River

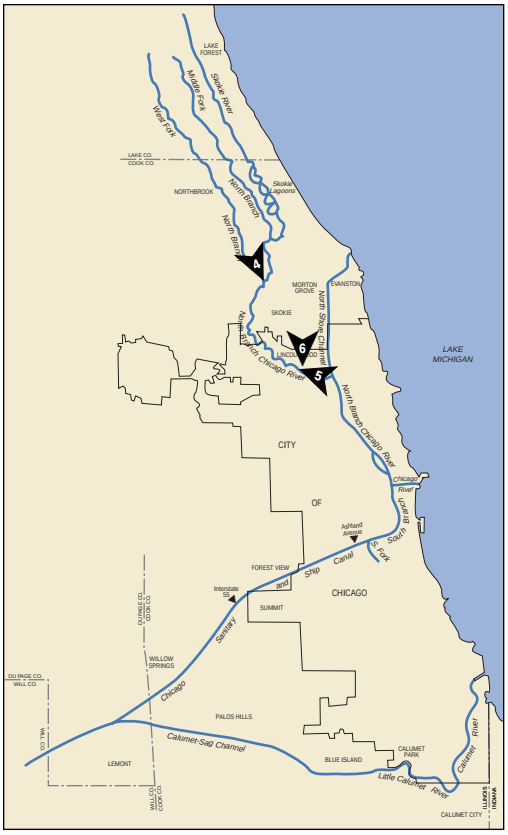
A wooded stretch of the Middle Fork flowing through Harms Woods, a public recreation area located in Glenview and administered by the Forest Preserve District of Cook County.

(Courtesy of the U.S. Fish and Wildlife Service)

3. Skokie River

A peaceful section of the Skokie River or "East Fork" in the vicinity of Centennial Park, a public facility administered by the Park District of Highland Park.

(Courtesy of the Friends of the Chicago River)



4. Middle Fork of the North Branch of the Chicago River and West Fork of the North Branch of the Chicago River

Confluence of the West Fork (right foreground) and Middle Fork (left foreground) at Chick Evans Golf Course, administered by the Forest Preserve District of Cook County. Below the confluence, the North Branch flows under Beckwith Road (middleground) and Dempster Road (center background).

(Photograph by Richard E. Carter, 1996)

5. North Branch of the Chicago River

A view of Gompers Park (Chicago Park District) located at the southwest corner of North Pulaski Avenue (foreground) and Foster Avenue. The North Branch, obstructed by dense tree cover, is located in the center of the photograph flowing from upper left to lower right. The Gompers Park wetland restoration project lies along the left riverbank.

(Photograph by Richard E. Carter, 1996)

6. North Branch of the Chicago River

A view overlooking North Park College located on Foster Avenue (foreground). The North Branch, identified by the curving line of trees in the center of the photograph, flows from the foreground at Foster Avenue to River Park (Chicago Park District) in the background where the North Shore Channel enters from the left.

(Photograph by Richard E. Carter, 1995)

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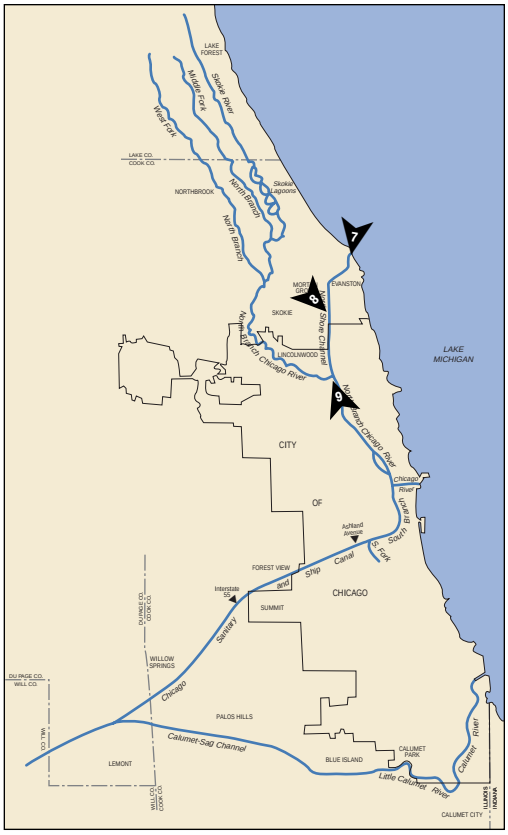


7. North Shore Channel

A view looking southwest along the Channel as it flows toward the background. The Peter Jans Golf Course adjoins both banks (foreground) and the Evanston Ecology Center is in the right background. The Lincoln Street bridge is in the foreground, while Green Bay Road is in the middleground.

(Photograph by Richard E. Carter, 1994)

8. North Shore Channel

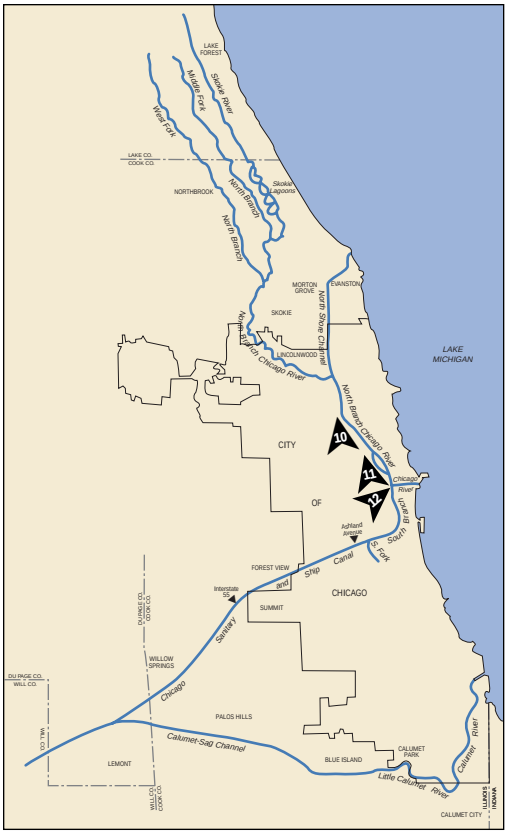
A view of the Channel as it flows (foreground to background) past public recreational facilities administered by the Skokie Park District. The Winston Towers apartments are on the left, while the Lincolntown Mall is to the right.

(Photograph by Richard E. Carter, 1994)

9. North Branch of the Chicago River and North Shore Channel

A view of the North Shore Channel (flowing from right background) and its confluence with the North Branch (center) as it enters from the left. River Park (Chicago Park District) adjoins both banks of the waterway. Argyle Street bridge is in the foreground, while Foster Avenue bridge is in the center.

(Photograph by Richard E. Carter, 1995)



10. North Branch of the Chicago River

A view of the North Branch as it flows through the Ravenswood neighborhood. Horner Park (Chicago Park District) lies along the left bank (west). A local riverbank planting project sponsored by Waters Elementary School has successfully restored portions of the east bank (right) above the Bond Boat Yard (center).

(Photograph by Richard E. Carter, 1996)

11. North Branch of the Chicago River

The North Avenue Turning Basin (center) and the North Branch as it flows on the west (left) side of Goose Island (upper left to lower left). The North Avenue bascule bridge crosses the North Branch immediately above (upstream) the turning basin.

(Photograph by Richard E. Carter, 1995)

12. Chicago River and North Branch of the Chicago River

The North Branch (flowing from left to right) as it joins the Chicago River ("main stem") at Wolf Point (small vegetated site at the river bend). The South Branch of the Chicago River flows behind the large, white building at the right edge (center) of the photograph.

(Photograph by Richard E. Carter, 1995)

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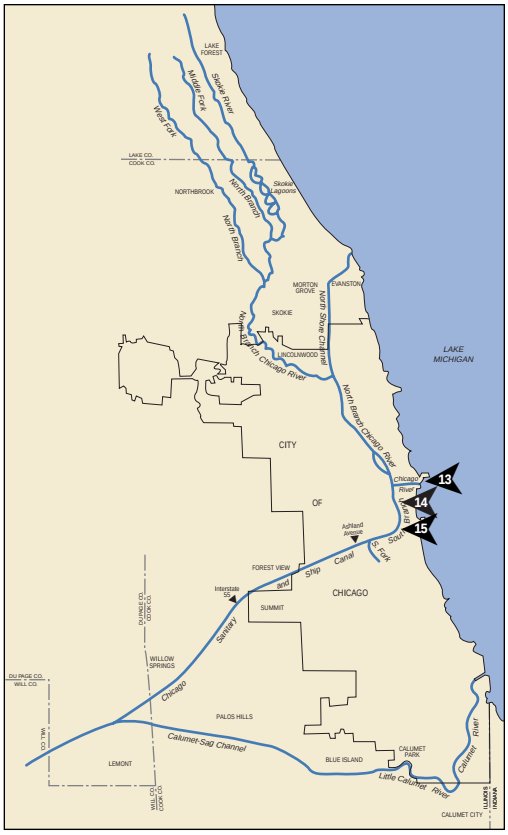


13. Chicago River

A view of the Chicago River, North Pier Lock and Lake Michigan (foreground). Water flow between Lake Michigan and the Chicago River system is controlled by the lock. Navy Pier is in the right foreground.

(Photograph by Richard E. Carter, 1996)

14. South Branch of the Chicago River

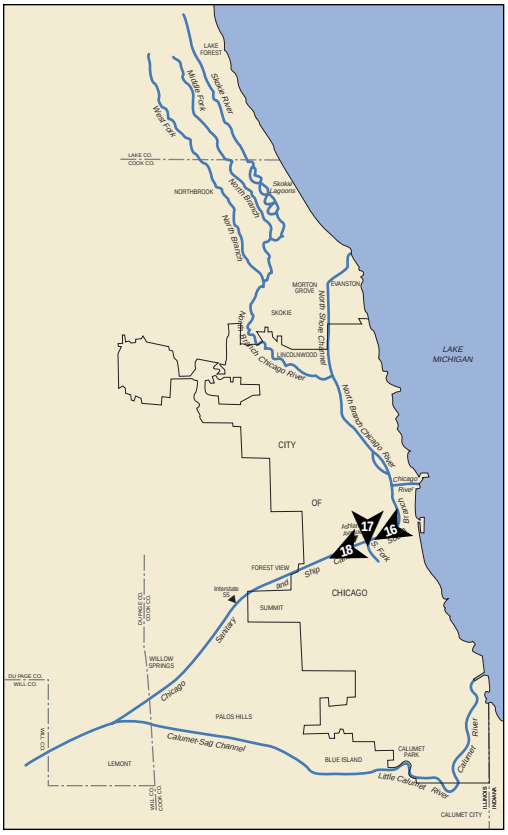
A view of the South Branch of the Chicago River immediately southwest of the Loop. The river flows from right (north) to left (south). Congress Street (Interstate 290, the Eisenhower Expressway) crosses over the South Branch in the center of the photograph, then proceeds through the Chicago Post Office building.

(Photograph by Richard E. Carter, 1995)

15. South Branch of the Chicago River

The South Branch flows from center foreground to left background. Proceeding downstream, bridges include Amtrak Railroad, Canal Street, Cermak Road and the Dan Ryan Expressway (Interstate 90/94).

(Photograph by Richard E. Carter, 1995)



16. South Branch of the Chicago River, Sanitary and Ship Canal

The South Branch flows from the right foreground, passing under the Loomis Street bridge, to left background where it joins the Chicago Sanitary and Ship Canal near the Damen Avenue bridge. The South Turning Basin is the large area of open water.

(Photograph by Richard E. Carter, 1995)

17. South Fork of the South Branch of the Chicago River

The South Fork flows from left background to center foreground. Ashland Avenue parallels the right bank of the waterway, while the cluster of bridges spanning the South Fork includes the Stevenson Expressway (Interstate 55) and Archer Avenue. The site of the original Illinois and Michigan Canal lock (Lock No. 0), located on the site in the right foreground, will be commemorated by the Chicago Canal Origins Park.

(Photograph by Richard E. Carter, 1996)

18. Chicago Sanitary and Ship Canal

A view looking west along the canal flowing from right foreground to left background. The Commonwealth Edison Crawford Generating Station (striped smokestack) is located to the right of the Canal at the Pulaski Road bridge (background). The waterfront warehouse and loading dock with barges is typical of shipping facilities on navigable portions of the waterway. Bridges include (foreground to middleground) Western Avenue, Baltimore and Ohio Railroad, California Avenue and Illinois Central Gulf Railroad.

(Photograph by Richard E. Carter, 1995)

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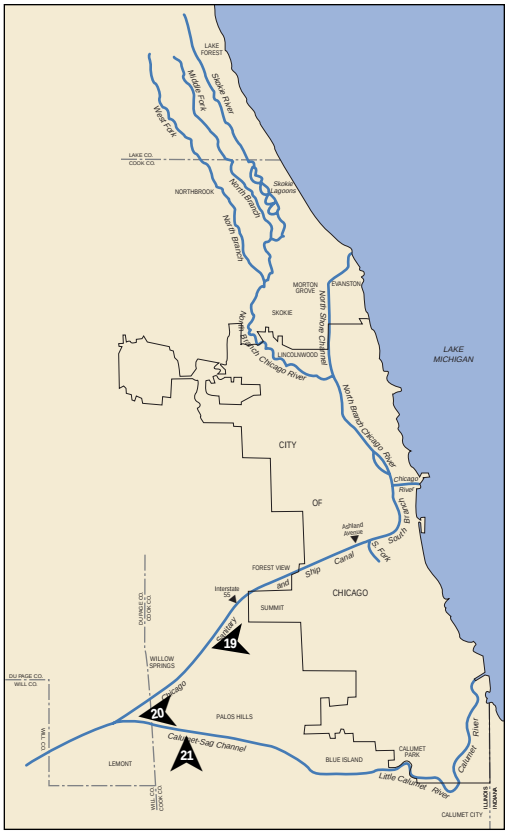


19. Chicago Sanitary and Ship Canal

A view of the Sanitary and Ship Canal and typical barge traffic that frequents the waterway. The Des Plaines River, which parallels the canal south of Summit, is in the upper portion of the photograph and the Illinois and Michigan Canal is hidden by vegetation at the lower left. The area pictured is in the vicinity of Willow Springs south of Interstate 294.

(Photograph by Richard E. Carter, 1995)

20. Chicago Sanitary and Ship Canal and Calumet Sag Channel

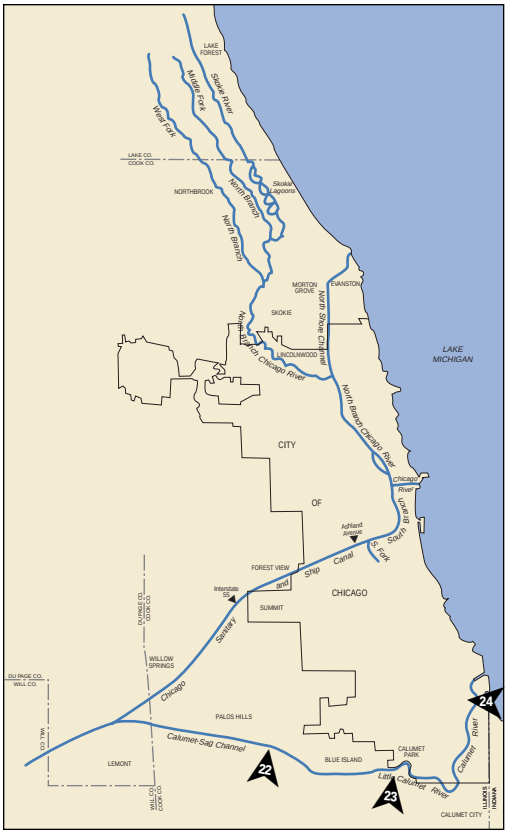
A view of the many waterways in the Palos Hills-Lemont area. The historic Illinois and Michigan Canal (lower left) parallels the larger Sanitary and Ship Canal. The bridge in the middle foreground is Illinois Route 83. Paralleling the Sanitary and Ship Canal on the right is the Des Plaines River. The confluence of the Ship Canal and the Calumet Sag Channel is located in the left middleground adjacent to the Canal Junction Sidestream Elevated Pool Aeration (SEPA) Station. The Village of Lemont adjoins the left bank of the Ship Canal (left background).

(Photograph by Richard E. Carter, 1995)

21. Calumet Sag Channel

A view of recreational boaters on the Calumet Sag Channel in the Palos Hills Forest Preserve (administered by the Forest Preserve District of Cook County) in the vicinity of Saganashkee Slough.

(Photograph by Richard E. Carter, 1995)



22. Calumet Sag Channel

A view of the channel as it flows through Palos Heights. The water body adjacent to the channel is Lake Katherine and nature center. Harlem Avenue (Illinois Highway 43) crosses the channel in the left middleground and College Drive (Illinois Highway 83) is in the foreground.

(Photograph by Richard E. Carter, 1996)

23. Little Calumet River

A view of the Little Calumet River as it flows (right middleground to left foreground) around the Acme Bend. The Riverdale Plant of Acme Steel Company occupies the peninsula formed by the bend. The Penn Central Railroad crosses the river in the center of the photograph. The wooded area in the foreground is Whistler Woods, administered by the Forest Preserve District of Cook County.

(Photograph by Richard E. Carter, 1996)

24. Calumet River

A view of the Calumet River in the vicinity of Calumet Harbor (out of view to the right) as it flows toward the Little Calumet River (right background to left foreground). The large body of water (right background) is a turning basin. The small bridge just below the basin is 95th Street. The Penn Central Railroad crosses the river in the center of the photograph and the Chicago Skyway (Interstate 190) crosses to the left of center.

(Photograph by Richard E. Carter, 1996)

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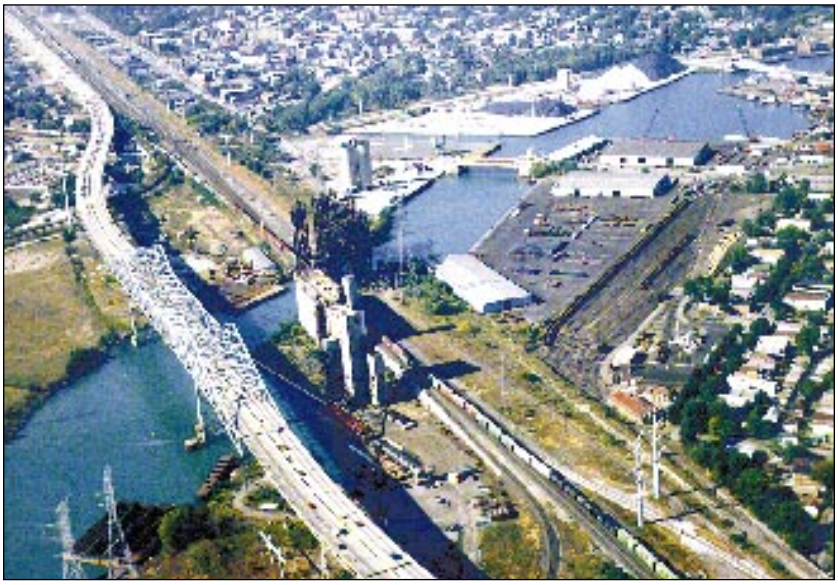

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CHAPTER 2

Nearby Neighborhood Residents' Images and Perceptions of the River

Paul H. Gobster

SUMMARY OF FINDINGS

This study brought together groups of residents to discuss what they felt about the Chicago River in their neighborhood and how they would like to see it improved for recreation and other values. Residents were recruited at random for 11 focus groups, including 9 groups who lived close to the river in neighborhoods throughout the corridor and 2 groups from the metropolitan region at large who lived away from the river. Groups averaged 9 participants each, and 98 people in all participated in the study. Through a combination of structured survey questions and facilitated, open-ended discussion, the groups discussed such questions as: What are people's current levels of awareness and knowledge of the river? How do people use the river? What is the perceived quality of the river landscape? Have perceptions of the river changed? What types of development are preferred along the corridor? How can the river be improved for recreation and other values? Can recreation development activities proceed if the water is not clean? What specific recommendations can be made to improve particular river segments?

Responses to the structured survey questions and transcripts of the open-ended discussions were analyzed to examine commonalities and differences within and between focus groups on general issues (e.g., the current condition and maintenance of the river landscape) and to identify specific topics of importance (e.g., perceptions of fish consumption, knowledge about river aeration facilities). A computerized coding scheme developed for the transcripts allowed respondents' comments to be summarized and organized so that salient themes and issues could be identified.

CURRENT PERCEPTIONS AND USES OF THE RIVER

Participants' current perceptions and uses of the river can be summarized as follows:

1. **Nearby residents were generally aware of the river in their neighborhood, but knew little about the Chicago River as a system.** The different names, often colloquial ones, given to different reaches may obscure how individual reaches connect as a system. Knowledge of current and historic activities along the river was spotty and sometimes inaccurate, although one or two people in some groups were often extremely familiar with some aspect of the river due to their jobs, leisure interests, or because their homes were close to river improvement or development projects. Those from the two metropolitan groups who lived away from the river tended to have the lowest levels of knowledge and awareness. What they knew about the river was often limited to the Main Branch and was based on infrequent trips downtown or recall of major news events such as the "Great Chicago Flood" of 1992 or the annual dyeing of the river green on St. Patrick's Day.

2. **People's overall impressions of the river in their neighborhood varied greatly by where they lived.** Those living near the Main Branch, the Middle Fork, and the Skokie Lagoons generally had a high regard for the river in their neighborhood, while those along the North and South Branches and the Cal-Sag Channel generally had a low regard. Drawings and written statements revealed many reasons for participants' quantitative ratings of their overall feelings. Those who felt positively about the river mentioned things about history, wildlife, and aesthetics, while those who felt negatively focused on pollution, misuse, and neglect of the resource. Whether people's overall impressions were positive or negative, the vividness and emotional charge of their descriptions conveyed a high concern about the present and future states of the resource.

3. **Nearby residents used the river corridor in diverse ways.** Most residents who lived near the river used and appreciated it at some level, even for just an open view and change of scenery as they drove over it. Direct use of the corridor often hinged on the availability of open space and facilities. Where such opportunities exist, many neighbors used the corridor for linear recreation such as walking and bicycling or for location-specific activities such as picnicking or relaxation. Visual appreciation of the corridor was an important type of indirect use for those who lived right by the river, even if they rarely went out to use it directly. Water-based recreation was a popular but infrequent activity of nearby residents. Although only a small proportion of nearby residents owned and used boats on the river near their home, several had taken river tour boats on the downtown reaches and said that being on the river is a unique experience open to all.

4. **The river's natural, aesthetic, and functional characteristics were important to nearby residents.** When nearby residents talked about the characteristics of the river landscape that were important to them, they often focused on the vegetation and wildlife present. These features were the major attraction in the less developed

reaches of the corridor, but nature was also important to residents in highly urbanized settings, where green trees, grass, and wild brush moderated the expanses of buildings and concrete paving. Natural features provided important aesthetic benefits to nearby residents, including beauty, solitude, and a needed contrast with the urban development surrounding the corridor. People looked to the river for more than natural beauty, however, and recognized the significance of its architectural and engineering achievements and the utilitarian roles it plays for industry, commerce, flood control, and sanitation.

5. **Water quality condition and maintenance was the chief concern.** A high proportion of focus group participants felt there were serious water pollution problems on the reach near where they lived, although their explanations of how the river was polluted varied considerably from one end of the corridor to the other. Along the northernmost reaches of the corridor, people were concerned mainly about turbidity and natural debris in the water, while those further south were concerned about offensive odors, dumping, industry and barge discharges, and toxic waste. Some residents saw the presence of fish in their reaches as an indicator that water quality was improving, though not to the point where the fish could be eaten. Although most residents cited problems with the current condition of the water, a smaller percentage in each reach were aware of the various efforts to maintain and improve water quality, including dredging, aeration, garbage pickup, and the "Deep Tunnel" stormwater storage project.

6. **Safety and access were among the other important concerns of nearby residents.** Two other issues cited by nearby residents, safety and access, have important implications for river corridor planning and management. Each of these issues has many dimensions as voiced by nearby residents. For safety, residents were concerned both with physical safety, particularly with children falling in the water and the consequences of body contact, and with personal safety and the threat of violence from gangs and others who congregate at spots along the river. For access, residents were concerned about such issues as the convenience, amount, and type of access to the river, and public versus private rights to use the waterway.

7. **Nearby residents perceived positive changes occurring along the river.** Despite some serious problems with the condition and maintenance of the corridor, many nearby residents had seen positive changes in recent years and were hopeful about further improvements. Water quality changes most often mentioned are those improvements that can be directly perceived: increased water clarity, and reductions in debris and odors. Residents saw open space and facility developments for recreation as additional signs of positive change that will enhance their recreational use and the desirability of living near the river.

FUTURE PROSPECTS FOR THE RIVER

Participants' ideas about the future potential of the river for recreation and other purposes are summarized below, along with the implications these findings have for planning and management:

1. **Clean water is the key factor that will decide the future of the river for recreation and other purposes.** Although participants in many of the focus groups recognized that substantial improvements in water quality had already been made, further efforts are still needed if the rivers in their neighborhoods are to be used more fully for recreation and other purposes. Good water quality is important for direct, water-based activities such as boating and fishing. It is also important for indirect, land-based activities, but people are willing to accept less-than-pristine conditions as long the odors and debris are not offensive. To address water quality concerns, agencies and municipalities could increase active cleanup efforts and step up regulation and monitoring programs. Based on the willingness of some participants to work on grassroots efforts to help improve water quality, volunteer groups could be mobilized for litter and debris removal, water quality monitoring, and other activities.

2. **The natural environment should be enhanced throughout the river corridor.** Vegetation and wildlife were important to participants' enjoyment and use of the river in both urban and suburban settings. Along more remote stretches of the corridor, enhancing the natural environment might mean keeping vegetation more natural or restoring it to its natural integrity. Restoration in some cases might include reducing current wildlife population levels, such as the deer herd at the Skokie Lagoons. Along more highly used stretches of park and forest preserve, vegetation might be managed to balance needs for wildlife, aesthetics, recreational use, and personal safety. This balance might be achieved by creating more "manicured" areas with trees, grass, and flowers and by planting or thinning vegetation to increase sight lines and openness. Along the most urbanized sections of the river, more trees and grass could be planted to soften the edge between the river and the built environment that surrounds it, to make the shore more aesthetically pleasing and conducive to use by recreationists and wildlife.

3. **Maintenance of the landscape and existing facilities, and the development of new facilities, are key ingredients to greater use of the river for recreation.** Many participants cited "good maintenance" as an important condition of their ideal setting for recreation, and they despaired about the poor current condition and lack of maintenance of the river edge in their neighborhood. Along with maintaining the water quality and vegetation, this concern translates to keeping the river landscape reasonably free of litter and debris, and keeping built facilities in good condition and free of graffiti and vandalism. Trails

were chief among the suggestions for new recreation facility development in the corridor; increased park and open space was a priority along some reaches (e.g., South Branch, Cal-Sag) where such areas are currently sparse.

4. **Increased safety and access are also needed before more people will perceive and use the river as a recreational resource.** Current problems with safety were cited as impediments to wider use in nearly every focus group. Suggestions for increasing safety varied according to the specific safety concerns. Solutions ranged from heavier vegetation, fencing, and railings to keep children from falling into the river; to better lighting, less vegetation, and more patrols to ward off crime. In a similar sense, various strategies might improve access to the river, from clearing weeds and other vegetation to enhance views of the river to purchasing land and developing facilities to promote close, convenient physical access.

5. **The diversity of the corridor is both a strength and a challenge that must be acknowledged in future development efforts.** The natural and social diversity existing within the corridor prevents any generic approaches to development. By recognizing this diversity, corridor planners and managers might more successfully work within the constraints and opportunities it allows. Those participants who talked about the corridor as a whole mentioned the need to balance recreational development with industrial, commercial, and residential land uses. In the case of recreational development, this balance requires a sensitivity to the "context" of development and the degree of naturalness or level of development that is appropriate to the urban or suburban setting. This information may help planners and managers understand local problems and priorities and in turn help their constituencies understand the corridor as a diverse but interconnected system.

6. **Outreach efforts can promote local awareness, interest, and action in river improvement activities.** A final point gleaned from discussions about the future potential of the river dealt with how river improvement efforts are communicated to the public. Participants who were informed about river cleanup projects tended to have a much more positive outlook on the river than those who were not aware of these projects. In fact, for several of the attendees who knew little about the river, participation in the focus group exercises and discussions helped improve their perceptions of the river. These findings show the critical need for, and power of, better public communications by agencies, municipalities, and advocacy groups. From the many experiences recounted by participants, it is clear that awareness can build interest and concern, and in some cases, even lead to individual and grassroots community action in river improvement projects. Many of the participants who used the river in their neighborhood showed a high concern for it and a willingness to take at least partial responsibility for ensuring its protection and improvement.

BY-REACH SUMMARY OF FINDINGS

Participants' current perceptions and uses of the river in their neighborhood, as well as their recommendations for future improvements, are summarized in Table 2.1 for each focus group.

PART I
INTRODUCTION TO THE STUDY

PURPOSE AND OBJECTIVES

Research on urban corridor recreation opportunities has shown that most who visit a local trail or greenway tend to come from nearby residential neighborhoods, often less than a mile away (Young and Flowers, 1982; Furuseth and Altman, 1991; Moore et al., 1992). Nearby residents are often the most frequent users of trails and greenways, and their support can affect the ultimate success of a greenway as a recreation resource (Gobster, 1995). Most importantly, those who live near park and open spaces often have an intimate knowledge of these resources, their assets and shortcomings. For these reasons, the project investigators felt it important to find out more about how nearby residents perceive and use the Chicago River.

The objectives of this study were:

1. To include a sample of participants that reflects the geographic, age, gender, economic, and ethnic diversity of residents who live near the Chicago River corridor and in the surrounding metropolitan region.
2. To examine residents' awareness, perceptions, and uses of the river corridor, its sites and reaches, and to solicit their ideas and opinions on improving the corridor for recreation and other resource values.
3. To suggest how study findings might be used to develop planning, design, and management strategies for the river corridor.

STUDY METHODS

THE FOCUS GROUP AS A METHOD OF INVESTIGATION

Focus group interviews were used to gather information on awareness, perception, and use from nearby and metropolitan residents. As a social science method, the focus group interview is being increasingly used to identify and explore people's perceptions and behavior (Goldman and McDonald, 1987). Focus groups allow investigators to probe salient issues and uncover ideas and insights that may not surface through traditional mail and telephone surveys (Krueger, 1994). Although the qualitative nature of this method does

TABLE 2.1
Summary of current perceptions and future prospects by focus group

MIDDLE FORK/LAKE FOREST (REACH 2)	
• River Recreational Use:	Passive, e.g., walking, sitting, nature exploration
• Places Used:	Backyards, road dead ends, Middle Fork Savanna
• Positive Characteristics:	Beauty and solitude, rare plants
• Problems:	Turbidity and natural debris in water, steep banks are hazards for children
• Improvements/Changes:	Purchase and development of Middle Fork Savanna
• Recommendations:	Remove downed trees and deal with flooding, increase safety, ensure appropriate level of development for Savanna
SKOKIE LAGOONS/GLENCOE (REACH 3)	
• River Recreational Use:	Frequent use for walking, biking, skiing, and other activities
• Places Used:	Forest Preserves, Botanic Garden
• Positive Characteristics:	Wildlife, natural vegetation, picturesque landscape
• Problems:	Turbidity and natural debris in water, deer overpopulation, exotic vegetation, littering
• Improvements/Changes:	Dredging of lagoons has improved water quality
• Recommendations:	Continue lagoon cleanup efforts, control deer population, restore native vegetation, remove fallen trees, "manicure" landscape near some use areas, reduce littering
NORTH SHORE CHANNEL/EVANSTON AND SKOKIE (REACH 4)	
• River Recreational Use:	Walking, biking, jogging, nature exploration, ball playing, harvesting of wild edibles
• Places Used:	Trails along canal in Skokie and Evanston, Sculpture Park, Ladd Arboretum
• Positive Characteristics:	Good maintenance, convenient access
• Problems:	Water pollution/odor, lack of safety in park areas with dense vegetation, steep canal banks are hazardous to children
• Improvements/Changes:	Pollution reduced, "Deep Tunnel" stormwater storage project seen as positive
• Recommendations:	Increase safety by thinning vegetation and by increasing lighting, patrols, and through traffic; balance nature with safety concerns
NORTH BRANCH/CHICAGO-RAVENSWOOD AND ALBANY PARK (REACH 5A & B)	
• River Recreational Use:	Various park activities, but limited by crime and gangs
• Places Used:	City parks along the river: Gompers, River, Horner
• Positive Characteristics:	River lends "country" atmosphere to urban scene; good maintenance of yards by riparian residents
• Problems:	Water quality problems with pollution, odor, dumping; poor maintenance of park landscape and facilities; gangs and crime
• Improvements/Changes:	Few improvements or changes noted
• Recommendations:	Increase safety, increase cleanup efforts
NORTH BRANCH/CHICAGO-LATHROP (REACH 5B)	
• River Recreational Use:	Limited due to lack of public space; some fishing and viewing from bridge
• Places Used:	Bridges
• Positive Characteristics:	Aesthetic and functional (transportation) values
• Problems:	Little physical or visual access to river, severe pollution—odor and dumping, safety hazards to children
• Improvements/Changes:	Few improvements or changes noted
• Recommendations:	Clean up water and shoreline, make water more usable for fishing and boating
MAIN BRANCH/CHICAGO-LOOP (DOWNTOWN AREA) (REACH 6)	
• River Recreational Use:	Walking, jogging, biking, picnicking, viewing, boating
• Places Used:	Riverwalk, North Pier, Wolf Point
• Positive Characteristics:	Scenery—views of and from the river; contrast of nature with urban scene; good maintenance
• Problems:	Water quality—litter; personal safety
• Improvements/Changes:	Many positive changes noted in water and landscape quality
• Recommendations:	Develop continuous riverwalk, develop more restaurants and other riverside destinations reachable by foot or boat, mixed feelings about proposed riverboat gambling
SOUTH BRANCH/CHICAGO-CHINATOWN (REACH 7)	
• River Recreational Use:	Viewing; use limited by lack of public open space
• Places Used:	Bridges
• Positive Characteristics:	Aesthetic (contrast/change of scene) and functional (industry, economic development) values
• Problems:	Pollution, lack of open space
• Improvements/Changes:	Proposed park development along river could increase recreation opportunities for the community
• Recommendations:	Clean up pollution, develop park space and a riverwalk, develop shore with sensitivity to needs of the community
CAL-SAG CHANNEL/PALOS HEIGHTS, PALOS PARK (REACH 10A)	
• River Recreational Use:	Hiking, biking, picnicking
• Places Used:	Palos Forest Preserve, I&M Canal trail, Lake Katherine
• Positive Characteristics:	Wildlife, natural vegetation and scenery, barges and functional values of the canal
• Problems:	Water pollution, concern for safety when alone in remote areas of the forest preserve
• Improvements/Changes:	Sidestream Elevated Pool Aeration (SEPA) plants are a sign of water quality improvement; more fish and fishing noticed along waterways
• Recommendations:	Continue water cleanup efforts, keep corridor largely natural with some limited development for recreation (marina, stores)

TABLE 2.1 (Continued)
Summary of current perceptions and future prospects by focus group

CALUMET RIVER/CHICAGO-PULLMAN; BLUE ISLAND (REACH 10C)	
• River Recreational Use:	Some boating and other uses; use limited by lack of public open space but especially by poor water and landscape quality
• Places Used:	Beaubien Woods Forest Preserve
• Positive Characteristics:	Some areas with natural or pioneer vegetation
• Problems:	Severe water pollution—smell, toxics, etc.; landfill smell and pollution also constrain use
• Improvements/Changes:	Sidestream Elevated Pool Aeration (SEPA) station in Blue Island is a sign of improved water quality
• Recommendations:	Clean up water and landfills, enhance corridor for recreational and business opportunities
METROPOLITAN EAST-CHICAGO	
• River Recreational Use:	Occasional tour boats and river tours; walking and bike riding
• Places Used:	Mostly downtown
• Positive Characteristics:	Views from bridges; downtown generally well kept
• Problems:	Water pollution—turbidity, smell, toxics, dumping; poor landscape maintenance
• Improvements/Changes:	Aeration plant near Devon Avenue
• Recommendations:	Clean up water; more bike trails, trees, and downtown riverside restaurants; maintain variety of settings in corridor
METROPOLITAN WEST-WEST SUBURBAN DUPAGE COUNTY	
• River Recreational Use:	Low awareness and use; some viewing, tour boats
• Places Used:	Mostly downtown
• Positive Characteristics:	Historical value; river dyed green on St. Patrick's Day; bridges and downtown views; use for transportation, industry
• Problems:	Polluted, unattractive
• Improvements/Changes:	Better sewage treatment
• Recommendations:	Improve water quality and shoreline aesthetics; increase recreation opportunities

not allow for generalizing study results to a larger population, the flexibility of the approach and the depth of understanding that can be attained make it an ideal method at the early stages of issue assessment and a particularly valuable complement to quantitative surveys (Fern, 1983). We worked cooperatively with Adam Davis of Decision Sciences, Inc., in developing the sampling design and interview questions, and implementing the focus groups for this study. Davis also facilitated all the focus group sessions.

SITE SELECTION

We conducted 11 focus groups in all—9 from neighborhoods close to the river and 2 from the Chicago metropolitan region at large. For the nearby resident groups, riparian and nearby (1-2 blocks away) residential areas throughout the river corridor were identified through large-scale maps. The nine neighborhood areas were chosen for their geographic, socioeconomic, and ethnic differences, and because of important local resources and current projects or issues. The two metropolitan groups were included to get a feel for how average metropolitan residents who do not live on the river think about and use the river, and how they might differ from nearby residents. The reaches and neighborhood areas are shown in Figure 2.1 and are characterized below:

1. **Middle Fork/Lake Forest (Reach 2):** This area, in the suburb of Lake Forest near the headwaters of the North Branch, is sparsely populated, predominantly Anglo American, and upper income. The river here is narrow and flows through a complex of residential, wetland, prairie, and woodland areas. A new oak savanna restoration project by the Lake County Forest Preserves and The Nature Conservancy is located here.

2. **Skokie Lagoons/Glencoe (Reach 3):** The Skokie Lagoons area includes 7 pools and 190 acres of water surrounded by a 400-acre woodland-marsh complex owned and managed by the Forest Preserve District of Cook County. Although the neighboring community of Glencoe is primarily Anglo American and well-off, the Lagoons area itself is an important regional attraction for an ethnically and economically diverse group of recreationists. At the time of the focus group interview, the lagoons were being dredged as part of a recreational and ecological restoration project.

3. **North Shore Channel/Evanston and Skokie (Reach 4):** The corridor is mostly park land in this section, owned by the Metropolitan Water Reclamation District of Greater Chicago and managed by the City of Evanston and the Village of Skokie. Adjacent neighborhoods are middle class and racially mixed. The Evanston side of the channel has many older trees, a paved trail, and picnic facilities. The Skokie side was recently improved for recreation with new plantings, a paved trail, and a sculpture park.

4. **North Branch/Chicago-Ravenswood and Albany Park (Reach 5A & B):** The river in this area flows through several parks and other open spaces, and is one of the few stretches where people have homes bordering the river. Neighborhoods are a mix of housing densities, incomes, and ethnicities. Public agencies and private groups recently made open space improvements and have plans for more. There has been a controversy over riparian residents who have built piers and decks on the riverbank without the consent of the Metropolitan Water Reclamation District of Greater Chicago, which owns it.

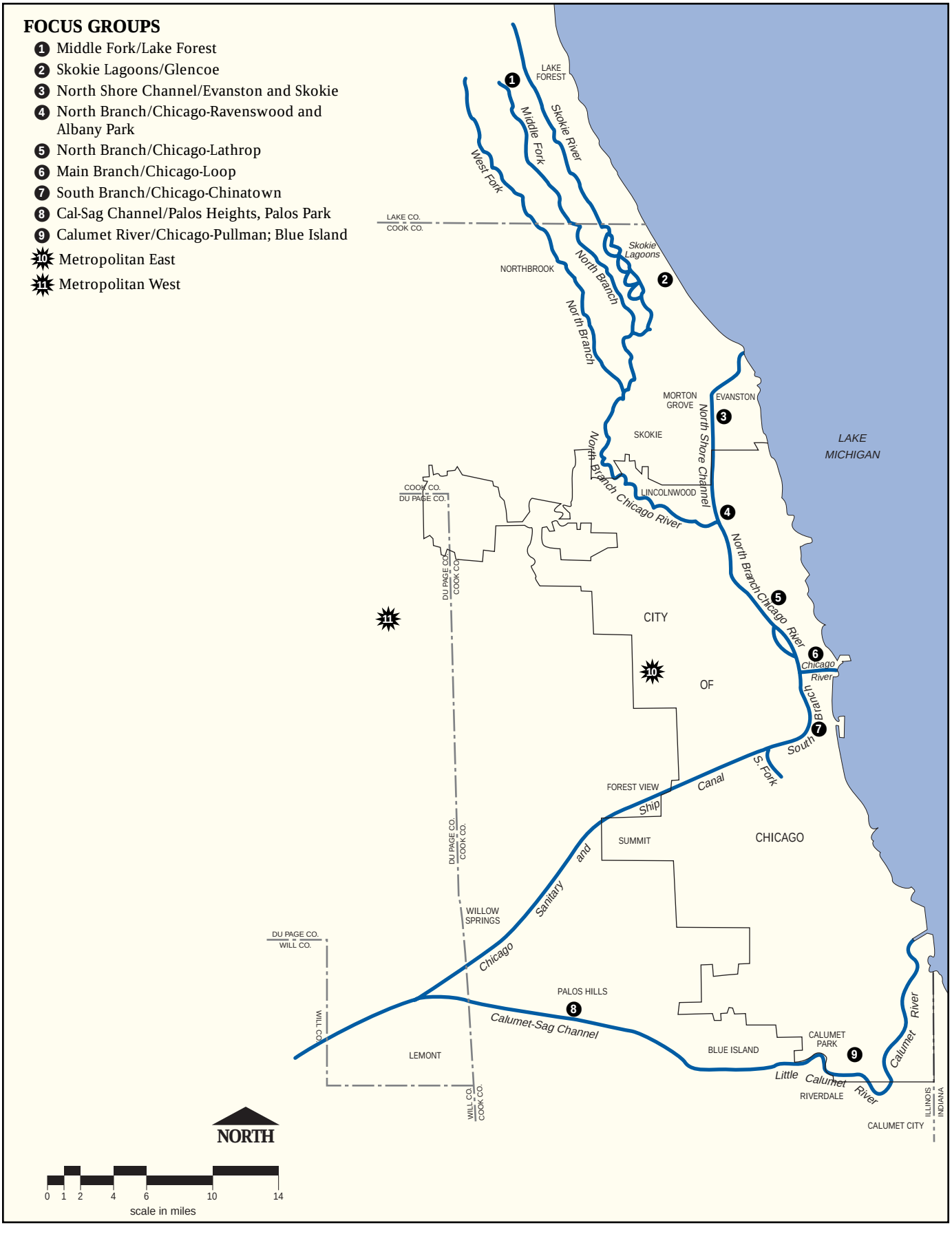


FIGURE 2.1
Map of study reaches with location of focus groups

5. **North Branch/Chicago-Lathrop (Reach 5B):** The river here is channelized, its fenced-off banks have little natural vegetation, and riparian land use is mostly commercial and industrial. The area includes Lathrop Homes—a Chicago Housing Authority (CHA) development—and surrounding blocks of mixed-density housing. Residents are low-and middle-income African Americans, Anglo Americans, and Hispanics. There is little access to the river, although public agencies and private groups are working on a project at Lathrop Homes that will increase open space and recreation opportunities.

6. **Main Branch/Chicago-Loop (Reach 6):** The Loop refers to downtown Chicago and includes the Main Branch of the Chicago River and short segments of the North and South Branches. The river here is wide and channelized, and its banks are developed with high-rise office and residential buildings. Loop residents are mostly upper income Anglo Americans. Open space along the river is mostly hardscape plazas and cafes, and there is a riverwalk along here that will eventually be made continuous through the Loop. Recreational boating and fishing are becoming increasingly popular.

7. **South Branch/Chicago-Chinatown (Reach 7):** This stretch of the river is mainly commercial and industrial, though abandoned areas have grown up with pioneer vegetation. Chicago's Chinatown, which fronts the river here, has a high proportion of the city's Chinese American residents and has one of the lowest amounts of open space per capita. Chinatown residents are working with the Chicago Park District on plans for a 12-acre park along the river's east bank.

8. **Cal-Sag Channel/Palos Heights, Palos Park (Reach 10A):** The neighborhood area is just east of the Palos-Sag Forest Preserves, one of the largest contiguous open spaces in Northeastern Illinois. Barges and tugs use the channel, as do some recreational power boats. The suburban residents of Palos Park and Palos Heights are primarily upper middle class Anglo Americans. The Lake Katherine Nature Center was recently developed along the channel in a unique public-private development partnership, and recreational use could be expanded on the Cal-Sag and nearby Sanitary and Ship Canal corridors.

9. **Calumet River/Chicago-Pullman; Blue Island (Reach 10C):** The river, less channelized here than along the Cal-Sag, is actively used for commercial and recreational boating. Land use is mostly heavy industrial and commercial, with some open space and forest preserve areas nearby. Some working class Anglo American and African American residential neighborhoods are located along the river in this area. Some river fishing occurs on this stretch, and there are plans to increase wildlife and recreation opportunities.

The two regional metropolitan groups included:

10. **Metropolitan East:** Residents from various neighborhoods in the City of Chicago.

11. **Metropolitan West:** Residents from west suburban DuPage County.

Although these focus group descriptions identify both reaches and neighborhood areas from which participants were selected, the targeted sampling approach makes the neighborhood area a more accurate label for the groups and will be used for the rest of the report. Because participants were asked to think about and respond in terms of "the river in your neighborhood," findings from a given focus group may not reflect perceptions of resource conditions for an entire reach.

PARTICIPANT SELECTION

Maps identified residential streets near the river, and residents' names and phone numbers were identified by reverse telephone directories. Phone numbers for the nearby resident focus groups and the regional metropolitan groups were called at random, and an adult male or female from those households was selected to balance group composition by gender. We also included teen-aged participants in some of the focus groups, to help expand the issues and perspectives that would be discussed. Some recruitment in Lathrop CHA homes was done through networks established from previous studies, where it was found that many residents did not have telephones. To minimize any biases that people might bring to the groups, individuals were solicited without divulging the nature of issues to be discussed.

Fourteen participants were recruited for each focus group. From our past experience, we'd learned that an ideal group size of 8-10 would show up and that groups larger than this could inhibit the pace of the discussion and flow of ideas.

The actual results of the sampling procedure are summarized in Table 2.2. The 11 focus groups ranged in size from 6 to 13, with a mean size of 9. In all, 98 people participated in the study. Most groups were balanced with respect to gender and age. Each group reflected the racial and ethnic diversity of the neighborhoods described in the previous section on site selection. Background questionnaires filled out by participants showed a wide variety of occupations, from professionals to laborers to homemakers, retirees, and students. In some cases, the characteristics of the areas from which focus groups were solicited reflected a particular socio-demographic orientation. Few participants from the Palos and Loop groups had children living in their households, the Lake Forest and Glencoe groups were upper income, and the Pullman-Blue Island and Lathrop groups were lower income.

FOCUS GROUP FORMAT

Each focus group session was held in a convenient neighborhood location and lasted about 1½ hours. Three major topic areas were addressed in the sessions:

1. Outdoor activities participants do in their free time, and the settings where they do these activities.
2. Awareness, perceptions, and uses of the Chicago River in general, and in participants' neighborhoods specifically.
3. Attitudes toward river development and enhancement in their neighborhood, reaction to development "prototypes," and recommendations for river enhancement.

TABLE 2.2
Focus group composition

Variable	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Stem Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
GENDER												
Male	4	6	5	2	6	6	5	4	2	5	4	49
Female	5	5	7	5	7	2	1	4	5	3	5	49
AGE (YEARS)												
<18	–	4	–	1	1	–	1	–	–	–	1	8
18-34	1	1	1	3	4	3	4		2	2	2	23
35-54	6	1	4	1	7	5	1	1	3	3	4	36
>55	2	5	7	2	1	–	–	7	2	3	2	31
RACE/ETHNICITY												
Anglo American	9	11	5	6	3	8	–	8	5	6	9	70
African American	–	–	7	–	7	–	–	–	2	1	–	17
Hispanic American	–	–	–	–	3	–	–	–	–	1	–	4
Asian American	–	–	–	–	–	–	6	–	–	1	–	7
HOUSEHOLDS W/ CHILDREN												
Yes	8	7	8	4	9	1	6	2	5	4	5	59
No	1	4	4	3	4	7	–	6	2	4	4	39
EDUCATION												
Less than H.S.	–	2	–	–	2	–	–	–	–	–	–	4
Some H.S.	–	2	–	2	3	–	2	–	1	2	1	13
H.S. Grad	–	1	–	1	3	–	1	2	2	3	1	14
Some College	4	2	3	3	3	1	–	3	2	2	1	24
Tech. Degree	–	–	–	–	1	1	1	–	–	–	1	4
College Grad	1	2	7	–	–	4	2	3	2	2	4	27
Post College	4	2	2	1	1	2	–	–	–	–	1	13
GROSS ANNUAL HOUSEHOLD INCOME												
<$30,000	–	–	1	4	12	2	3	–	5	4	2	33
$30,000-39,999	–	–	2	–	–	2	2	4	1	–	–	11
$40,000-49,999	–	–	–	–	1	1	–	1	–	1	2	6
$50,000-59,999	1	1	4	1	–	2	–	1	–	2	2	14
$60,000-69,999	1	–	2	–	–	–	–	1	1	–	–	5
>$70,000	7	5	3	2	–	1	1	–	–	1	2	22
TOTAL	**9**	**11**	**12**	**7**	**13**	**8**	**6**	**8**	**7**	**8**	**9**	**98**

Topic areas were addressed through a combination of worksheet exercises filled out by each individual, serial questioning between the facilitator and each participant, and interactive discussion among participants. Initial worksheets and questioning got participants thinking about their outdoor leisure generally, without reference to the river. Once participants were comfortable talking and expressing their feelings, successive questions zeroed in on progressively narrower issues relating to the river. A copy of the moderator guide is shown in Appendix 2.1.

ANALYSIS OF DATA

Data from the worksheets were summarized for each group. Each focus group was videotaped and audiotaped, and discussions were transcribed for analysis. Although analysis of the worksheet data was relatively straightforward, the richness and sheer amount of textual information in the transcripts (over 170 pages of text) entailed a more involved approach to analysis. A computerized scheme was developed to code each person's responses according to the response itself, the context in which it was made, and the pertinent issues it conveyed (Fielding and Lee, 1992; Silverman, 1993). A complete description of the coding process, including a coding example and the codebook for focus group comments, appears in Appendix 2.2.

Using data summary and sorting procedures, the coding system allowed us to establish some basic quantitative measurements of issue importance and saliency, such as the percentage of comments referring to "water quality" as an issue, and to compare these issues between groups. Although this information provided a partial basis for our discussion of the focus group findings that follows, a full account of the statistics themselves is less central to the presentation and is

thus provided in Tables 2.3.1 through 2.3.7 in Appendix 2.3. Table 2.3.1 provides an overall accounting of how responses were distributed among all context and issue codes. Tables 2.3.2 through 2.3.7 detail response data for particular contexts and issues.

The coding system enabled us to identify and explore the breadth of issues that arose out of the discussions and to probe the various facets of these issues. In this way, participants' comments could be organized in ways that helped to reveal a higher level of meaning than might be attained from reading the transcripts one-by-one (Wolcott, 1994). The coding system also was an efficient way to retrieve quotations on a particular issue, and to separate them by context, group, and/or individual. We have included quotations in this report to help the reader better understand the depth of issues discussed and the range and variety of perceptions that exist.

PRESENTATION AND DISCUSSION OF FINDINGS

We present and discuss our findings here in two parts—the first focusing on what the Chicago River *currently is* in the minds of people, and the second on what the river *could be in the future*. Within each of these contexts, we describe relevant issues using the worksheet and text code data where appropriate, and we discuss and illustrate the issues with representative quotations. Together, this information provides the basis for recommendations on how to plan and manage the physical and social aspects of the Chicago River environment.

PART II CURRENT PERCEPTIONS AND USES OF THE RIVER

GENERAL PERCEPTIONS OF THE RIVER

CURRENT LEVEL OF AWARENESS AND KNOWLEDGE OF THE RIVER AMONG RESIDENTS

We began focus group discussions of the Chicago River with a free association task, to get a first look at how people generally perceived the river. Using a worksheet, focus group participants were asked to put down the first thing that came into their minds when presented with a list of area park, open space, and water landmarks. Among these was "the Chicago River in your neighborhood." Nearly half of the responses included such words as "dirty" or "pollution," conveying that many people had a negative impression of the river. What was somewhat surprising, however, was that more than one-third of the participants had "no association," or simply put down neutral words such as "water," "green," or "boats."

Subsequent discussion of this question showed that some people were confused when asked about the Chicago River in their neighborhood, especially those who lived along the far northern and southern reaches of the corridor, as exemplified by these responses:

> From the Lake Forest group: *[Brian] My thought of the Chicago River is downtown. This is the first I've known that these ditches are even connected to that.*
>
> From the Glencoe Group: *[Babette] I was wondering whether the Lagoons are in fact part of the North Branch of the Chicago River and I'm not sure they are.*
>
> From the Palos Group: *[Pat] It's not in my neighborhood.*

For some, part of this confusion was due to the many different names given to different reaches of the corridor. In addition to the "official" names of the reaches, local residents may refer to their part of the Chicago River by a variety of colloquial names, such as these from the Lake Forest group:

> *[Mark] Skokie Ditch.*
>
> *[Kati] The creek on Everett Road.*
>
> *[Monica] Until Philip said what it was, I had no idea what it was, I didn't even know it had a name.*

…the Evanston-Skokie Group:

> *[David] We call it the canal.*
>
> *[Hariette] The Sanitary District Canal.*
>
> *[Georgette] Everyone has a different name to call it. I grew up calling it the North Branch, it goes from Wilmette Harbor where the locks are…*

…and the Ravenswood-Albany Park Group:

> *[Brenda] About four blocks from where I live…[near] California and Roscoe, there is a branch and I guess it's the North Branch but it's like a channel…*
>
> *[?] I live about a half block on the other side of Horner Park, the other side of the river, and we just call it the river.*

The perceptions of those in the regional metropolitan groups are particularly interesting. This dialogue from the Metro West group provides an inkling of what the average person's knowledge and awareness of the river might be if he or she does not live near the river:

> *[Facilitator] What is the first thing that came to mind when I said Chicago River?*
>
> *[Rudolf] The first thing that came to mind was that it is still polluted with stockyard waste.*
>
> *[Brian] A movie that John Belushi was in where a car went flying out of a parking lot and into the river.*
>
> *[Julie] It's dirty and polluted. I grew up boating on the river every summer and I just remember it was nothing but dirt all along the sides—pollution, cans, papers, dirt and junk. This was at Marina Towers.*
>
> *[Louis] Green river on St. Patrick's Day.*
>
> *[Michelle]…I only associated it with that Lower Wacker Drive area where you get on the boats.*
>
> *[Louis] Well it has some historical value because that's where Old Fort Dearborn was located, where the Michigan Avenue bridge is.*

In other cases, the knowledge that people did have of the river, in their neighborhood or elsewhere, was inaccurate. Misperceptions about cleanup efforts, sources of pollution, and other aspects showed up in nearly every focus group. Misperceptions are underlined in the following quotes:

On pollution of the Skokie Lagoons and ongoing dredging efforts:

> *[Babette] Yea, but I think the dredging that's been done, it's been going on for three years, partly from the droppings of all the millions of geese that's being cleaned out—and deer—they're trying to get the water so…they're recycling it somehow. I'm not sure…*

On the smell of the North Shore Channel and the discontinuance of water chlorination:

> *[Larry] I really don't think it's the canal that you're smelling. In the Howard-McCormick area what you're really smelling is the sewage treatment plant. They used to chlorinate the water until recently, when they felt that the cost of treating it was prohibitive so they discontinued it; that has increased the smell.*

And on the operation of the Cal-Sag "waterfalls":

> *[Pat] They said they'd have that waterfall operating but they didn't turn it back on until about the beginning of May. I thought: "Gee why isn't it working year 'round?" It would keep aerating the water and it would probably do so much more. Somebody has to sit there and watch it, and if you're paying someone to watch it, it seems like the thing should be working. To sit and watch something not work for six months would drive me mad.*

Although discussion of these topics formed a relatively small part of the overall focus group discussion, it did uncover some potential challenges planners might face in dealing with public perceptions about the river. First, some individuals and groups have a low level of awareness about the Chicago River, both as a system and as a water body that flows near their homes. Part of this low awareness might result from the many different names given to different reaches of the river. Second, the river may not be a salient part of some people's lives, especially for those who live further away from the river. And, as with other less striking issues or objects, people's knowledge and awareness are often reduced to a few simple facts—some of which may be misconstrued. In contacting individuals and community groups on river issues, care should be taken not only to clarify the locality of the reach in relation to where people live, but also to convey that the reach is connected to the larger system.

RESIDENTS' OVERALL IMPRESSIONS OF THE RIVER

One of our principal objectives was to find out what those who did live near the river felt about it as a resource. To begin to address this, we followed up the free association task with another worksheet that had participants rate on a 0-100 (low-high) scale how they felt about the Chicago River in their neighborhood, along with other park and open space landmarks. The variation in responses across focus groups was quite revealing, as shown in the plot of mean ratings in Figure 2.2. Mean ratings were lowest for the Ravenswood-Albany Park group, followed by the Pullman-Blue Island and Lathrop groups. Ratings were highest for the Loop group, followed by the Glencoe, Metro East, and Lake Forest groups.

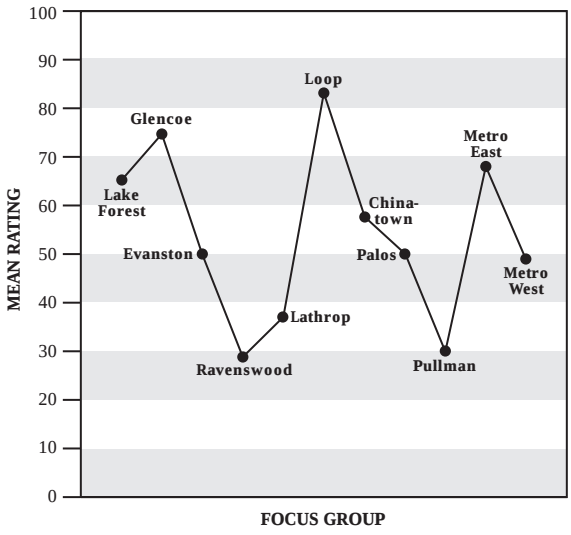


FIGURE 2.2
Plot of mean ratings of "The Chicago River in Your Neighborhood" exercise, all groups

Participants' overall feelings for the river in their neighborhoods were further explored in a subsequent worksheet. Participants were each given a box of crayons and asked to draw the river as it flowed through their neighborhood. When they were finished drawing, they were told to turn the sheet over and complete the sentence: "I am the Chicago River in your neighborhood; I am…" Samples of these drawings are shown on pages 15-19. Drawings for the highly rated reaches of the Middle Fork and Skokie Lagoons showed abundant trees and greenery; the water was usually colored blue, and the scenes often included wildlife. Loop participants focused on the urban scenery of the Main Branch—skyscrapers, bridges, boats, and formal tree plantings. Drawings for the lowest rated reaches showed a bleak view of the river; the river tended to be colored black or brown, and drawings often showed floating debris, pollution outflows, and few signs of green shoreland vegetation.

Representative comments from the "I am" part of the worksheet reflect this wide variation in people's images of the river as it flowed through their different neighborhoods.

Two points about these statements should be underscored. The first, already mentioned and confirmed by people's drawings and ratings of the river, is that the statements illustrate the sometimes radical variations in perceptions of different river reaches. Participants in the far northern reaches of the study area and the Loop were for the most part pleased with how the river currently is and hopeful that it will be preserved and improved. This outlook differed from those of focus group participants in other reaches, who tended to be much more negative and despairing about the future. This was particularly the case for the Pullman-Blue Island group, whose statements coincided with the lowest ratings given by any of the groups in assessing the river in their neighborhood.

MIDDLE FORK/LAKE FOREST

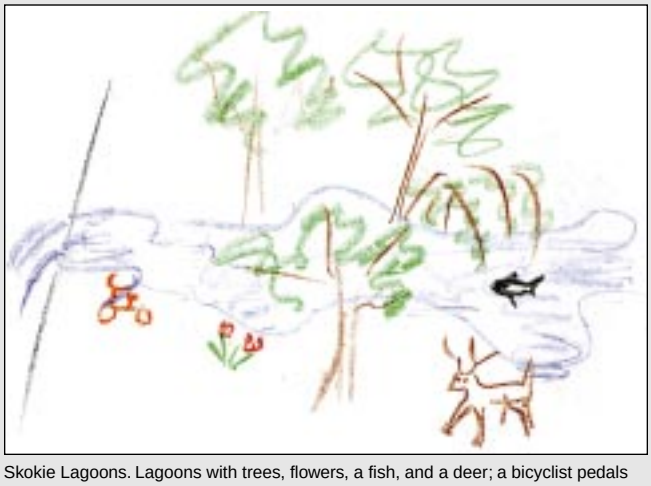
Middle Fork. A house along the stream surrounded by trees and greenery; a bicyclist pedals nearby.

- *I am part of a large river that has a history and has been here for a long time. I provide water to animals and plant life.*
- *I have been neglected until recently when interest arose to develop the land, fighting between developers and people wanting to preserve vegetation.*
- *I am quiet, gentle, relaxed. I am nature undisturbed.*
- *I am a treasure, do not abuse me. I can provide pleasure for the human race as well as animals and wildlife. If I am lost, I cannot be replaced. Take care of me.*
- *I am a tiny little drainage creek, but I add some feeling of solitude to my neighborhood. If I was bigger, maybe the community would give me a better name.*

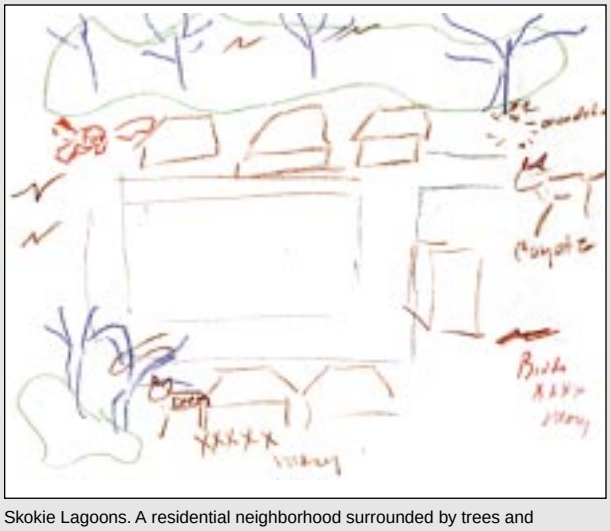
Middle Fork. Houses, a pond, and the Middle Fork with trees and other greenery, with Everett Rd. crossing the stream near the neighbors' houses.

SKOKIE LAGOONS/GLENCOE

- *I am so happy that so many people come to sit by my banks and enjoy the beautiful surroundings. I am happy that I have fish for people to catch. I wish that there could be a way to clean up a little.*
- *I am a dirty yet grumpy old pond that keeps overflowing. I would like to be cleaned up, yet I corrode all the boats that try to help clean me up.*
- *I am happy that people of all races, creeds, and backgrounds enjoy me; fishing, hiking, running, seeing the flora and fauna I support, picnicking, and in winter skiing, sledding, etc.*
- *I am a place for families to come to and enjoy picnicking, sailing. It is a place to get away from the stress of everyday life and unwind.*



Skokie Lagoons. Lagoons with trees, flowers, a fish, and a deer; a bicyclist pedals along the forest preserve trail.



Skokie Lagoons. A residential neighborhood surrounded by trees and inhabited by a multitude of wildlife.

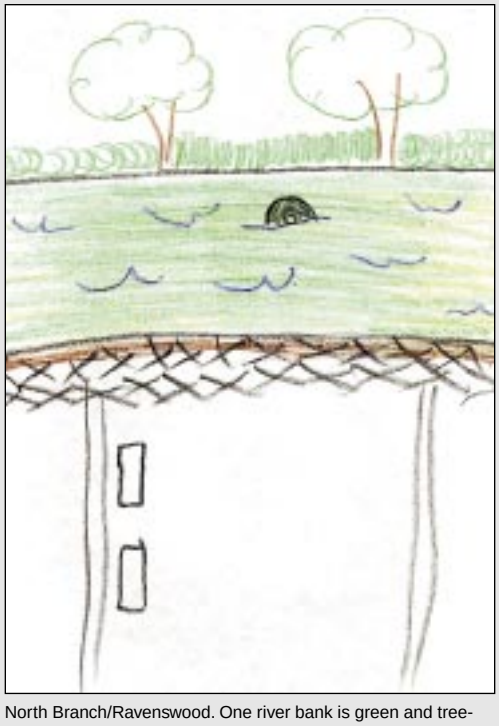
NORTH SHORE CHANNEL/EVANSTON-SKOKIE

- *I am dirty but trying to clean up.*
- *I am trying to clean up my act, please people also help. Keep me clean. I'm not just a sewer, I help you control your flooding.*
- *I am deep, dirty, and dangerous. I've many unguarded areas. In winter, children try to cross on the ice. Derelicts sleep under my bridges.*
- *I am a moving, viable body. Birds and ducks enjoy my water. I help avoid flooding in areas. Landscaping my banks is wonderful.*

North Shore Channel/Evanston. Steep, tree-lined canal banks are fenced off. A boat is docked at a pier.

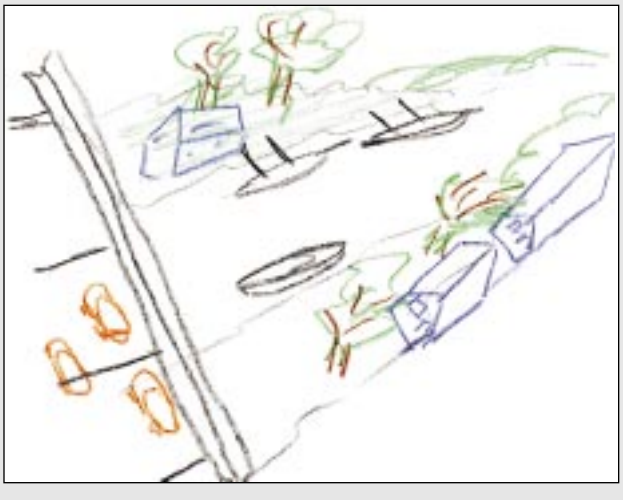
North Shore Channel/Evanston-Skokie. A tree-lined corridor and McCormick Avenue

NORTH BRANCH/RAVENSWOOD-ALBANY PARK



North Branch/Ravenswood. One river bank is green and tree-lined and the other is fenced off and residential. A tire floats in the river.

- *I am the Chicago River, get me out of here. I'm being used as a dump site. Everywhere around me there is pollution. I would not be surprised if underneath me there were cars, bodies, you name it.*
- *I'm so dirty. Please don't throw things in me. God didn't give me to you for a garbage dump. Would you like to swim in me like this?*
- *I am the Chicago River running through Ravenswood Manor. I am beautiful visually, but I am still badly polluted and need a major cleaning effort.*
- *I am a river. I want to be clean and clear. I want fish to live in my waters. I do not want to be a receptacle for everyone's castoffs—such as shopping carts, etc. I want people to stroll my banks. I want animals and birds to reside nearby. I want to be an asset to the community.*



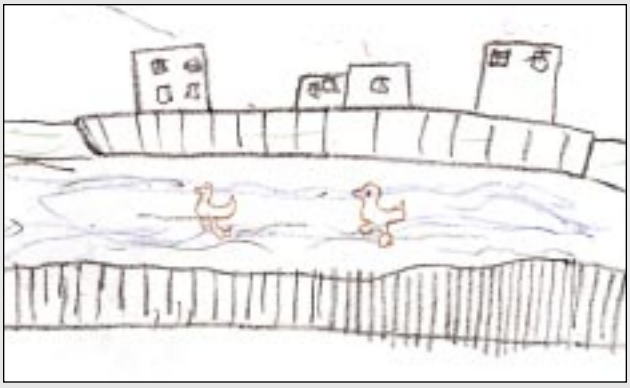
North Branch/ Ravenswood. A green, tree-lined residential river corridor shows boats docked by houses and a bridge.

NORTH BRANCH/LATHROP

- *I am the Chicago River in the Lathrop Homes, and I am the most disgusting, dangerous, foul, and dirty body of water in the Chicago area. I want and need to be cleaned. Please save me before it's too late.*
- *I am so dirty, I stink, and I am tired of people throwing all that trash in me, and children play in me even though they know I am dangerous. And so many rats, they die here and pollute my water. I wish the city would clean me up.*

North Branch/Lathrop. The river is fenced off and bordered with houses and a bridge crossing. Bottles, a shopping cart, and other debris float in the river.

- *I am near death. Too much filth and scum are constantly poured into me. I look best on St. Patrick's Day when "da Mare" pours green dye into me. Fish would much prefer to be elsewhere. It would be nice to be back to the state I was in before Chicago became a city, where one could see a few feet into me. Chicago already has enough sewers.*
- *I am tired of the dirt, garbage, and there's a dead rat. Boy! I need to get cleaned up. The land around me needs a lot of work. Too many weeds, no one can even see me with this garbage and tall weeds. I'd love to be clean and blue as I was before the bad chemicals made me cough.*

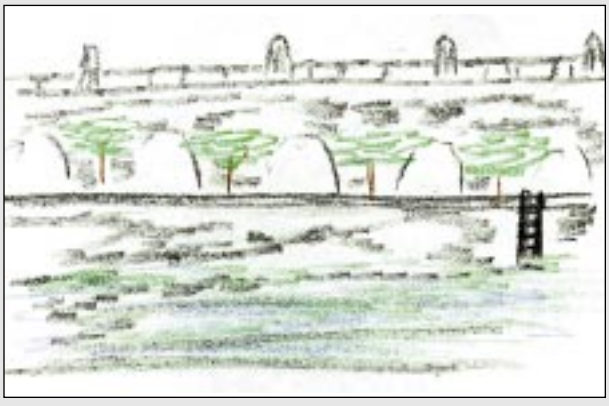


North Branch/Lathrop. The riverbank is walled and fenced off, and bordered by a road and the Lathrop CHA homes. Ducks float in the river.

MAIN BRANCH/LOOP

Main Branch/Loop. Bridges rise as sailboats move down the river. People are shown on the riverwalk near Marina City and other high-rises.

- *I am wishing the buildings recognized me more. The occasional small spills at the marina fuel dock are choking me because the flow is slow on the Main Branch. Thank you Friends of the Chicago River for your efforts.*
- *I am a creation of God. Ultimately you have power to change my course, hurt me, use me, or rape me. But the God that created everything will judge you on the last day…[and] I will be used to judge you all.*
- *I am the flow of life and beauty, sound and breath off the lake and winds holding back the teeming millions to stop and reflect, look, listen, smell.*
- *I am the Chicago River. The former mayor, Richard J. Daley, used to talk of its potential. But that potential has yet to be realized. I am a great resource to Chicago for business and for entertainment, but I am undeveloped as yet.*



Main Branch/Loop. The riverwalk along Upper and Lower East Wacker Drive. Evenly-spaced trees line the river bank.

SOUTH BRANCH/CHINATOWN

South Branch/Chinatown: An exhaust-spewing car crosses the bridge, throwing garbage into the river. Pollution, a dead fish, and junk float on the surface.

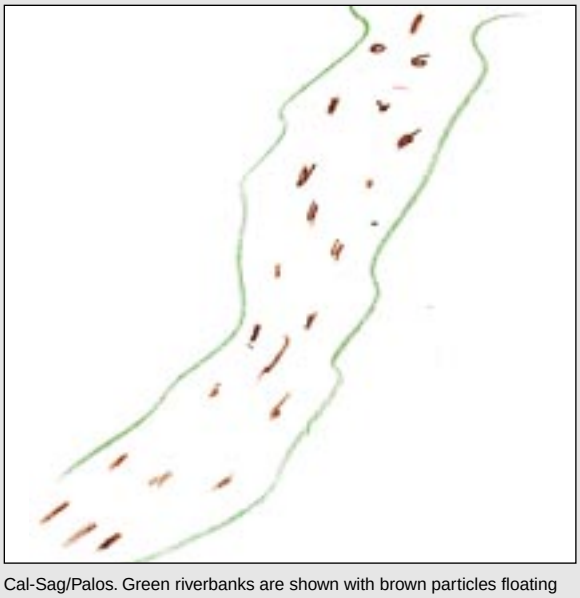
- *I am the Chicago River, I help the city's population survive every season of the year. Without me, they will have no water to quench their thirst or for sanitation.*
- *I am happy about people coming to the riverside to barbecue, etc.*
- *I am the Chicago River. I feel I have been neglected, poisoned, used, and abused. I have provided a means, a highway for transport. What have you done for me?*
- *I am filthy and sick of being in this neighborhood of yours. Why can't I just stick to the Chicago downtown area? I wish I were dead. After all, no one enjoys me here. All people do is drive across the bridge and soil me.*

South Branch/Chinatown: A green riverbank and bridge crossing are shown.

CAL-SAG CHANNEL/PALOS

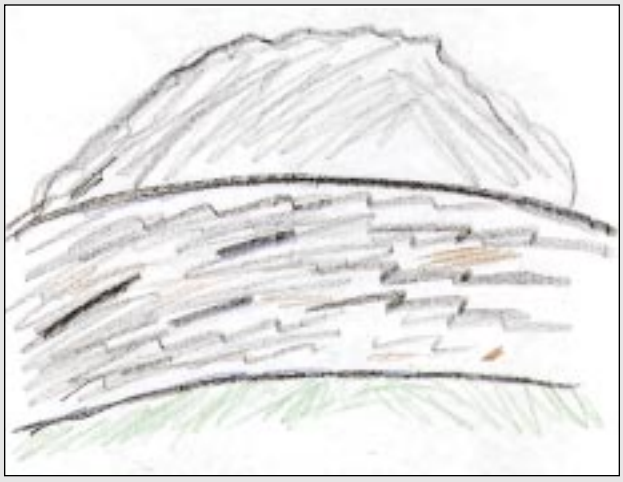
- *I am feeling that Chicago is a beautiful city. I am happy through it.*
- *I am the Chicago River and am a historic engineering marvel. I run backwards.*
- *I am a river serving seven million people. They do not all treat me properly, but I still try to serve them.*
- *I am a massive belch, a putrid, offensive scar on the earth.*

Cal-Sag/Palos. A house with access to the river is shown.



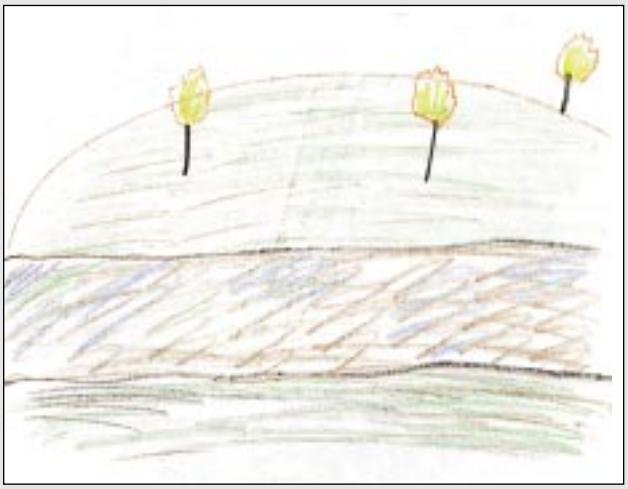
Cal-Sag/Palos. Green riverbanks are shown with brown particles floating in the water.

CALUMET RIVER/PULLMAN-BLUE ISLAND



Cal-Sag/Pullman. River flowing past the landfill. Other side is colored green (Beaubein Woods Forest Preserve?), but the river itself is colored black and brown.

- *I am dying, help me.*
- *I am in pain, please help me. I can't breathe, I'm dying, help.*
- *I am very sad, dirty, and I wish there was a way everyone or someone would help clean me up. Please help me, don't pollute.*
- *I am trying to breathe, please give me clean air.*



Calumet River/Pullman. Landfill is drawn with flames burning off the methane gas emissions. River is colored brown and blue.

The second major point from this exercise is that these statements convey, in vivid and sometimes poetic terms, the full range of perceptions and emotions many people hold toward the river. These include many positive aspects about the river—its history, wildlife, and beauty—and what these aspects give those who experience the river, such as enjoyment of many different activities, a sense of solitude, and feelings of rootedness or connection with the river and communities along it. The negative perceptions and emotions, however, are what stand out most. By giving a voice to the river, people were able to personify the effects of pollution and mistreatment using such emotional terms as pain, illness, hurt, rape, and death—words that powerfully convey what stacks of statistics about water quality seldom can. Above all, these statements—whether positive or negative—demonstrate the high level of concern that participants have for the river, a concern for how good or bad they see the river today, but more importantly, a concern for how it could be tomorrow. This concern seems to hold even for those who know little about the river, including those from the two metropolitan-wide groups.

Together, the rating, drawing, and imagery exercises were helpful in identifying the spectrum of issues for further discussion. In subsequent discussions, the facilitator keyed in on the concerns expressed by participants, allowing us to identify and explore current perceptions of the river in greater detail. In the following sections, we examine specific issues and their implications for river planning and management.

ANALYSIS OF KEY QUESTIONS AND ISSUES

To identify important issues regarding current perceptions of the river, we first looked at the percentage values of general issues codes for statements whose contexts referred only to current conditions, perceptions, and uses of the river (See Table 2.3.2).

For all groups, the issues most often brought up concerned the current condition and maintenance of the river landscape, river characteristics, activities that participants currently engaged in on or near the river, and current aspects of river development. Other issues that figured importantly in some group discussions included the reputation of the river for the two metropolitan-wide groups, river access for the Ravenswood-Albany Park group, and safety for the Evanston-Skokie, Ravenswood-Albany Park, Lathrop, Loop, and Palos groups. These data gave us clues about which aspects of the discussion to investigate more closely. An analysis of these issues follows.

HOW DO PEOPLE USE THE RIVER?

To understand how people currently used the river, we looked at those specific issue codes dealing with recreation activity and river development. Participants mentioned 39 different activities they engaged in along the river; of these, top mentioned activities included land-based corridor activities

such as walking and bicycling, and varied children's activities. Water-oriented recreation, however, dominated people's conversations about river-oriented activities; these activities included boating, watching the river and activities on it, and fishing. The largest subcategory of comments referring to boating dealt with tour boats, which several participants mentioned as a unique way to experience the river and one that is accessible to everyone:

> From the Glencoe group: *[Dan] It's not like you're being bussed, it's not the normal kind of tour where they say: "Look out your windows now on your left and your right." I mean you're on the boat and it's different, you get to see all the buildings from different sides than you would if you were on land.*

> From the Loop Group: *[Chuck] I drove architecture tours on the river for years and never got tired of going down that river. People just love it and there's good reason, by day or by night, spring, summer, or fall.*

> From the Metro East group: *[Monique]…As a matter of fact, I go down the river once a year. I take a tour boat with a friend, mother, dad, or one of the kids; my husband is tired of looking at it…I will skip lunch to make sure I have the money. I get in the boat from the river and go into the lake and it's very uplifting.*

In categorizing comments on river development, we found that more than two-thirds of them dealt with open space and recreational facilities. Participants in the Lake Forest, Glencoe, Palos, and Pullman-Blue Island groups talked about forest and nature preserve sites they had visited, while those in the more urban reaches focused on park and riverwalk areas. In terms of facilities development, trails were mentioned by many groups, while boating facilities, restrooms, and bridges were important topics of discussion in selected groups.

Linear activities: Discussion about activities and river development most often focused on the linear nature of the corridor. Comments from participants in groups where facilities are currently available illustrate how the corridor provides multiple activities throughout the year:

> From the Glencoe group: *[Sheldon] I'm quite familiar with the Skokie Lagoons and Botanic Gardens. I'll start from my street and I'll jog through up around the Botanic Gardens until I get to the north end of the gardens, back around through the whole garden, back out and down the trail. I do that when it's nice. I also cross country ski during the winter, not through the gardens but there's a bike path around there. And I also bike ride.*

> From the Evanston-Skokie group: *[Phil] The Sculpture Park is excellent for biking and walking. That whole area.*

> From the Loop group: *[Chris] I have a boat I park in front of the building so I boat quite a bit on the river.*

> From the Palos group: *[Joseph]…I bike at Lake Katherine and along the I&M Canal—a marvelous area—and I golf in the area wherever I can pick up a match free.*

Special places: But just because the river is a linear resource doesn't mean that it is used or needs to be used solely for linear activities. Much of the river use we heard about was confined to certain locations on the river, often for passive activities:

> From the Lake Forest group: *[Brian]…I take my little boy into the grassy areas and walk around back there with him. There's a little wooden bridge where he sits down and watches the water go by and it's great, I love it.*

> From the Loop group: *[Mary Anne] We feed the ducks, we picnic along the river frequently. In various spots there are little park-like areas although a lot of people don't know about them so that is part of the fun of kind of exploring the river in the area and you are only a few feet away and you see just millions of people streaming by and you're real isolated in a very beautiful little area. You see a lot of people drawing and painting, taking pictures, and film-making.*

> From the Palos group: *[Pat] There is one section of Lake Katherine where you can sit and watch the boats go by. I like the barges and the boats.*

> From the Metro East group: *[George] If I have to do something downtown—like go where you pay your traffic tickets—and you walk across the bridge, that's a nice view.*

Visual use: And for some participants, river use didn't require direct access or on-site activity at all; to those living near the river, visual access is important and can often result in positive benefits:

> From the Glencoe group: *[Michael] It's right behind my house, I just have to look out my window…*

> From the Evanston-Skokie group: *[Georgette] It's the area I look out at from my bedroom window.*

> From the Lathrop group: *[Maxine] I can only see it from the bridge, and my kids wave at the boats when they go by…*

> From the Loop group: *[Ann]…My balcony floats over it and I sit mesmerized just about every summer evening. Sometimes there's a blimp, and there's trains. The horses used to go across the Kinzie Street bridge, and it's just fun to see all the different things. It's heavenly, really.*

HOW DO PEOPLE CHARACTERIZE THE RIVER?

What about the Chicago River matters to people? What elements of the Chicago River are important to people's enjoyment and use? In our discussions, we found that the river environment has many facets, each of which is important in characterizing "the river" (See Table 2.3.3). A few people mentioned the physical characteristics of the river and its shoreline, implying it is significant because its size and extent. Others, especially in the Loop group, thought the built environment was a big part of the riverscape, and they appreciated the buildings, bridges, and other architectural elements that give the river its distinctive character. The most significant aspects of the river, however, were its natural characteristics and the aesthetic and functional benefits it provides.

Characteristics of the Natural Environment: One of the highest percentages of comments about the characteristics of the Chicago River referred to the natural environment. Most codes pertained either to vegetation or wildlife; both of these elements of the river landscape were usually referred to positively, adding to people's experience of the river no matter which reach they lived near. In the most urbanized sections of the river, landscaped areas of trees, grass, flowers, and general greenery increased the appeal of the river:

> From the Loop group: *[Chuck]…You know, it's nice to live nearby. [Across the river, on the other bank] you've got those nice green trees. It's the only green we've got around there…*

> From the Metro East group (in reference to the new park along the south bank of the Main Branch): *[Monique] It's one of Chicago's best hidden secrets because we are in a big industrial city and when you discover little areas like this…The man is right how they've cleaned it up. And in that location they've put trees that give it a different outlook. It even gives you the feeling that you can be safe and enjoy.*

Groups from along the less developed stretches talked mainly about the natural landscape, as shown by the high percentages reported for the Lake Forest, Glencoe, and Palos groups in Table 2.3.3. This focus is illustrated by the following two discussion segments about wildlife and native vegetation from the Lake Forest group:

> *[Facilitator] What can you tell me about the Middle Fork Savanna?*

> *[?] Is that the Open Lands property?*

> *[Phil] It was known as the Halligan Estate, or the Circle H Ranch. Then it was sold to a developer, and a lot of public pressure was put on. So the city and the Lake County Board bought it, and now we're safe…*

> *[Vern] It's one of the very few places where the situation is the same as the settlers found it when they came here.*

> *[Mark] It's just never been built on.*

> *[Vern] The Illinois prairie is really what it is.*

> *[Meredith, and others] Birds,…deer.*

and from the Glencoe group:

> *[?]…I think probably what I do more than anything is watch the wildlife and really track that, and today we had a baby deer born in our neighbor's yard.*

> *[?] I've seen a fox in there.*

> *[Michael] About two months ago we saw a coyote in our backyard.*

> *[Robbie] I saw two snapping turtles today.*

> *[?] In the Botanic Garden there's a little pond and every couple of days I watch the frogs and tadpoles in it.*

> *[Babette] We are so lucky!*

Vegetation and wildlife along the river were also referred to in some negative ways. In some focus groups, unmaintained vegetation was cause for concern, as was dense vegetation and its implications for safety. These topics will be discussed in more detail in separate sections on maintenance and safety. People in several focus groups mentioned problems with rats along the river, and some attributed mosquitos and other pest insects to the river. The Skokie Lagoons presented an interesting case of the benefits and problems with urban wildlife. While most participants in the groups loved to see deer and geese, they also recognized that the current high populations of these animals was cause for concern. More will be mentioned about wildlife and the Skokie Lagoons in a subsequent section on issues specific to particular reaches.

On the whole, however, the natural environment was an important, positive characteristic of the river environment. In both wild and developed reaches, vegetation and wildlife can be an important attraction to those who live and recreate near the river. In listening to those living near significant natural areas, in particular the Lake Forest, Glencoe, and Palos groups, we came away with the feeling that the quality of their lives had been significantly and positively affected by daily interactions with nature along the river.

Evaluative Characteristics: The highest percentage of comments about the current characteristics of the river referred to participants' evaluations of the range of benefits the river provides to individuals, neighborhoods, and the region as a whole. Most comments here were aesthetic in nature: the beauty and scenery afforded by river views, the peace and solitude of being down by the river's edge, and the presence of the river as a contrasting element within the urban fabric:

> From the Loop group: *[Mary Anne] Well I just have a real fondness for the river and Olive Park and the beach in that particular area because you have all the tranquility and peacefulness of being right on the water and yet, this extreme contrast of the incredibly busy city with the beautiful skyline.*

> From the Chinatown group: *[Ken] I like it for the water scenery about it and its contrast with all the commercial and factory development. At least you can see something, you can look out and see the water rather than looking at the factories; people looking at that day in, day out, they get tired of it and this is a change of pace or setting and they feel better.*

Less often mentioned but noteworthy were the many functional or utilitarian benefits the river provides:

- **As an intake and outlet for industry:**
  From the Chinatown group: *[Gene]…about all it does is provide water. It's dirty, I mean it's like a pollution dump for the factories. And there isn't much use for it.*

- **For drainage and flood prevention:**
  From the Lake Forest group: *[Phil] I realize how important it is—you're talking about the Chicago River…That's our drainage; we'd be lost without it.*

- **As a location for industry and residential land use:**
  From the Metro East group: *[Mike]…it's a working river, it's not a river of beauty, so to me it's just like industry's there, homes are there, they're part of the river.*

- **As a transportation route:**
  From the Lathrop group: *[Lee] Well I think it is very good—I mean it could be improved by all means, but I feel that it's OK. We transport things through that river, too, so although we have the negative part about it [pollution], we have the positive part, too.*

- **As a sanitary system:**
  From the Palos group: *[Joe]…It was built as a relief for the Chicago River system. To accept all the sludge and pump it on down to somewhere.*

- **And as a problem not good for anything:**
  From the Evanston-Skokie group: *[Dorsey] I don't see any purpose of the canal. That whole area should be just completely closed. It should be filled in and then make an embankment on both sides.*

Some of the most thought-provoking comments came from several participants who had difficulty reconciling their appreciation of the beauty of the river with their knowledge of its current condition and misuse:

> From the Ravenswood-Albany Park group: *[Tom]…It's visually appealing although it's still very polluted, because it's very wide and in the summertime there's trees all over and you look down and see homes, you see these terraces going down to the river, some of them have gardens all over them, and then you have the boats down there. It looks real cute, like you're in the countryside. For three blocks or so you can pretend you're not in the middle of Chicago, and you can pretend it's not the Chicago River, although you don't even want to touch it.*
>
> From the Loop group: *[Alan] How do you answer that question? I think it's really polluted but it's a beautiful view and I think there is a big difference between here and just a few blocks away.*

As these two comments illustrate, people can perceive the river in both positive and negative ways. These seemingly conflicting perceptions are important to understand, for they can affect how people will use the river. Although most people we talked with felt the river provided some positive benefits, many limit their use because of significant problems they perceive. Most of these negative perceptions relate to the current condition and maintenance of the river and its corridor, the subject of the next section.

WHAT IS THE PERCEIVED ENVIRONMENTAL QUALITY OF THE RIVER LANDSCAPE?

Discussions about the current status of the river focused mainly on perceptions of river condition and maintenance. The heart of this topic was water quality condition and maintenance (See Table 2.3.4). The condition and maintenance of the adjacent landscape and facilities and the vegetation were also talked about, but were less central to this part of the discussion.

Water Quality Condition and Maintenance: Two important findings about current perceptions of water quality condition and maintenance should be pointed out. The first is the very strong perception among focus group participants that the water near where they live is polluted. This was evidenced by a high percentage of participants' comments referring to the word "polluted" and its variants (e.g., "dirty," "filthy," "gross") in describing the current condition and maintenance of the river landscape. However, most Loop participants felt the water of the Main Branch was, if not pristine, then at least not seriously polluted.

A second important finding was that "pollution" meant different things to participants in different reaches. Representative quotes illustrate how pollution was interpreted by the different focus groups:

- **As natural debris:**
  From the Lake Forest group: *[Phil] We have mosquitos, but I have to stand up for that ditch; it's not a dirty thing, it's a good thing. Our problem managing that ditch is that people don't want their particular bank cleaned. There's a tree that they loved and then it falls over into the ditch and they don't want it removed.*

- **As turbidity:**
  From the Glencoe group: *[Robbie] Well, I have no problem, even with the water, because that's just the way it is. I mean even in nature where no one's ever been sometimes the water's gross just because of the mud around it or whatever. A lot of it's just runoff and there's nothing you can do about it. I think it's really beautiful, but it could be kept up better.*

- **As odor:**
  From the Evanston-Skokie group: *[Bernadine] My first instinct was to put down odor and pollution because that's the perception I have of it from when I was growing up around there. You couldn't drive down McCormick without having to roll your windows up because the odor was suffocating. But in recent years it has gotten better.*

- **As dumping and littering:**
  From the Ravenswood-Albany Park group: *[Rakesh]…you see people coming home from my school, they drink a pop or something and the can—they just throw it in, or a food bag. It doesn't look like a river, it looks like a landfill.*

  From the Lathrop group: *[Theresa] There is so much debris thrown in and I don't think they ever take time to clean it out.*

- **As water color:**
  From the Loop group: *[Chuck] When the river is high the sluice gates in the locks aren't flushing as much water through, and so the Main Branch water slows down so you get the brown water and all the garbage that would normally be flushed away, it just hovers around.*

- **And as hazardous waste:**
  From the Pullman-Blue Island group: *[Jennifer] If you go into Hammond where the [Grand Calumet] goes into Illinois, they have signs up that say "Hazardous Water—Danger" along the river. And that's scary, it doesn't even look like water. There is a lot of pollution being put in that way.*

Two other key issues of water quality condition and maintenance included flooding and fish. Flooding was an issue for the Lake Forest and Evanston-Skokie groups, the latter group in reference to the Deep Tunnel stormwater storage project. The subject of fish was touched on by several of the groups. The relationship of fishing to water quality and condition is important, for many saw fishing as a sign of improved water quality:

> From the Lathrop group: *[Terell] Some people fish in there; they swear that there's catfish in there, but I just don't know.*

> From the Palos group: *[Jim] The fish are starting to come back. I was out for a walk [along the river] last summer and I saw a couple of guys at nighttime, they were floating by and they had fishing poles and I said: "Hey, how'd you guys do?" and they said: "Well, we got a couple of carp" and I said: "Where were you at?" and they said they were fishing in the Cal-Sag and I said: "No you weren't; nothing can survive there."*

Although many saw the presence of fish in the river system as a positive sign, the specter of pollution remained in most people's minds when they thought about eating fish caught in the river:

> From the Glencoe group: *[Nerissa]…I like to see people fishing there but I saw one group barbecuing fish, and I could never do that, because they live in such polluted…*

> From the Ravenswood-Albany Park group: *[Dawn]…It's not that bad—I mean I wouldn't swim in it or anything, I wouldn't want to eat any fish that came out of it, either.*

> From the Lathrop group: *[George] Then what's the point of fishing if you've got poison in the water? I mean the fish are our barometer for the toxins they are going to ingest.*

As shown by these quotations, many of the pollution-related problems that concerned focus group participants were ones that impacted their senses. These sensory experiences can create strong and lasting images for people, images they may continue to carry even if the situation improves.

In some cases, recent cleanup and maintenance efforts have gone unnoticed by focus group participants, especially those from the two metropolitan-wide groups who do not see the river frequently. For the most part, however, at least some of the participants in each group were aware of cleanup and maintenance efforts near where they lived. Those efforts most often referred to included dredging at the Skokie Lagoons, the Deep Tunnel stormwater storage project along the North Shore Channel in Evanston and Skokie, the skimmer boats that clean floating debris from the Main Branch, and the Sidestream Elevated Pool Aeration (SEPA) plants or "waterfalls" on the Cal-Sag. These representative quotes reveal the positive signs of encouragement that come with awareness of such activities:

> From the Glencoe group: *[Michael] Well, it's being cleaned right now. It's in its last year. It's been cleaned. They've been putting in fish. It was dirty, and it still is a bit dirty, but it's being cleaned.*

> From the Evanston-Skokie group: *[Larry] Well yes, it will help [the flooding problem], and the Deep Tunnel will also give residents new streets and curbs, etc. It's a good deal for the residents, the benefits are outstanding compared to the short term problems with construction.*

> From the Palos group: *[Joe] It's very promising if the waterfall was more effective. The ultimate goal is to pump enough oxygen in there so the carp can live, and in the process, clean it up.*

> From the Pullman-Blue Island group: *[Bill]…I'm enthused about the way they're trying to clean it up. I've said they've polluted it for 200 years, now it could take that long to clean it up, but at least they're working on it.*

Landscape/Facility and Vegetation Condition and Maintenance: Comments in the other two categories dealing with condition and maintenance of the river landscape were much fewer in number than those dealing with water quality, but are nonetheless important to note. People commented on how nicely some of the grounds along the corridor were maintained; these places included the Skokie Sculpture Park and Ladd Arboretum along the North Shore Channel, the homes in Ravenswood Manor along the North Branch, and the riverwalk downtown along the Main Branch. Places mentioned that were poorly maintained included the River Park ballfields on the North Branch, the river edge near Lathrop on the North Branch, and the Beaubien Woods Forest Preserve boat landing along the Calumet River. Many of the comments about lack of maintenance dealt with a pervasive but relatively easy to correct problem: litter. This dialogue from the Glencoe focus group illustrates how different participants viewed the problem:

> *[Robbie] It is pretty dirty; the only reason I gave it high marks is because at least it is a place with trees and greenery, and a lot of people don't even have that opportunity. So I gave it a 65 but there is so much trash there.*

> *[Allen] But that's a spring and summer occurrence isn't it? When they throw the beer cans?*

> *[Babette] Yea, I think they keep it pretty well picked up.*

> *[Michael]…When we go out there we don't throw things around because we know that the next time we go out there, it'll still be there. But when people come from other places, they throw their stuff everywhere because they know they are never going to see it again.*

> *[Babette] I think that's interesting, because considering how many people do use it, I really feel that people pretty much do use the trash cans.*

WHAT OTHER ISSUES CURRENTLY CONCERN NEARBY RESIDENTS?

Of the remaining issues discussed within the groups, two stand out as important despite the relatively few comments about them. These issues are safety and access.

Safety: The issue of safety had many dimensions as it was discussed within the context of current perceptions of the river. More than two-thirds of comments about safety dealt with issues of personal safety. The bulk of these comments came

from participants in the Evanston-Skokie, Ravenswood-Albany Park, and Loop focus groups, and centered on concerns about criminal activities that occurred along the river and on the effect that vegetation has on perceived safety. Representative comments included:

> From the Evanston-Skokie group: *[David] It seems that on the Evanston side there's more of the trees, the dense forest, it's more closed, and when it's like that people can hide and do things. You get more of an element coming into those areas. On the Skokie side, it's more open, more sunshine, fewer trees, it's more visible and it's more safe. If you're going to have an area it's going to have to be more like the Skokie side.*

> From the Ravenswood-Albany Park group: *[Rakesh] We used to go to the parks but not anymore because there's too many gangs out there. River, Gompers, Horner Park. We'll play baseball there but only if you go over with the whole team, not as an individual and not when there's shooting going on…*

> From the Loop group: *[Chuck] There's two ways of looking at the river. There's the river down at river level and then there's the river where you're up above…[When] you have to go down the stairs, that's where the security problem comes up, because anybody can come along Lower Wacker Drive and quickly go out…*

Most of the remaining comments about safety involved physical safety. These comments focused mainly on people's fears of children falling in the river or on the consequences of direct body contact with the water:

> From the Lathrop group: *[Theresa] I've seen children being pulled out that have drowned and that isn't a very nice scene.*

> From the Loop group: *[Bradley] I know it looks very beautiful, but I have friends that work on the barges and they have to continuously get tetanus shots and check-ups. It is a very polluted area…the sewage treatment in the city is decent up to a point, but it's a very dirty river and I think only the carp survive there. If you ever fell in it you would have to go through a lot of tetanus shots and you wouldn't want to get a mouthful. It's not like a spring creek, you know.*

> From the Palos group: *[Jim] I can remember reading an article ten years ago that really stuck in my mind. They said that if you were to fall into that canal just by accident, and swallow a mouthful, you were dead.*

Access: Access was another topic with few but very insightful comments. The focus groups identified many dimensions of what it means for the river to be accessible. These dimensions included convenience and proximity of getting to the river by car or on foot; physical versus visual access to the river; the mix of public and private land along the shore and the adequacy of public open space; access and the pros and cons of fencing; the ability to walk along the river edge and the continuity (or lack thereof) of riverwalks in the downtown and other areas; and the disparity of access to facilities and enhancements on some stretches of the river. In those groups where it was discussed, most felt that public access to the river was a priority. However, as this comment from the Ravenswood-Albany Park focus group shows, some recognized the fine balance that must exist between providing public access and protecting the interests of individuals who own land along the river:

> *[Tom] My neighbors have their boats parked down there; it's very nice. The only thing is, rumor has it that people are beginning to wonder if the river is public and if so, why are there boats parked on the river while the public pays for it? There are also rumors that there is going to be a major bicycle path coming down from the north along the river and will hit Lawrence, where it will have to stop because it all becomes private homes and people have concrete terraces down to the river and boats down there. It's kind of nice that people are living on it, but it blocks and you can't walk through there because it's all fenced off. It's denied public access so there's some talk about it. Legally, I suppose they can just put the bike path through. Legally, we should be able to walk anywhere on the river because it's public. But it isn't set up that way. It goes back and forth because the neighborhood looks nice there and the people keep it clean because the people are using it as their private property. But at the same time you are denying everyone access to it. If the public did get access, the homeowners would lose enormously in terms of property values.*

HAVE PERCEPTIONS OF THE RIVER CHANGED?

Another central issue about current perceptions of the river has to do with change. During our conversations with focus group participants, it became clear that although many spoke of serious problems and concerns with the present state of the river, many also felt that significant improvements had been made. Nearly every focus group referred to improvements in water quality, landscaping, and/or facility development:

> From the Glencoe group: *[Dan] Well, when I found out they were cleaning [the Skokie Lagoons], a year later I saw that it was actually cleaner. I took a close look at the water.*

> From the Evanston-Skokie group: *[David]…the Sculpture Park is real nice. The area is much improved from when we first moved out to the area.*

> From the Lathrop group: *[Theresa] I believe they have improved it somewhat because years ago, as I said, children used to go down there and they would lose their balance and fall in the river. Now they have a high fence around it.*

> From the Loop group: *[Mary Anne] I've been in the area for so many years and I've seen, compared to how it was 12-15 years ago, it's amazing, the difference along the river now.*

> From the Palos group: *[Dick] I think they are doing a terrific job on it and if they continue on it, it's going to be even better. The number of pleasure boats alone that are in there [are a sign of its improvement]…of course, they are not helping the quality of the water. The increase in them in the last couple of years has been tremendous.*

> From the Metro East group: *[George] Aesthetically, I have to say, too, over the years the river looks a little cleaner the few times that I've passed by, and I would like to know how they monitor that. Who's in charge of that? Is there an environmental agency that gets after them or what?*

> From the Metro West group: *[Rudolf]…clean up efforts are underway and they show promising results. I get a lot of*

company from Europe so every year at least once or twice we go downtown sightseeing. The Chicago River is part of the sightseeing and it really became a lot cleaner. You can see at least two feet down now. Before it was a soup, now you can see. And I also heard that some fish are in there, but I wouldn't want to eat them…

But this perception of improvement was not universal among groups, and the following comment is more representative of the feelings of participants in the Pullman-Blue Island group:

[Jennifer] I put 100% scummy, dirty. I see nothing since growing up in that area that I would call a sign of improvement…It seems to be getting worse as the years go by—smellier, dirtier, thicker—[laughter].

WHAT PERCEPTIONS AND USES OF THE RIVER CHARACTERIZE PARTICULAR NEIGHBORHOODS AND REACHES?

Looking at participants' perceptions on a group-by-group basis can help characterize particular neighborhoods and reaches.

- **Middle Fork/Lake Forest:** Several of the participants did not know the "correct" name for the Middle Fork; most referred to it as "the ditch." Few were aware the Middle Fork connects with the greater Chicago River system. Residents appreciated the area for its natural aesthetic qualities, affording solitude and a place for passive activities like walking with children and dogs, and exploring nature from people's backyards or where roads dead ended at the river. Considerable discussion time on places and activities was devoted to the new Middle Fork Savanna preserve under development near participants' homes. Most knew it was a rare and valuable plant community and were pleased to have it as part of their neighborhood. Concerns about river landscape condition and maintenance focused on turbidity and natural debris in the water as a threat from flooding. Although both of these conditions are "natural" occurrences, they contributed to some participants' perceptions that the water was polluted:

  [Sharon] The reason [I gave it a low rating] is I remember a few years ago the people who live back there, it overflowed and their basements and everything were flooded.

  [Meredith]…I have no objection to the drainage ditch at all. It doesn't smell, there's no odor from it at all. It's brownish water and that's why when I said "pollution," I don't know that you'd go down there and drink it, you know it's not a Colorado creek kind of water but it doesn't bother me one way or the other…

- **Skokie Lagoons/Glencoe:** Participants in this group identified very closely with the forest preserves that surround the river and their homes, and they use them frequently for walking, bicycling, skiing, and other activities. Specific places mentioned along the river included the Lagoons and forest preserve areas in Glencoe along Forest Way, and the Chicago Botanic Gardens. The natural environment of the Skokie Lagoons setting—including its plants and wildlife—was highly regarded, and the landscape as a whole was cherished for its picturesque qualities. Both the aquatic and terrestrial environments of the Lagoons, however, are suffering problems, and participants knew about these problems and efforts to rectify them. Many felt the Lagoons were polluted, but saw signs of improvement from the ongoing dredging project. One participant succinctly described the magnitude and complexity of trying to restore the natural dynamics of the wildlife-vegetation communities of the Lagoons area:

  [Nancy]…It's a long term plan that involves culling the deer and then restoring the plant life. The wildflowers that used to be in the woods are gone, they're all trampled, and the forest has been taken over by a certain vine. I don't mean to sound pessimistic, but there are many dead trees, very few leaves. It's just changed.

- **North Shore Channel/Evanston-Skokie:** Focus group participants referred to the channel by several different colloquial names, but most called it the "canal." Most of the participants used the recreational trail along the canal for walking and biking; other activities included ball playing, nature exploration, and harvesting of wild edibles. The lands along the canal were generally well liked, and participants thought they were for the most part well maintained. Specific places mentioned by participants included the sculpture park in Skokie and the arboretum in Evanston. Many in the group felt that the canal was polluted, and although some thought there was an odor problem, others felt significant improvements had been made in this area. Completion of the Deep Tunnel stormwater storage project was seen as a plus to participants, who recognized its benefits but are affected by road closures, noise, and other construction impacts. Some in the group felt the high density of vegetation on the Evanston side made for unsafe conditions, while for others the vegetation was one symptom of a greater problem in safe park use:

  [June] Right off the street behind my house there's a very nice park that goes all the way to the canal. It's roomy, it's got a few pieces of equipment there, and it would be an ideal place to go because families could make their own picnics, make your own fun, but then you're interrupted by so many outside things until you just don't feel really comfortable.

  [Lashar] The first thing I wrote down [about the canal] was "It's dangerous for children."

- **North Branch/Ravenswood-Albany Park:** Participants from this section of the North Branch felt fortunate to have many parks with good facilities near them, including Gompers, River, and Horner. However, their use of these parks was limited by gangs, crime, and poor maintenance. The Ravenswood Manor residential neighborhood has well-maintained homes along the riverbanks, and although no one in the group owned property here, they had mixed feelings about plans to develop a public trail through this stretch. Some participants liked the natural aesthetic

quality the river lends to this urbanized landscape, but most perceived this stretch of the North Branch to be very polluted from people dumping things in it. Over all of the focus groups, Ravenswood-Albany Park participants rated the river the lowest; most explained their 0-100 (low-high) ratings in terms of their perceptions in water quality:

80 River creates Ravenswood Manor neighborhood.

60 Although it smells bad and is dirty, it gives the neighborhood character and 'possums.

30 Polluted, needs to be cleaned up so the ducks that live there will survive.

30 Used for dumping. River banks undeveloped and unsafe.

0 Very dirty.

- **North Branch/Lathrop:** There is little public space along the river in this stretch, and most of the participants stated that they went outside the community to recreate. Focus group participants mentioned more pollution-related problems with the river here than in any other focus group—general pollution, smell, turbidity, hazards of eating the fish, shoreside dumping, and instream debris. In contrast to the Evanston-Skokie, Ravenswood-Albany Park, and Loop discussions, the issue of safety was brought up here only in the context of the potential hazards of children falling into the river. Focus group residents generally appreciated the aesthetic and functional qualities the river provides, but felt their physical access to the river was limited by the lack of developed public space. In addition, some participants in the Lathrop group felt that even their visual access was restricted because much of the fencing along the shoreline was overgrown with weeds:

  [Maxine]…you can't really see the river. On the Levitt Street side, you can see it because there's concrete in front of it, but over here the weeds are so high and trees and everything that you can't really see unless you go over the bridge. [The vegetation] needs to be cut down and that would also help people see if their kids are going in there…

- **Main Branch/Loop:** Loop participants rated the river in their neighborhood higher than any other group; they had many positive things to say about its aesthetic qualities and the range of recreational opportunities it provides. Many participants used the river for walking, dog walking, jogging, bicycling, and picnicking, and a few owned or had friends who owned boats that they docked on the river downtown. Special places along the river mentioned by participants included Wolf Point, North Pier, the riverwalk, and the views of and from the high-rise buildings. Several participants remarked on the recent improvements in water quality, though some thought the litter in the water was a continuing problem. Personal safety along the riverwalk was also a concern to many participants, perceiving the water-level walkways hidden from view by trees as especially dangerous places and hangouts for muggers and the homeless. One thing Loop participants seemed to note more than other groups was the high degree of positive change happening—not just a matter of improvement over time, but also the contrast of change as a function of distance:

  [Alan] When you go east of Michigan Avenue, that area is just being developed and a lot of the buildings there are less than two years old and everything is being built a lot different than it is west of Michigan. West of Michigan is more established, you have to walk down the steps and everything and it's like the palisades along the river. East there's the water cannon, the Centennial Fountain, it's a whole lot different but it's a brand new area. It's kind of undiscovered territory. Everything is wide open. East, along the river you've got the Sheraton, Cityfront Center, North Pier Terminal, and it's well built up, well lit, and pretty open. It's not better or worse, it's just different.

- **South Branch/Chinatown:** The Chinatown community area ranks among the lowest in the city in acreage of open space per capita, and focus group participants commented on the lack of space and facilities for recreation. No public open space exists along the river, although the Chicago Park District plans to develop a 12-acre riverside park on land it recently purchased. Participants generally welcomed this idea, but saw potential problems because of the polluted nature of the river. Current recreational use of the river is limited to viewing it; however, in contrast with other focus groups, Chinatown participants seemed to recognize the multiple uses and potentials of the corridor for aesthetics and recreation, for functional uses for industry, and for opportunities for further economic development:

  [Brian2] I gave it a high rating because of the prospects for economic development. Hopefully riverboat gambling. I agree with what he said, it's a break in the scenery and it has prospects of recreation although it is polluted. It isn't being used for recreation now.

- **Cal-Sag Channel/Palos:** Much like those in the Skokie Lagoons focus group, Palos participants cherished the natural qualities of the environment surrounding the Cal-Sag Channel and Sanitary and Ship Canal, especially the wildlife and scenery of the Palos Forest Preserves. They used these wildlands for hiking, biking, picnicking, and other activities, and they also used nearby trails on the I&M Canal and at Lake Katherine. Barge use here was seen as a positive aesthetic element as well as a functional use. Although most thought the water was quite polluted, several were aware of efforts to clean it up. Participants in the Palos group had a somewhat different perspective on safety; many participants in the group were of retirement age, and although they pursued active recreational activities, the potential hazards of being alone in remote sections of the forest preserves concerned them:

  [Joseph] The I&M Canal is a little hazardous because you're out there all alone. But Lake Katherine has the peace and the quiet with a general semblance of safety.

  [Pat] I like Lake Katherine; I walked around it since before it was built when they were just digging a hole in the ground. I've usually walked around it by myself, however, I don't go into a forest preserve by myself. I would have qualms about that.

- **Calumet River/Pullman-Blue Island:** Participants living near the Calumet River had few good things to say about it; most felt that the water and adjacent shore were severely degraded. Participants rarely used the river directly or indirectly for recreation, but a few have gone boating on it and the Cal-Sag or knew friends who did, and some mentioned marinas in the area. The odor of the water was the principal indicator of pollution for several participants, while others referred to its color, toxics, and hazards of eating fish or body contact. The landfills across from Beaubien Woods Forest Preserve were another major cause for concern, because of their increasing size and the smell and other forms of pollution they bring to the land and water. Most participants accepted the industrial nature of the corridor, but did not accept the need for barges and factories to pollute the water. One person in the group was very positive about the Metropolitan Water Reclamation District's new Sidestream Elevated Pool Aeration station near his home in Blue Island and hoped it and other plants would improve the water quality of the channel. On the whole, however, the Pullman-Blue Island group was the most pessimistic of all focus groups about river improvements:

  [Jerry] We originally bought in that area because they had grand plans of cleaning up all those boatyards and it was all supposed to be made into modern marinas. That was twenty years ago. We had a home built right there. It never came, none of the plans came to fruition…The river itself is polluted, there is no way that you can do anything right now. It will take a really long time, I think, to clean it up.

PART III
FUTURE PROSPECTS FOR THE RIVER

Our discussions with participants about their current perceptions of the river established the context for looking at how they would like the river improved for recreation and related values. We combined structured exercises and open discussion to get at what people thought about the future potential of the river and how it might meet their needs for recreation.

IDEAL SETTING FOR RECREATION

We began our discussion of the future potential of the corridor with an exercise that asked participants to describe their "ideal recreation setting." Because the context of that exercise was general and did not focus on the river corridor, we do not detail those results here (see Table 2.3.5 for a statistical summary of responses). The exercise did, however, set the stage for discussions of future river enhancement options, and we thus note that participants' responses mentioned these key factors as important for making an ideal setting for recreation:

- Natural, scenic, pleasant surroundings
- Good maintenance
- Varied open space and facilities that support a range of passive and active pastimes
- Convenient, open access to all
- Safety

TYPES OF DEVELOPMENT PREFERRED ALONG THE CORRIDOR

ANALYSIS OF PHOTOGRAPHS OF RIVER DEVELOPMENT ALTERNATIVES

A subsequent exercise related to ideal settings focused people's attention directly on the river corridor. In this exercise, participants passed around a set of seven 8" x 10" color photos depicting various places along the river and were asked to rate each on a 0-100 (low-high) scale of "overall appeal." These photos are shown on pages 28-30, and include: 1) a boat ramp across from a landfill site; 2) a small downtown plaza with a man seated on a bench; 3) a section of the Chicago Riverwalk downtown with formal tree plantings; 4) a concrete walk alongside a downtown factory/warehouse with no vegetation; 5) a paved bike path along a naturally vegetated river channel; 6) a footbridge crossing a small stream in a natural wooded setting; and 7) an aeration facility on the North Shore Channel with open grassy banks and walled shore.

The mean ratings for these photos, averaged over all individuals and groups, are shown in Figure 2.3. The highest rated scenes included the two that were the most natural appearing (scenes 5 and 6), and the downtown riverwalk scene (scene 3). The lowest rated scene was of the downtown factory/warehouse (scene 4).

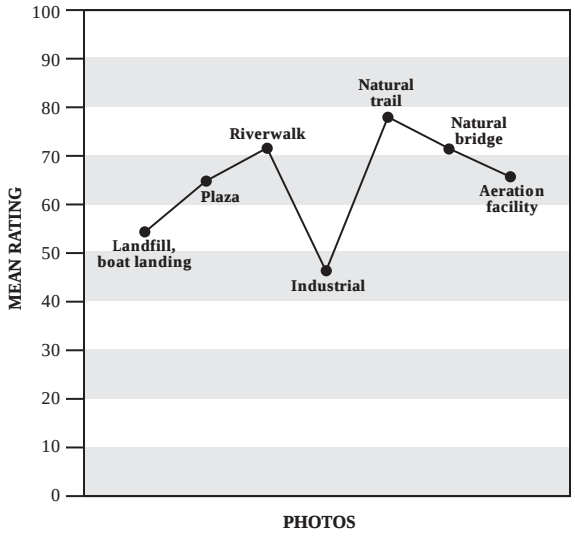


FIGURE 2.3
Mean score ratings for photos, averaged over all groups

Discussions of people's ratings were helpful in identifying the attributes of river development that affect visual appeal, and in defining which kinds of river development alternatives were preferred for the sections of the river in which participants lived (See Table 2.3.6 for statistical information). Important general attributes included river and landscape characteristics such as the natural environment and aesthetic surroundings; condition and maintenance of the water, vegetation, and landscape; the context of development and characteristics of open space development; and safety. Specific attributes were more important to some scenes than to others. Below is a summary of the major positive and negative attributes for each scene:

- **Scene 1—Landfill and Boat Landing**

Some viewers could not tell that the large hill across from the boat landing was a landfill. Thus, those who gave it positive ratings often did so because they thought the landfill was part of the natural topography. Most, however, didn't like this scene, and overall it was rated the second lowest. Representative comments from the Chinatown group include:

> *[Adrianne] I gave it a 60. I'm not too interested in this place.*
>
> *[Brian2] It's barren.*
>
> *[Ken]…I just felt a little bit negative about it and put down a 40.*

- **Scene 2—Downtown Plaza**

Positive comments about the small downtown plaza revolved around its intimate scale; relaxing, user-friendly atmosphere; and pleasant combination of natural and built elements. Representative comments include:

> From the Glencoe group: *[Allen] It's an interesting concept of man-made material with nature. A very pleasant setting.*
>
> From the Ravenswood-Albany Park group: *[Brenda] I got a peaceful feeling out of it, for being in the city. There's not all this hustle and bustle, and you can sit there and relax.*
>
> *[Tom] Nice refuge.*
>
> From the Chinatown group: *[Adrianne] There is not a lot of space in this picture. But it seems to be very nice and comfortable and very nice just sitting there.*

Negative comments referred to its overly urban setting, the small scale, and potential social problems:

> From the Ravenswood-Albany Park group: *[Dawn] I think it needs bigger trees, to make it seem more comfortable because right now although it's planted, you're still surrounded by concrete.*
>
> *[Susan] It looks so crowded [claustrophobic], it looks like it's piling in on top of him and he looks uncomfortable sitting on what looks like a hard bench that just doesn't look like it's in place.*
>
> From the Loop group: *[Gene] I can just imagine people walking by asking: "Any change?"*

- **Scene 3—Chicago Riverwalk**

This scene of the downtown Chicago Riverwalk was the second-most discussed photo among the participants. Comments were mostly positive, focusing on the trees, the cleanliness of the water and shore, the accessibility to the water, and the apparent safety of the surrounding area. Representative comments include:

> From the Lake Forest group: *[?] The trees help beautify.*
>
> From the Glencoe group: *[Jeremy] It's festive, it's inviting, a place to stop and you would stop there. I mean you would buy things, or walk through. You'd notice it.*
>
> From the Loop group: *[?] You can get down close to the river and you don't feel like you're isolated from everyone.*

From the Metro West group: *[Kathy] It's neat, clean looking, it's colorful, the red awnings make that picture, it's bright.*

Negative comments were few and relatively minor in comparison to what people liked about the scene:

From the Lake Forest group: *[Mark] It's a little cold.*

[Eliz.] My first impression was the trees. I like the trees but they don't look like they belong there, they're like potted plants or something. But it's pleasant, and the water looks clean.

- **Scene 4—Industrial Land Use**

This scene was rated the lowest, mainly due to its industrial land use, stark expanses of concrete, and lack of vegetation. The following comments summarize the feelings of many who rated this scene low:

From the Evanston-Skokie group: *[?] Number four has too much cement.*

From the Lathrop group: *[?] Well, this river is a highway, you know, just another road. And there's no green, no nature there at all.*

From the Loop group: *[?] With some work you can crack that up and put in some trees.*

[?] Yea, but the way it is now there's no trees, no landscaping; you wouldn't want to sit there and look at the river, I'm sure.

Comments about this scene were not entirely negative. Positive comments mentioned by participants focused on the issues of good maintenance and utility:

From the Evanston-Skokie group: *[Brian] I like the fact that you can tie up your boat along there, there's cleats and it provides a useful function as well as recreation.*

From the Loop group: *[?] At least [the path] continues, I mean you can ride a bike down there.*

From the Pullman-Blue Island group: *[?]…You can go walking there, biking, keep it well lit. If industry is going to own river front property, they should make it look nice.*

- **Scenes 5 and 6—Natural Areas**

Scene 5

These two highest-rated scenes had much in common and were often discussed together within the focus groups. As a pair, they were also the most discussed of all the pictures. Many of the positive comments had to do with the mix of natural vegetation and recreational development. Representative comments include:

From the Lake Forest group: *[Monica] I gave it a 100 and said it was nice and seems like a very enjoyable place to ride your bike* (scene 5).

[Phil]…My comment there is: "That was created by God." And all man has to do is respect it and keep it somewhat orderly (scene 6).

From the Glencoe group: *[?] Wildflowers. It's natural yet managed and groomed* (scene 5).

From the Evanston-Skokie group: *[Larry] It's natural* (scene 6).

From the Loop group: *[Chuck] I like it because it's one of the few [scenes] with trees that come right down to the water's edge with no retaining wall, so I feel like it's a real river* (scene 5).

Scene 6

Several participants imagined that natural recreation settings such as these might offer significant psychological benefits to users:

From the Ravenswood-Albany Park group: *[Tom] Calm and pretty* (scene 5).

From the Lathrop group: *[George] It seems like an escape, that's what it seems to me that a river could provide—some greenery, maybe you can see some wildlife instead of belly-up fish* (scene 5).

[Terell] I gave it a 100 because it looks so peaceful and serene away from a whole lot of other stuff, city stuff. This looks great, I like it (scene 5).

From the Loop group: *[Bradley] The greenery is excellent and it's obviously a continuous path which means you're not going to be teased with about a hundred yards of walking space and then find yourself out on the street…*(scene 5).

The high levels of naturalness and density of vegetation were perceived positively by some and negatively by others. As the following comments illustrate, some saw these features as vestiges of wilderness while others saw them as signs of neglect or limits to human use:

From the Lake Forest group: *[Brian] It's not overly manicured—people tend to want to manicure everything. This doesn't have that feel. It's just natural. It would be a place I'd want to take my kids to. I like that better than [photo] 5 actually* (scene 6).

From the Glencoe group: *[?] I think we like to be able to use nature, but if it's overgrown with trees everywhere, it's hardly used* (scene 6).

From the Lathrop group: *[Lee] Number 6 looks totally ridiculous to me. The trees need to be trimmed…*

[?] You'd have to do stuff, go and cut stuff down (scene 6).

From the Palos group: *[Jim] My favorite picture was one you just showed with just a simple blacktop and it looks like a sort of park off to the left or it might be the edge of a golf course or something, and leaving things wooded and as wild as possible* (scene 5).

From the Metro West group: *[Rudolf] I rated it 50 because it's an area of benign neglect* (scene 5).

[Michelle] I like the way they did it because it preserves the wildlife area. It's not all commercialized and overcrowded. It's a relaxing picture to look at (scene 5).

The safety of river landscapes with dense vegetation, like those pictured in the scenes, was also discussed in several groups. There were varied responses to such conditions, as evidenced in this dialogue between two Ravenswood-Albany Park group participants about scene 5:

[Eliz.] First, it looks unsafe, too many high overgrown places, there's that little pond over there that somebody could wander into, a child and you know, get lost. It's not well kept, the path is OK but the whole setting would be one I wouldn't want to go into.

[Dawn] I like it a lot. I love the plants and the wildflowers, I love when things grow wild but you know I think it really looks nice and like anywhere else, you have to be aware of what's around you to be safe, regardless. I mean there's paths like that in the suburbs and they're nice.

[Eliz.] But I wouldn't want to go in there by myself.

[Dawn] I disagree—some people are always kind of paranoid about going into places—I don't want to insult you—if you're afraid of everything, you just can't be that way and live. But you do need to be aware of what's going on around you.

Water quality was also an issue of some disagreement, much of it based on the color or clarity of the water portrayed in the scenes:

From the Ravenswood-Albany Park group: *[Susan]…The river looks clean, it looks like you can just dive in head first without having to worry whether or not you are going to hit a couple of pairs of dirty tennis shoes or a car that was thrown in or something, or an old inner tube…*(scene 5).

From the Metro West group: *[Kathy] I would have rated it higher if the water didn't look so muddy* (scene 5).

[Herb]…Whether the river is muddy or not, it would be nicer if it weren't muddy and you saw fish jumping, but I guess if it doesn't smell, you're not seeing debris floating or even under the surface, I can enjoy it if there are other things around it (scene 5).

From the Evanston-Skokie group: *[Bernadine] The water looks dirty* (scene 6).

From the Ravenswood-Albany Park group: *[Susan] I liked the other one [scene 5] but I don't like this one because the water looks murky* (scene 6).

[Brenda] It looks more like a creek, with a mud bottom and stuff (scene 6).

- **Scene 7—Aeration Facility**

Much of the discussion of scene 7 focused on trying to decide what was making the white foam in the water. Once they knew this was an aeration facility, several participants commented positively on the cleanup efforts and the well-maintained landscape, while others felt that the design of the facility could be more natural and user-friendly:

From the Lake Forest group: *[Brian] Way too industrial.*

From the Glencoe group: *[Annette] I just put urban and controlled.*

From the Lathrop group: *[Lee] I really do like that one. It's better scenery that way. Everything is trimmed and everything looks perfect for a river.*

From the Chinatown group: *[Adrianne] Picture seven I gave an 80. For the green, trees, spaciousness, and it looks clean.*

[Brian1] I gave it an 80, too. Clean water, it looked a little bit more artificial and stuff, it wouldn't be so ideal for people. The sides make it look artificial.

ESSENTIAL ATTRIBUTES OF PREFERENCE

People's comments about the seven photos showed us how the elements of an ideal setting might play a role in river corridor development:

- **Clean water:** The apparent color and clarity of the water seem important indicators of preference, and signs of water cleanup activities are also viewed in a positive light.
- **Green vegetation:** Whether in formal urban plantings or in natural masses, trees and green vegetation are important contributors to river settings across the development spectrum.
- **A well-maintained landscape:** In urban and suburban settings, maintenance of natural and built features is important. Care is reflected in many things, including the appearance of water and vegetation; the presence of litter, graffiti, or vandalism; and the upkeep of facilities.
- **Good design:** Built features along the riverscape should show sensitivity to detail, have a good sense of scale, invite use, and respect the nature of the setting.
- **A relaxing, aesthetically pleasing atmosphere:** By their very nature, rivers seem to have special inherent qualities that foster relaxation and psychological renewal (Kaplan, 1977). Riverscape design and management of water, vegetation, and facilities can enhance these important psychological benefits, as well as enhance recreation and aesthetics.
- **A high level of safety:** As described in this and earlier sections, the perception of safety can vary widely among different people, and a place that is perceived safe by one person may be considered unsafe by another. Dense vegetation can be a potential threat to safety, and can thus affect the desirability of using river areas for recreation.

THE IMPORTANCE OF CONTEXT

Although these attributes were mentioned as desirable in many of the scenes, there were marked differences in how some attributes were interpreted as a function of the *context* or setting in which the scene was discussed. Focus group participants made an important distinction between the kinds and levels of development that were appropriate where they lived and those appropriate to other settings. These other settings include urban commercial, urban industrial, and urban and suburban open space. Comments on the scenes below illustrate how participants saw the relationships between context and appropriate development:

- **Scene 2—Downtown Plaza**

  From the Evanston-Skokie group: *[Larry] Number two is for cities only.*

  From the Chinatown group: *[Brian2] I liked it, but it's not really a park setting that I sort of envisioned [for the new Chinatown park].*

- **Scene 3—Chicago Riverwalk**

  From the Lake Forest group: *[Kathy] For downtown it is appealing.*

  From the Evanston-Skokie group: *[Georgette] It's good for urban.*

  [David] I think that's good for the city, but I don't like it for the suburbs.

  From the Chinatown group: *[Gene] Three is good but realistically you can't…I don't think it's suitable for our neighborhood…*

- **Scene 5—Natural Area with Trail**

  From the Evanston-Skokie group: *[Larry] I would never touch that, that's pretty. You're talking about nature, but you know it depends on where you're looking at. If you're looking at Evanston or some place like it, that would be better up north along the Skokie Lagoons area…I think [the North Shore Channel in] Evanston still looks nice, but they need a little more openness…*

The next section elaborates on what specific levels of naturalness and development people felt were appropriate to the stretch of river they lived along. Referring to participants' discussion of the photographs, however, we did find some sketchy evidence of culturally based preferences for levels of naturalness and development. One comment by an older participant of the Chinatown focus group expressed this cultural distinction:

> *[Ken] This one (photo 2) in terms of Chinese people would be better than the other one (photo 3). This (#2) is more like a setting for Chinese people. The other (#3) is for American people.*

Many participants in the Evanston-Skokie, Lathrop, and Pullman-Blue Island groups who were African American expressed greater preferences for scenes showing high levels of maintenance and facility development as well as vegetation that was more open, formal, and manicured. On the other hand, Anglo American participants in these groups and especially in the suburban Lake Forest, Glencoe, and Palos groups often expressed preferences for less developed scenes with a higher density of natural vegetation. It is not certain whether these variable preferences are based on ethnicity or are a function of urban-suburban residency, and there is evidence in the related literature to support both hypotheses (e.g., Schroeder, 1983; Kaplan and Talbot, 1988; Dwyer and Gobster, 1992). Nevertheless, the variability in preferences expressed by groups due to culture, location, or other factors makes it all the more important to consider the context of development in river planning and management.

RIVER IMPROVEMENTS

With information about ideal settings and responses to photographs of river development alternatives to build on, we ended our focus groups with an open discussion of how the river could be improved for recreation and other purposes. Participants generally focused on many of the same issues as they did in discussions of ideal settings and photo ratings: an emphasis on improving the condition and maintaining the quality of river water, vegetation, and landscape; a focus on different river development alternatives; and a concern for protecting the natural and aesthetic characteristics of the

corridor (Table 2.3.7). Specific comments on these issues, however, are best understood by how they help to answer three important questions about improving the river for recreation and other purposes: 1) Can development proceed if the water is not clean? 2) What general recommendations can be made for improving the corridor? 3) What specific recommendations did participants make about the river in their particular neighborhoods? These questions are addressed in the following sections.

CAN DEVELOPMENT PROCEED IF THE WATER IS NOT CLEAN?

Most participants did not expect that the Chicago River would or should be made into a pristine environment, and while most wanted to see water quality improvements made, they realized the urban nature of the river and its non-recreational uses. Many remarked that they can still bicycle, observe wildlife, and enjoy other in-stream and streamside recreational activities even though they know the water is polluted, as long as it doesn't stink. Most of all, our sample of nearby residents cared deeply for their river, and while they realized that water quality remains a significant problem, they held high hopes for the future:

> From the Palos group: *[Helen] I may not see [the improvements] in my time, but I'm sure they're going to happen.*

> From the Metro East group: *[Matt]…even the people who thought the river was polluted—and I think just about everyone here thinks that—it's still a wonderful resource and it's something that we really care about.*

> From the Metro West group: *[Emily] I think the river just adds to Chicago and makes it all the more beautiful. I always thought the river was beautiful and I mean even though it's dirty, it's nothing that can't be improved.*

> *[Herb] Look at cities in Europe and how important the rivers are there. And they maintain their importance to the state even though they are polluted.*

> *[Kathy] The river itself doesn't do a lot for me. I think it's how they set it up. Obviously in that picture it's what they do along the river to make it look attractive, because the river itself is dirty. To me it is anyway, so how can they make it look attractive with the buildings and the settings and what not around it even though the water itself is dirty.*

This optimistic outlook was found in all the focus groups, except the Pullman-Blue Island group. Participants in that group had an underlying despair for the future of the river in their neighborhood:

> *[Jennifer] I'm pessimistic about the future of the rivers.*

> *[Louise] Like I said, it would be nice if you could develop all the shore area there. I think there is a lot of possibility but as long as the landfill is there I don't see any potential. Because no matter how nice you make it look, it's still going to stink.*

> *[Jerry] They have to stop the pollution that's coming from Indiana. They did try to clean up the Cal at one time and they noticed that just too much pollution was coming from Indiana and if you don't have cooperation between states you're not going to get anywhere fast. Unless they do some interstate cooperation, I don't really see any future for the Cal-Sag.*

One person had an interesting perspective on the sequence of water pollution cleanup and river development activities, and put it this way:

> From the Metro East group: *[George] If they do it step-wise, if they beautify it first with trees and landscaping, then maybe people will force the politicians to clean it up. Because if you beautify an area, then the next thing is you don't want it polluted as much anymore. So maybe instead of going in there and cleaning it up, you beautify it first. It's like if you're wearing a clean shirt and you get a spot on it—maybe people will notice the pollution more once you get the trees and landscaping along all these different branches.*

WHAT GENERAL RECOMMENDATIONS CAN BE MADE FOR IMPROVING THE CORRIDOR?

Many of the recommendations participants made for improving the river in their neighborhood involved issues common throughout the corridor. These issues are itemized below, illustrated by comments from participants in different focus groups:

- **Continue to improve water quality:** For most groups, the need for water quality improvements was chief among the recommendations made. Again, various of perspectives were given from the different reaches along the corridor:

  > From the Glencoe group: *[Dan] I think it should be cleaned faster so that people can swim in it.*

  > From the Ravenswood-Albany Park group: *[?] It would be nice if the river was clean and you could have picnics by it without worrying about rats or perverts.*

  > From the Lathrop group: *[George] If they are going to have riverboat gambling they are going to have to clean it up to make it attractive for the out-of-state business coming in, all the high rollers. But again, I'm rather cynical about that, I mean there's a lot that could be done that needs to be done—we have the mechanisms to clean water. There's other places where filth can be poured instead of the river. If there was some will on the part of the enforcement agencies. The river looks best on St. Patrick's Day when they dump green dye in it, that's when it looks good. Other than that it's just a waterway. You know transportation is something, but waterways can be much cleaner and also be used for more than transporting goods.*

- **Improve the vegetation:** Recommendations dealt mainly with adding trees and other greenery to the corridor:

  > From the Metro East group: *[Tim] More trees. Daley's got a good thing going with his trees. And certain people here would like the architecture and other parts of it preserved as well—don't just make the whole thing trees. It's a varied river, you know, it's quite a bit different along different parts of it. I like the variety, beautify certain parts of it, and clean it.*

  > From the Palos group: *[Ann] They really should plant more wildflowers and other things that will beautify the area. You know they've just got this, it just goes down this bank and then there's scrub grass and a few bushes and weeds. I would like it to be cultivated a little bit more so we had some color and flowers and stuff like that.*

- **Improve landscape maintenance:** Recommendations here related to cleanup of litter and maintenance of riparian vegetation:

  From the Evanston-Skokie group: *[Susan] I would like to see the shoreline tree lined, the other vegetation cleaned up, and a lot of the glass and other garbage that has been thrown in there needs to be removed.*

  From the Lathrop group: *[Maxine] If you kept [the chain-link fence] free of weeds and tall grass, you could see through it to the river and then maybe the kids wouldn't be tempted to climb over it.*

  From the Pullman-Blue Island group: *[Jennifer]…get the beer bottles and the litter out of there and get some nice, fresh, healthy land.*

- **Aim for an appropriate level of development:** Development recommendations varied greatly across the reaches of the corridor, but in general participants felt that development—whether for economic, recreational, or environmental purposes—should be carried out with sensitivity to the context of surrounding land uses:

  From the Loop group: *[Bob]…I wish the Chicago River was developed with more of a promenade approach, where you have a place that people could come to with cafes or just stroll along on it. Right now you've got this discontinuous link: you kind of walk along it and then you have to go around it then come back to it.*

  From the Palos group: *[Joe] I'd like to see a generally enhanced, limited development consistent with the countryfied ambiance that we have now…I think the pressure to commercialize it is going to be enormous. I like commerce naturally, but when the rush is on such as when Crestwell gets permission and sets a precedent by building that marina on the south side of the canal, I think it's going to go bonkers.*

  From the Pullman-Blue Island group: *[Jennifer] I think there could be more businesses. They might even create some jobs in the area. There would be a lot of potential there if it was clean, if it wasn't so bad, but people stay away because of that.*

- **Create a balance and variety of uses along the corridor:** Although each reach might dictate development-specific approaches, it is clear that no single theme can or should be forced upon the entire corridor. Instead, as one discussion from the Lathrop focus group illustrates, perhaps the best strategy for corridor planning might be to recognize, plan for, and celebrate the variety that is the Chicago River corridor:

  [George] There are many things you can have, many different views along different parts of the river, and the means of transportation to get to each of them. If you have functional areas like that area where the water was being aerated, grow some trees, grow some greenery, it doesn't have to be overhanging. However, leave some areas that are unspoiled where the trees can hang the way they would grow normally. Many different parts of the city have different uses, different functions; the river is needed in some areas for transportation—you won't get the kind of greenery there, it doesn't make any sense to have overhanging trees. Other places it can be more like a park. I mean, you have residential there, we have parks here. Picture number five comes closest to what I have in mind for this area.

  [Lee] Yeah, yeah you hit it right on the button, brother. A variety of all of them.

- **Develop a corridor trail system:** Along some reaches that do not currently have them, the development of trails was recommended to enhance recreational quality:

  From the Lake Forest group: *[Kati] I think they could put in a path, not with gravel but with chips like a hiking trail almost.*

  From the Lathrop group: *[George] Build it up, I've seen proposals for bike paths and stuff. With some greenery around the shore, it would be an area where you would want to go, where you would want to spend some time…*

  From the Loop group: *[Bradley] I would like to see continuous jogging, walking, and biking paths along the river, ultimately leading out of the city. Where you can take the branches all the way out to the forest preserve areas. Some people can run that distance.*

  From the Chinatown group: *[Brian2] I was thinking more in terms of the San Antonio Riverwalk…a riverwalk—to walk, shop, bicycle.*

  From the Palos group: *[Ann] Great potential. I would love to see some of it blacktopped so we could walk along it…*

  From the Metro East group: *[Matt]…I don't see any reason why you couldn't have a small strip of land along the river that was park-like and would be taken care of. And you could have a running path and a bicycle path and a few places where you could have other parks and ballfields…*

- **Increase safety:** Recommendations for increasing the safety were diverse, and in the case of vegetation management and fencing, were often conflicting:

  From the Lake Forest group: *[Brian] If you maintain fairly heavy vegetation along the top of the embankment, it would act as a disincentive for a kid to try and get down there. And there's a lot of that now; I've never really tried to access it from the yards, but looking down the stream from the end of the road there's a pretty heavy cover of vegetation along it.*

  From the Evanston-Skokie group: *[Dorsey] A fence on the steep embankment would help but, I think a lot of the greenery—the trees, the shrubs—a lot of that just needs to be cut away…*

  [Larry] Kids are going to jump cyclone fences, kids are going to do whatever they want to do. You can't stop them. People know they can't walk near the edge, I mean older folks walking in the neighborhoods aren't going to walk along the edge of the water and fall into it…

  From the Ravenswood-Albany Park group: *[Claire] Where we're talking about they need to put up a fence. There is one that they have, but a car crashed through and knocked the fence over and now it's pretty pathetic…*

- **Improve access:** As was mentioned in previous sections, the issue of access had many dimensions for participants. Few specific recommendations were given in this section for improving access, with most comments referring to physical access:

From the Loop group: *[Ann] I think they should really concentrate on just making a path where people could go continuously walking.*

From the Palos group: *[Ed] What they really need to do with it is make the area accessible; right now there are no preplanned paths or anything…*

- **Tell current success stories:** Up and down the corridor we heard many positive stories of river cleanup efforts, recreational facility developments, and plant and wildlife preservation projects. In some cases this knowledge was widespread among participants, but in most instances only one or two participants were aware of activities going on. Better promotional campaigns by agencies, municipalities, and interest groups could raise public consciousness about these activities, as shown by the following two comments from participants in the southern reaches of the corridor about cleanup efforts by the Metropolitan Water Reclamation District along the Cal-Sag:

From the Palos group: *[Dick] The only thing I would say is we know that this waterfall is in there and it's supposed to be aerating the water or it's cleaning the water, I don't think it's filtering it. But maybe there should be more PR as to just how well is it functioning. Has the pH level changed, what's happening? It's been running for a year except for when it was closed down…What was the water like when it started, and after all this money was spent, what's the water like now?*

From the Pullman-Blue Island group: *[Bill] Well I'm hoping what they're trying to do is going to work. It remains to be seen. I know there were five projects on the books and I know that two of them are built and operating and they are both in nice-looking areas. The water is still dirty, but they're working on it.*

- **Use information to change perceptions:** Information about cleanup efforts and other ongoing projects can go far to change people's perceptions of the river corridor. These current efforts provide excellent opportunities to showcase the river. In many cases, however, the river can "speak for itself" in attracting people's interest and enthusiasm—all they have to do is see and/or experience the river, something those who do not live near it rarely do. As these comments from the Metro West focus group illustrate, the color photographs of scenes along the corridor changed the perceptions of two of the participants:

[Brian] I was going to say you can change your opinion just from a picture. Her opinion was way down low and now all of a sudden she sees a picture and realizes it's the river she's just been downplaying the whole time, you know suddenly it just looked beautiful to her. A picture can tell you a thousand words and apparently it did for her.

[Herb] I guess I would say that the river's natural creative beauty is for the most part probably gone so what it's going to be is up to people. It can be many things and that's possible, certainly with a commitment on the part of people. As much as anything, it's a matter of knowing—and your pictures are one way—that there really are beautiful spots even now, and changing the negative perceptions that people have.

- **Encourage local action and responsibility:** One final issue that cut across the focus groups concerned how such a formidable task as river cleanup can actually happen. Many participants looked to governmental bodies to clean up, regulate, and monitor the environmental quality of land and water resources. In several focus groups, however, participants also talked about the need for individuals and local groups to share responsibility for cleaning up the river:

From the Glencoe group: *[Robbie] Clean up. People should take responsibility for themselves more or less, I mean, it doesn't even have to be a group thing, it can be a personal thing. If everyone just picked a spot today you wouldn't even need to have these [focus groups].*

[Jeremy] It's been said but I'd also like to say that I'm glad all the people out there are willing to clean it up, helping to clean it up, and I'd like to see that continue and have people go out there everyday to clean so it's not dirty anymore.

From the Evanston-Skokie group: *[Larry]…people just have to police themselves and police their neighborhoods…*

From the Ravenswood-Albany Park group: *[Susan] I think a lot of the time we depend on other people to do the work for us, and I think a lot of the time a community effort would be a heck of a better idea, because when you depend on the city to do it for you, you could sit on your backside until the millennium comes and you know that it ain't going to happen. But if you can get a bunch of people that are actually saying: "I'm tired of this," you can really get something done.*

The issue of local responsibility and need for community action is well summarized in this dialogue from the Lathrop focus group participants:

[James] Instead of talking about it, they should do something about it.

[Lee] Who do we need to contact for the making of a better river?

[Terell] Let's get some action.

[Maxine] We can start this weekend by helping out on the river cleanup.

[Lee] But is that our job?

[Maxine] Yes. It's our community and if we don't put something into it, no one else will, either.

WHAT SPECIFIC RECOMMENDATIONS CAN BE MADE FOR IMPROVING PARTICULAR REACHES?

In addition to corridor-wide recommendations, issues of concern within particular focus groups inspired participants to recommend specific actions for improving conditions in their neighborhood and along their reach:

- **Middle Fork/Lake Forest:** One suggestion was to deal more effectively with flooding by cleaning up some of the downed trees and other obstructions that cause water to back up into people's yards and basements. Another was to increase safety near the river and lessen the chance that children will slide down the bank and into the water.

Suggestions here included planting denser vegetation along the crest of the hill to deter access and installing a natural path with rope railing at key use areas, e.g., where roads dead-end at the river.

The most important discussion dealt with the appropriate level of development for the Middle Fork Savanna area. An initial suggestion by one participant was questioned by others, but soon a general consensus was reached by those living near the savanna on how they felt it should be developed for use:

[Brian] A paved bike path near where we go would enhance the area. The other thing I think would enhance it without changing the nature area is, and some people will disagree with this, but since I have little kids I would love to see some understated swing sets or something down in that area for kids to play…

[Vern] I have an objection there. I think the savanna should be made for nature study. I think there are other facilities available for baseball and so forth, but that's a rare, a very rare thing and if we lose it, it's gone forever.

[Meredith] I agree that it should be left in its natural state; the area behind our house is going to have paths so there are other wildlife preserves available where you could do that type of thing. I don't know whether putting in a natural path or something would disturb it, but it's supposed to be one of the rarest pieces of savanna in the State of Illinois, there's such few left, and I don't know about tampering with it.

[Kati] Yea, I think they could put in a path, not with gravel but with chips like a hiking trail almost.

[Sharon] People get carried away once they start cleaning it up and putting in a path. Lake Forest always does the biggest and the best, but then pretty soon you're going to have tennis courts and everything else.

[Brian] What I've seen in other areas first they put in a path, then they do fences and pretty soon you're decorating it up. Just a simple path without decoration is what's best.

- **Skokie Lagoons/Glencoe:** Participants in this focus group agreed that the naturalness of the area should be maintained, except in some recreation areas where a more groomed look could prevail. The Skokie Lagoons cleanup effort should be continued; some participants imagined a future in which the Lagoons would not only be fishable, but swimable as well. Cleanup efforts should also be increased along the shore areas, with better self-policing of litter by forest preserve recreationists and some removal of fallen trees near areas of human use.

  Perhaps the biggest problem that participants would like managers to focus on is the exploding population of deer and their impact on people and the native vegetation of the forest preserve:

  [Sheldon]…I would also like to see animal control where…I think the Skokie Lagoons offers, it's such a natural thing where you have animals and people in a playground you know. That's where people meet nature, you know you have the animals here but I would like to see the deer controlled somewhat but not killed. Perhaps something could be done to prevent them from roaming and still maintain them there. Like an electronic fence. It's really going to be I think dangerous. I would hate to see a deer lying dead on Forest Way.

  [Francine] There was one on Dundee Rd. last week.

  [Nancy] I think everything has been said. I guess it's the balance between the deer and the wildflowers that I see as the problem, but it is the loss of the wildflowers in particular that I most deplore.

- **North Shore Channel/Evanston-Skokie:** Most recommendations from participants dealt with the safety issue. The dilemma for management is: How do you maintain the natural, pleasing quality of the landscape yet maintain a comfortable level of perceived safety? Recommendations included the following:

  [Larry] I think Evanston and that area still looks nice, but they need a little openness.

  [David] Yeah, it's a little dangerous, a little dense, but it's like Larry said, you don't want to touch something like that, it's beautiful. The only problem is that late at night you probably would want to close it off like [they do in the forest preserves]. Close it off, fence it off late at night so you can't cross it, but in the daylight I think that's ideal.

  [June] The main thing is the patrolling, because the park is already really nice.

  [David] Either that or open up that street again. I think that would be a big help.

- **North Branch/Ravenswood-Albany Park:** Increasing the safety was the main suggestion of participants in this focus group; their solutions echoed many of those touched on by Evanston-Skokie participants. Community-based strategies to increase safety and clean up water and shore areas were seen as playing important roles in an overall effort:

  [Brenda] Like neighborhood watches; get together everyone in your neighborhood that lives in the general vicinity of Horner Pk. [to police the area by the river], because you formed the neighborhood watch with the neighbors so the community ought to get together and do it.

- **North Branch/Lathrop:** The main suggestion of participants was to improve the water quality of the river—to decrease the smell, reduce the garbage thrown into it, and make it more usable for boating and fishing. Solutions here included community-based initiatives and fines for polluters who dump or throw trash into the river. Another set of suggestions was aimed at improving the shoreline area so that it could be better used by residents:

  [Maxine]…They need to cut some of the weeds down and clean up and then people can have more respect for it.

  [Emmet] If they made a major change to the shoreline it would be better, it would give a good outlook on life. It maybe would help people have something to do instead of just sitting around in the house, talking, hanging out.

- **Main Branch/Loop:** Recommendations specific to the downtown sections of the corridor included increasing the safety of walkway areas, increasing the continuity of the riverwalk, and developing more cafes and restaurants that can be reached on foot and by boat. The proposal to develop a riverboat gambling facility near the downtown area was a major topic of discussion, and opinions were mixed on what the city should do:

  [Chris]…I think it would probably improve the quality of our building, as far as we could get more out of our condo and things like that. It would improve our value because I think if it would be done, they would have to make sure they did it right and it would beautify the area instead of degrading the area, and they would have to be responsible for that branch of the river, too.

  [Chuck] I say if it does come, I say put it on a boat instead of Navy Pier.

  [Gene] I think it's ridiculous to put it on a boat when you've got all this undeveloped land. We're talking about 30,000 jobs. What is the point in having it, what Daley is talking about now is a moat, a moat boat, that's basically it. That's ridiculous, why not just build it on the ground? People come to Chicago, the rest of the state lives off Chicago. Definitely put it on land. We're talking about two billion dollars worth of development.

  [Chris] It doesn't matter to me.

  [Bradley] I don't like it. I don't like organized crime, period.

  [Mary Anne] I think we're still lucky to have such a wonderful resource like the Chicago River and the whole lakefront, and anything that gives people more access to that, I think it should be utilized. There is a certain charm and sense of freedom that you get on a boat that goes along with recreation, gambling, or being in a nightclub atmosphere. I think it's a lot of fun.

- **South Branch/Chinatown:** Recommendations by Chinatown participants for their stretch of the river were to increase river cleanup efforts, and develop park space and a riverwalk along the South Branch. Some participants were concerned that while increased river development might be good for the local economy, shoreline restaurants, recreational boating operations, and the like would not meet the needs of Chinatown residents:

  [Facilitator] Is there potential in your neighborhood for this kind of development?

  [Brian1] None that I see.

  [Ken] No, not in my neighborhood…you know, you have to consider if people can afford that type of thing.

- **Cal-Sag Channel/Palos:** Recommendations included cleanup of the river, restrictions on further industrial development, some limited commercial-recreational development including the construction of a marina (already proposed), and enhancement of recreational opportunities with path development along the shore of the canal. Palos participants were highly concerned that further development should respect and enhance the natural qualities that now exist:

  [Jim] I'd just really like to see them continue with their efforts to clean it up. As far as developing along it, try to preserve as much of the wildness as you can. Keep it clean, keep it simple…

  [Ann]…I think there is great potential there and I would just love to see that developed as they have talked about through the years, and having some little areas where there are restaurants or recreational facilities so that you could stop to watch the ducks or whatever.

  [Ed] Maintain its current natural setting, don't really upheave the whole thing to make it professional looking. Let it be the natural look. And make it accessible to people so that they don't have any fear about walking through it, either.

  [Helen] I want it kept pretty much the way it is. I like the way it is.

  [Marie] I pretty much feel the same way, I'd like to clean it up, not a lot of building and things but I would like a marina where you could stop in and walk. Of course, the path sounds great.

- **Calumet River/Pullman-Blue Island:** Participants would like to see their river enhanced for recreational and business opportunities. But before any development can happen, they overwhelmingly stressed the need to clean up the river and adjacent landfill:

  [Regina] If they cleaned up Mount Trashmore that would be a big help. A lot of the pollution coming into the Cal-Sag is coming from Indiana and they are not stopping it because it's Indiana's so it's coming over the border and polluting everything. If they cleaned up the river, even if they got 30 percent of it out of there, it would make the area a little bit nicer. You know, it would bring some of the summer boating in and some of the people back, and maybe rebuild the area around there.

  [Jennifer] I think what she said about Mount Trashmore is holding up a lot. I think the water should be cleaned up—it's a living thing, it needs to breathe basically. I think it needs to be cleaned somehow, just to bring the life back to it—it's like a big sludge puddle.

PART IV CONCLUSIONS

This study provided some insights into how an important constituent group, nearby neighborhood residents, perceive and use the Chicago River corridor. Although many specific thoughts and ideas were generated from the different focus group exercises and discussions, these findings can be condensed into three general themes to guide future planning efforts: the issues of central importance, the dynamics of the corridor, and the means to successful implementation of planning goals and objectives. We conclude this chapter with a brief discussion of each theme.

- **The Issues: Water Quality, Naturalness, Aesthetics, Maintenance, Safety, Access:** These six issues emerged time and again during the focus group discussions—from initial discussions of ideal settings for recreation, to perceptions of the river in participants' neighborhoods, to preferred features of river scenes, to suggestions for future development. Although these issues helped define what was important to the study participants, the various ways in which the issues were talked about revealed the specifics of what participants felt they had, didn't have, and wanted to have. With water quality taking the lead, a comprehensive understanding of these issues will help ensure the success of planning, management, and programs for the Chicago River and other urban river corridors being considered for improvement. This study has provided the basis for such an understanding, and it has shown not only the importance of these issues, but also their complex, multidimensional nature.

- **The Dynamics: Change, Variability, Diversity, Context, Appropriateness:** Although the six issues mentioned above might be thought of as required considerations for urban river corridor enhancements, another underlying but important theme conveyed frequently in this report signals caution to those wishing to apply any wholesale solutions to corridor planning, management, and programs. This theme refers to the dynamics of the corridor, dynamics that have temporal, spatial, social, and personal components to them. The corridor is diverse, both geographically and socially, and this diversity is reflected in the varied ways in which focus group participants talked about the present and desired condition of the river in their neighborhood. Solutions to river corridor problems must therefore be appropriate to their context. Even within a neighborhood or reach there will be multiple values and attitudes toward a given issue, and thus solutions need to accommodate differences or work toward consensus. Finally, it must be recognized that perceptions and uses of the river corridor will continue to change as more and more improvements are made. As is generally the case with environmental quality improvements, as people come to recognize the value of the resource they demand more of it. For the Chicago River corridor, demands for recreation development will no doubt increase as the environment of the corridor improves; corridor planners and managers should begin now to think about what this could mean, not just in the near future, but 30 to 50 years from now as well. In some cases, this will mean capitalizing on opportunities for land protection and enhancement in areas that currently do not receive much use or attention, while in other cases it will dictate stronger actions toward ensuring the continued balance of river uses for industry and commerce along with recreation. Either way, research such as this can help identify policy directions to help guide long-range decisionmaking.

- **The Means to Success: Awareness, Knowledge, Use, Experience, Concern, Action:** The final theme expressed in study findings is a critical one to keep in mind for planning, management, and program implementation. The success of future efforts in the corridor will depend largely on the receptivity of the corridor constituents, a receptivity that begins with awareness and knowledge, which in turn can lead to use and experience of the resource, and might ultimately result in concern and positive actions to protect and enhance the resource. This study showed the difficulty of realizing such a turn of events, for the awareness and knowledge of river and river improvement activities tend to be very localized and can drop off dramatically the further away people live from a given stretch of river. To the extent that the public can be informed about the river and improvement activities through news stories and features and through on-site information such as signs and facility tours, perceptions can be formed or improved. Sincerity is the key to any informational program, for misleading claims could work against the best intentioned of efforts.

  Use and experience are the essential counterparts to information for establishing an appreciation and concern for the corridor. Land and water trails can be ideal for bringing people into direct contact with the resource; and in many cases can become educational as well as recreational experiences for participants. Guided tours, an important way to reach and target particular audiences, can "initiate" those unfamiliar with the resource and who might not otherwise seek it out on their own.

  Public participation in resource management activities is one increasingly popular and successful way to accomplish environmental improvement goals; it has been used successfully by the Friends of the Chicago River and other environmental groups in Chicago and elsewhere. River restoration programs include river cleanup, ecological restoration of vegetative communities, and water quality monitoring. The direct interaction with the environment the activities offer participants is more than a recreational or social experience, and many who become involved in restoration find it provides them with deep aesthetic, symbolic, and spiritual values (Jordan, 1993).

In conclusion, this chapter offers some ideas for how we might better plan for river improvement by understanding the perceptions and preferences of one important user and interest group: nearby neighborhood residents. Knowing the issues and their dynamics is the important first step to action, but engaging the public to assist in action will surely be the key to success.

APPENDIX 2.1
FOCUS GROUP MODERATOR GUIDE

I. Introduction (5 minutes)

A. Written Exercise—Worksheet 1: Have participants complete background questionnaire including demographic questions.

II. Free Associations, Ratings and Imagery (15 minutes)

A. Written Exercises—Worksheets 2 & 3: Have participants free associate and rate on a 0 degree (cold/negative) to 100 degree (warm/positive) scale a list of general and area-specific landmarks and/or outdoor recreational developments, including "The Chicago River in Your Neighborhood."

B. Imagery Exercise—Worksheet 4: Pass out boxes of crayons and have participants draw a picture of "The Chicago River in My Neighborhood." When finished, have them turn the sheet over and complete the sentence: "I am the Chicago River in your neighborhood. I am…"

III. Outdoor Recreation Behavior and Attitudes (15 minutes)

A. Activities

1. Discussion: What outdoor recreation activities have you done in your neighborhood during the last 12 months? What about other members of your household?

B. Motivations

1. Written Exercise—Worksheet 5: Have participants list words and phrases that would describe their ideal setting for outdoor recreation activities in their neighborhood.

2. Discussion: People want to get outside to recreate in their neighborhood for different reasons. What do you want out of your outdoor recreation activities? Why do you do the things you do? Where in your neighborhood do you go? Why do you choose a particular site or setting over another one? Specific probes: importance of adjacent land use, water quality, environmental quality, feeling of wildness, aesthetics, access, facility development, safety, and congestion.

IV. Chicago River Imagery (35 minutes)

A. Discussion: Results of Free Association Exercise—Worksheet 2. Probe for specific reasons for associations to "The Chicago River in Your Neighborhood."

B. Discussion: Results of Rating Exercise—Worksheet 3. Probe for specific reasons for ratings of "The Chicago River in Your Neighborhood."

C. Discussion: Results of Imagery Exercise—Worksheet 4. Have people discuss their drawings and descriptions of the river in their neighborhood; probe for features or feelings included in their imagery.

D. Discussion: Specific Probes—Thinking about the Chicago River in your neighborhood, how do you feel about adjacent land use? Water quality? Environmental quality? Feelings of wildness? Aesthetics? Access? Facility development? Safety? Congestion? Why?

V. Chicago River Corridor Development (20 minutes)

A. Development Scenarios

1. Written Exercise—Worksheet 6: Show participants pictures of river corridor development exhibiting different aesthetic, land use, and recreational opportunity options. Have them rate and record their comments about each picture.

2. Discussion: Reasons for your ratings? Which pictures show the kind of development you'd like to see for the Chicago River corridor? Should there be different kinds of development along the river? Are there specific places that should have a certain kind of development?

B. Attitudes and Suggestions for River Improvement

1. Discussion: What principles should guide development of the Chicago River in your neighborhood? What would you like to see done and not done? What final message would you give to river corridor planners and managers for improving the river corridor, in your neighborhood or elsewhere?

APPENDIX 2.2
FOCUS GROUP CODING PROCESS

CODING PROCESS

To begin the coding process, we first thoroughly familiarized ourselves with the tapes and transcripts. Upon each iteration (up to 9 iterations per focus group), codes were formulated and revised until a system was developed for accurately and reliably coding participants' responses. Using a combination of statistical software packages including the Text Analysis Package (TAP) Version 1.0 (Drass, 1986) and SYSTAT for Windows Version 5 (SYSTAT Inc., 1992), we coded each response made by a person to identify:

1) The ***response*** itself—the unique number of the response, the individual who made it, and the group he or she was in;
2) The ***context*** in which the response was made—whether or not the response dealt with the river, whether it dealt with current perceptions and uses or future prospects and alternatives;
3) The pertinent ***issues*** conveyed in the response—general issue of concern (e.g., safety) and specific issue of concern (e.g., falling in the water).

In practice, each response received three response codes, one of five context codes, and up to three issue codes. The TAP program was used to code the context and issue codes; however, because TAP is limited to a maximum of 4 codes per response, some of the more lengthy and complex responses were split to adequately capture the number of issues they addressed. The box shown here gives a typical example of a how a respondent's comment was coded from the transcript.

EXAMPLE

In response to the facilitator's lead question, the respondent answers with three activities he and his family often engage in close to home:

1 2 nr1 h110 h150 h170 *[Mark] Walking, bicycling, rollerblading.*

Response Coding: The first two columns identify the respondent's focus group number and the unique number assigned to this comment. The text itself includes the respondent's name in brackets.

Context Coding: The third column identifies the context code, indicating the comment referred to the one (in bold italics) of five context codes below that described activities in general, not specifically associated with the Chicago River.

- yr References to activities, places and perceptions related to the Chicago River
  - yr1 Current conditions, perceptions, and uses of the river
  - yr2 River development prospects & alternatives—including activities they would like to do
  - yr3 Response to photographs of river development—Use photo numbers yr31 to yr37
- nr References to activities and places not on the Chicago River
  - ***nr1 Activities currently engaged in, generally or in other places but not on the river***
  - nr2 Ideal settings for recreation

Issue Coding: Columns 4-6 include codes for each of the activities mentioned by the respondent. The issue codes provide information of a hierarchical nature, from general to specific. At the most general level, the 3 activities each fell into letter "h" of "k" general categories:

a. River place names and locations	e. Reputation of the river	i. Safety issues
b. History and river facts	f. Current and future development	j. Crowding, conflict, other social issues
c. Characteristics of the river landscape	g. Access issues	
d. Current condition and maintenance	***h. Recreation activities***	k Demographics

Although each of the issue codes can be accessed on this general level, actual responses were assigned codes of a much more specific nature. Within the "Recreation activities" general category, codes 100-900 were used to assign the activities to a more specific activity category:

h100 Linear and solo active activities	h400 Water activities	h700 Winter sports
h200 Passive activities	h500 Active group sports	h800 "Urban" activities
h300 Children's activities	h600 Nature and arts activities	h900 Community-based activities

Finally, at the most specific level (for this issue), codes 10-70 were used to identify the specific activities mentioned:

h110 Walking	h140 Walking pets	***h170 Biking***
h120 Running, jogging	***h150 Rollerblading, skating***	
h130 Exercising	h160 Skateboarding	

CODEBOOK

Context Codes (use "p" extension to indicate specific place names on or off the river)

yr References to activities, places, and perceptions related to the Chicago River
- yr1 Current conditions, perceptions, and uses of the river
- yr2 River development prospects & alternatives—including activities respondents would like to do
- yr3 Response to photographs of river development—Use photo numbers yr31 to yr37

nr Reference to activities and places not on the Chicago River
- nr1 Activities that respondents currently engage in generally or in other places but not on the river
- nr2 Ideal settings for recreation

ISSUE CODES

A River place names and locations
- A101 Problems in identification of river name
- A102 The river system and branches; connectivity of the system
- A103 Colloquial names for the river—ditch, canal, channel, etc.
- A104 West Fork of North Branch
- A105 Middle Fork of North Branch
- A106 East Fork of North Branch/Skokie River, Skokie Lagoons
- A107 North Branch
- A108 North Shore Channel
- A109 The Chicago River downtown
- A110 South Branch
- A111 Sanitary and Ship Canal
- A112 Cal-Sag Channel
- A113 Calumet River
- A114 Little Calumet River
- A115 Other rivers not in the system
- A116 Specific places along river

B History and river facts, perceptions, and misperceptions
- B100 Exploration, settlement, and establishment of Chicago
- B200 Reversing the flow
- B300 Digging the channels
- B400 Early landscape of Chicago—marsh and prairie lands

C Characteristics of the river and landscape
- C100 Physical characteristics of the river proper
  - C110 Wide
  - C120 Narrow
  - C130 Straight
  - C140 Bends, curves
  - C150 Deep
  - C160 Shallow
  - C170 Pond, lake
  - C180 Walled shore
  - C190 Natural shore
- C200 Physical characteristics/features of the built environment
  - C210 Architecture—buildings/skyline
    - Bridges (use F489)
    - Boats (use H430 - H440)
- C300 Physical characteristics/features of the natural environment
  - C310 Vegetation—plants and landscapes
    - C311 Trees
      - C311a Mature trees
      - C311b Trees too small
    - C312 Bushes
    - C313 Grass
    - C314 Flowers
    - C315 Prairie; wildflowers and grasses
    - C316 Wetland, floodplain
    - C317 Forest, woods (see also F430 for references to forest preserves)
    - C318 Native, historic, or indigenous landscape; natural environment; rare or endangered natural landscape
    - C319 Wild brush, pioneer vegetation
    - C31a Green
  - C320 Wildlife
    - C321 Deer
    - C322 Birds
    - C323 Small animals; foxes and coyotes
    - C324 Mosquitos, bugs
    - C325 Rats
    - C326 Shorebirds and waterfowl
    - C327 Other water wildlife (e.g., frogs and turtles)
  - C330 Sun, shade
  - C340 Hills and topography
- C400 Evaluative characteristics
  - C410 Aesthetic and affective attributes—general statements "like" and "love" the river, landscape
    - C411 General views, sightseeing
    - C412 Beauty, scenic, attractive, awesome
    - C413 Peace, solitude, quiet, relaxing, uncrowded, secluded
    - C414 Pleasant, nice feeling, appealing
    - C415 Freedom
    - C416 Fresh air, clean air
    - C417 Clean (place)
    - C418 Escape, refuge
    - C419 Contrast of nature with the city/green-built, etc.
    - C41a Naturalness, lack of development
    - C41b Boring, dull, no feeling for it
    - C41c Gray, drab
    - C41d Cold, sterile
    - C41e Uninviting, not "people friendly"
    - C41f Just don't like it
  - C420 Functional attributes of the river—generally
    - C421 For drainage, prevents or controls flooding
    - C422 For recreation
    - C423 For transportation
    - C424 For sewage disposal
  - C430 Economic attributes
    - C431 Riverboat gambling
    - C432 Industry and commercial activity will create jobs

D Condition and maintenance of the river landscape
- D100 General statements about cleaning, care, and maintaining the river environment (water, shore)
  - D110 Manicured
  - D120 Messy, untended
  - D130 Stewardship, respect for nature, personal responsibility
  - D140 Condition is good considering its urban nature (context)
- D200 Improvement plans, information about improvement efforts
  - D2A00 Water quality condition
    - D2A10 Clean water
    - D2A20 Pollution—general statements of "dirty," "filthy," "gross," etc.

D2A30 Smell
D2A40 Toxics
D2A40 Color
D2A41 Dyeing the river green on St Patrick's Day
D2A50 Turbidity, etc.
D2A60 Natural debris—floating, sunken, etc.
D2A70 Dumping and littering of stuff in the river (not naturally caused)
D2A80 Fish—as indicators of/referents to water quality; restocking efforts
D2A81 Presence of fish, types of fish that live in the river
D2A82 Eating the fish
D2A90 Flooding
D2B00 Water quality maintenance: pollution control
D2B10 General statements of making the water clean or cleaner
D2B20 Water aeration/filtration
D2B21 Waterfalls
D2B22 Devon aeration facility
D2B23 Centennial fountain
D2B30 Water garbage pickup efforts
D2B31 Downtown skimmer boats
D2B32 Condition and maintenance along shore (non-water, non-vegetative)
D2B40 Dredging/cleanup
D2B50 Deep Tunnel
D400 Landscape and facility condition and maintenance—shoreline, land, & facilities
D410 General statement on care, maintenance
D411 Good care
D412 Poor care
D420 Land based cleanup efforts (not community based)
D430 Eroded
D440 Litter
D450 Dog litter
D460 Graffiti
D470 Vandalism
D480 Landfill
D500 Vegetation condition and maintenance
D510 Unmaintained vegetation, generally
D520 Overhanging trees, overgrown and in need of trimming
D530 "Manicured," formal
D540 Plant more trees and flowers, more landscaping needed
D550 Loss of native vegetation
D560 Barren, lack of landscaping
D570 Plant wildflowers

E Reputation of the river
E100 Change in environmental (water/land) quality over time
E110 Has improved
E120 Has stayed the same
E130 Has gotten worse
E200 Change in environmental quality as a function of location
E300 Comparisons with Lake Michigan
E400 Prospects for environmental quality improvement
E410 Good
E420 Poor

F River recreation use and development
F100 Prospects of river development
F110 Development shouldn't proceed until water is cleaned up
F120 Development can go ahead even if water isn't clean
F140 Balance of recreation with "working river"
F150 Low prospects for development/improvement
F200 Development mix
F210 All natural, preserve wildness
F220 Mostly natural
F230 Mix of natural and developed
F240 Mostly developed
F300 Compatibility/context of development
F310 Compatible, appropriate for this setting
F320 Too artificial, urban, or overdeveloped
F330 Too wild
F340 Keep it like it is
F350 More recreational development needed
F400 Open space development
F410 Recreation facilities in general
F420 Parks and plaza areas
F430 Forest and nature preserves
F440 Golf courses
F450 Private clubs
F460 Playgrounds
F470 Fishing and boating
F471 Ramps
F472 Marinas, boatyards, and rental places
F473 Fishing docks, piers
F480 Facility development
F481 Trails and paths
F481A Blacktopped
F481B Unpaved
F482 Benches
F483 Lights
F484 Attractive paving
F485 Fencing (see also Access-fencing and Safety-fencing)
F486 Restrooms
F487 Fountains and statuary
F488 Buildings—fieldhouses and pavilions
F489 Bridges
F48a Athletic facilities—playing courts, etc.
F48b Swimming facilities
F490 Open space protection activities
F491 Acquisition
F492 Easement
F493 Regulation of land use
F494 Regulation of users
F495 Enforcement of pollution control
F496 Leasing
F500 Development types
F510 Residential
F511 Property values—gain or loss
F520 Commercial—restaurants, cafes, bars, and shops
F530 Industrial
F540 Transportation
F550 Boating-oriented development
F600 Development spectrum
F610 Urban
F620 Suburban
F630 Rural—country
F640 Wild

G Access
G100 In general
G110 Visual access
G200 Convenience, proximity

- G300 Public vs. private land
- G400 Adequacy of public open space and parks
- G500 Adequacy of space for development
- G600 Fencing and access (see also fencing and safety)
- G700 On foot
  - G710 To get right down to the river
  - G720 Continuity of riverwalk
  - G730 Upper and lower levels by downtown
- G800 By car
  - G810 Parking
- G900 Equity in distribution of space and facilities, programs
  - G910 Cost of access to places and programs

H Activities—in general, varied activities
- H100 Linear and solo active activities
  - H110 Walking
  - H120 Running, jogging
  - H130 Exercising
  - H140 Walking pets
  - H150 Rollerblading, skating
  - H160 Skateboarding
  - H170 Biking
- H200 Passive activities
  - H210 Picnicking and BBQing
  - H220 Sitting, relaxing, getting some sun
  - H230 Looking at area (e.g., from home)
- H300 Children's activities
  - H310 Walking children
  - H320 Free play
  - H330 Playground activities
  - H340 Kid's park programs
- H400 Water activities
  - H410 Fishing
  - H420 Swimming, beach
  - H430 Boating:
    - H431 Canoeing, kayaking
    - H432 Motorboating
    - H433 Sailing
    - H43a Paddleboats
    - H434 Tour boats, tours, and river excursions
    - H435 Crewing/rowing
  - H440 Watching river activities, boats, its flow, and the general landscape
  - H450 Playing by or in the river
- H500 Active group sports
  - H510 Baseball
  - H520 Basketball
  - H530 Football
  - H540 Golf
  - H550 Soccer
  - H560 Tennis
  - H570 Volleyball
- H600 Nature and arts activities
  - H601 Nature study
  - H610 Watching, feeding wildlife interaction
  - H620 Art—painting, drawing
  - H630 Film and photography
  - H640 Gardening, lawn maintenance
  - H650 Plant collecting
  - H660 Zoo
  - H670 Cutting wood
- H700 Winter sports
  - H710 Skiing
  - H720 Skating
  - H730 Hockey
  - H740 Snowmobiling
  - H750 Tobogganing
- H800 "Urban" activities
  - H810 Tourism
  - H820 Shopping
  - H840 Festivals
- H900 Community-based activities
  - H910 River cleanup, land cleanup efforts
  - H920 Neighborhood watch/park watch programs
  - H930 Community policing
  - H940 Socializing

I Safety
- I100 General—physical safety
- I200 Falling in the water
  - I210 Fencing or lack thereof
  - I220 Body contact with water
- I300 General—personal safety, safe from crime, security
- I400 Vegetation
  - I410 Dense vegetation, foliage as hiding places for criminals and perverts, openness (antonym)
  - I420 Children getting lost in the woods
- I500 Criminal activity, gang activity, selling drugs
  - I510 Perverts, child molesters
- I600 Homeless, panhandlers
- I700 People drinking and/or doing drugs
- I800 Rowdies, yahoos
- I900 Patrols
- IA100 Lighting
- IA200 Visibility
- IA300 People/activity as a deterrent to crime

J Crowding, conflicts, and other social issues
- J100 People
- J200 Car traffic
- J300 Boat traffic and speed
- J400 Noise
- J500 Pets
- J600 Inappropriate behavior
- J700 Management conflicts

K Demographics—references to "all groups"
- K100 Age—reference to "all ages"
  - K110 Young children
  - K120 Teens
  - K130 Middle age
  - K140 Older adults
- K200 Gender
  - K210 Males
  - K220 Females
- K300 Social group composition
  - K310 Singles
  - K320 Couples
  - K330 Families
- K400 Occupation
  - K410 Blue collar
  - K420 Professionals
  - K430 Students
  - K440 Homemakers
  - K450 Retirees
- K500 Ethnicity—references to "all ethnic groups"
  - K510 African American
  - K520 Anglo American
  - K530 Hispanic American
  - K540 Asian American
    - K541 Chinese American

APPENDIX 2.3 STATISTICAL OVERVIEW OF FINDINGS

TABLE 2.3.1
Percentage of context and general issue codes for focus group transcript statements by group

	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Stem Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
CONTEXT CODES												
Refs. to Chicago River	**76.7**	**86.1**	**82.0**	**80.7**	**79.0**	**94.1**	**69.2**	**89.7**	**90.0**	**84.0**	**60.4**	**81.5**
Current perceptions, conditions, activities	35.7	53.6	51.9	37.6	27.8	50.7	23.1	41.2	61.4	54.3	31.5	42.5
Devt. prospects & alternatives	19.4	9.6	9.8	8.6	15.8	12.5	9.9	36.0	22.9	29.6	7.2	16.1
Responses to photos	21.7	22.9	20.3	34.4	35.3	30.9	36.3	12.5	5.7	0 .0	21.6	21.6
Refs. to other places	**23.3**	**13.9**	**18.1**	**19.4**	**21.1**	**5.9**	**30.8**	**10.3**	**10.0**	**16.1**	**39.6**	**18.5**
Current perceptions, conditions, activities	16.3	6.0	6.0	7.5	10.5	5.2	20.9	2.9	2.9	16.1	27.9	10.6
Ideal settings	7.0	7.8	12.0	11.8	10.5	0.7	9.9	7.4	7.1	0.0	11.7	7.9
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Context Codes (n)	**129**	**166**	**133**	**93**	**133**	**136**	**91**	**136**	**70**	**81**	**111**	**1279**
GENERAL ISSUES CODES												
River names	7.5	2.4	12.4	4.6	1.3	0.0	0.8	1.4	0.7	0.6	2.6	3.4
River history & facts	0.0	0.4	1.3	0.0	0.0	0.0	0.0	1.4	0.0	2.5	3.7	0.9
River characteristics	22.1	23.5	8.9	15.3	17.3	25.2	26.0	14.0	11.7	18.6	25.0	18.9
Condition & maint.	15.6	26.3	14.7	23.9	40.4	7.9	12.2	19.2	54.0	24.2	23.4	22.7
Reputation	.0	2.8	3.1	0.0	1.9	3.7	0.0	2.8	5.1	12.4	7.8	3.6
River development	28.1	21.9	20.0	14.8	16.0	22.0	21.4	40.2	17.5	16.8	18.8	22.1
River access	4.5	2.4	2.7	4.0	4.5	6.5	7.6	2.3	0.0	1.9	0.5	3.3
Activities	15.1	17.5	16.0	15.9	14.1	19.6	21.4	7.9	6.6	17.4	17.2	15.4
Safety	5.5	.8	19.1	20.5	4.5	14.0	4.6	8.9	2.9	4.4	0.5	8.1
Crowding, etc.	1.5	1.6	1.8	1.1	0.0	0.0	1.5	1.9	1.5	0.6	0.5	1.1
Demographic	0.0	0.4	0.0	0.0	0.0	0.9	4.6	0.0	0.0	0.6	0.0	0.5
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**199**	**251**	**225**	**176**	**156**	**214**	**131**	**214**	**137**	**161**	**192**	**2056**

TABLE 2.3.2
Current perceptions of the river—percentage of general issue codes for transcript statements by group

	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Branch Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
River names	19.5	4.3	22.1	10.5	3.9	0.0	3.1	3.6	1.3	0.0	7.9	7.5
River history & facts	0.0	.7	2.4	0.0	0.0	0.0	0.0	1.2	0.0	5.1	7.9	1.5
River characteristics	28.6	29.1	8.7	4.0	11.8	21.0	37.5	19.3	11.5	22.8	20.6	19.0
Condition & maint.	24.7	27.0	18.9	27.6	49.0	9.2	31.3	30.1	60.3	25.3	25.4	27.7
Reputation	0.0	5.0	4.7	0.0	2.0	6.7	0.0	2.4	3.9	19.0	14.3	5.5
River development	11.7	12.1	11.0	19.7	7.8	13.5	12.5	16.9	10.3	11.4	11.1	12.6
River access	2.6	0.0	0.8	6.6	9.8	5.0	3.1	0.0	0.0	1.3	0.0	2.3
Activities	9.1	19.2	15.0	10.5	5.9	24.4	12.5	13.3	7.7	13.9	11.1	14.3
Safety	3.9	.7	14.2	21.1	9.8	18.5	0.0	12.1	2.6	1.3	0.0	8.4
Crowding, etc.	0.0	2.1	2.4	0.0	0.0	0.0	0.0	1.2	2.6	0.0	1.6	1.1
Demographic	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.2
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**77**	**141**	**127**	**76**	**51**	**119**	**32**	**83**	**78**	**79**	**63**	**926**

TABLE 2.3.3
Current perceptions of the river—percentage of specific issue codes related to river characteristics by group

	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Branch Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
Characteristics of the river proper	0.0	0.0	0.0	0.0	0.0	12.0	8.3	0.0	11.1	11.1	15.4	5.1
Characteristics of the built environment	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	5.6	23.1	3.4
Characteristics of the natural environment	90.9	68.3	45.5	33.3	33.3	12.0	0.0	62.5	33.3	22.2	0.0	43.2
Vegetation	50.0	4.9	36.4	0.0	16.7	12.0	0.0	18.8	22.2	5.6	0.0	15.3
Wildlife	40.9	58.5	9.1	33.3	16.7	0.0	0.0	43.8	11.1	16.7	0.0	26.7
Other	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Evaluative characteristics	9.1	31.7	54.6	66.7	66.7	68.0	91.7	37.5	55.6	61.1	61.5	48.3
Aesthetic benefits	4.6	29.3	27.3	66.7	16.7	68.0	50.0	18.8	33.3	55.6	53.9	36.9
Functional benefits	4.6	2.4	27.3	0.0	33.3	0.0	25.0	18.8	22.2	5.6	7.7	9.7
Economic benefits	0.0	0.0	0.0	0.0	16.7	0.0	16.67	0.0	0.0	0.0	0.0	1.7
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**22**	**41**	**11**	**3**	**6**	**25**	**12**	**16**	**9**	**18**	**13**	**176**

TABLE 2.3.4
Current perceptions of the river—percentage of key specific issue codes related to condition and maintenance of the river landscape by group

	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Branch Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
General statements about condition and maintenance	15.8	7.9	0.0	14.3	12.0	0.0	10.0	12.0	4.3	10.0	0.0	7.9
Water quality condition and maintenance	79.0	55.3	91.7	75.8	84.0	90.9	90.0	88.0	89.4	85.0	100.0	82.5
Condition: Key Issues	79.0	39.5	58.3	71.4	72.0	63.6	80.0	52.0	59.6	70.0	93.8	63.3
Pollution (gen.)	*	*	*	*	*	*	*	*	*	*	*	
Smell			*		*				*	*		*
Toxics							*					
Color											*	
Turbidity					*							
Natural Debris	*											
Dumping/litter				*	*	*	*			*		
Fish		*		*	*			*				
Flooding	*		*									
Maintenance: Key Issues	0.0	15.8	33.3	4.8	12.0	27.3	10.0	36.0	29.8	15.0	6.3	19.1
Cleanup (gen.)					*		*		*			
Aeration/filtration						*		*	*			
Garbage pickup						*						
Dredging		*										
Deep tunnel			*									
Landscape/facility condition and maintenance	5.3	31.6	8.3	9.5	4.0	9.1	0.0	0.0	4.3	0.0	0.0	8.2
Vegetation condition and maintenance	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	2.1	5.0	0.0	1.6
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issues Codes (n)	**19**	**38**	**24**	**21**	**25**	**11**	**10**	**25**	**47**	**20**	**16**	**256**

*Identified as an issue by around 10% of the group or higher.

TABLE 2.3.5
Ideal settings—percentage of key general and specific issue codes by group

	STUDY AREAS									
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	North Branch Ravenswood-Albany Park	North Branch Lathrop	South Branch Chinatown	Cal-Sag Palos	Calumet R. Pullman-Blue Island	Metro West	All Groups[1]
Characteristics	25.0	25.0	3.6	7.1	0.0	13.3	52.9	40.0	41.2	21.6
Natural environment	*						*			
Aesthetic surroundings	*	*				*	*	*	*	*
Condition & maintenance	10.0	14.3	0.0	21.4	50.0	6.7	0.0	10.0	11.8	13.2
Clean water								*		
Well-maintained landscape	*			*	*					
Development	0.0	32.1	50.0	14.3	38.9	26.7	11.8	20.0	17.7	25.7
Open space development		*	*	*	*	*	*	*	*	
Access	10.0	10.2	17.9	0.0	0.0	33.3	17.7	0.0	5.9	11.4
Convenience, proximity	*						*			
Activities	20.0	10.2	10.7	7.1	0.0	6.7	11.8	20.0	17.7	11.4
Linear activities	*					*				
Active group sports								*	*	
Safety	20.0	0.0	17.9	42.9	0.0	0.0	0.0	10.0	5.9	10.2
All other issues	15.0	7.1	0.0	7.1	11.1	13.3	5.9	0.0	0.0	6.6
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**20**	**28**	**28**	**14**	**18**	**15**	**17**	**10**	**17**	**169**

*Identified as an issue by around 10% of the group or higher.

[1]This question was not discussed in the Loop or Metro East groups.

TABLE 2.3.6
Photo ratings—percentage of key general and specific issue codes by photo

	PHOTOS							
	Photo 1 Landfill & Boat Landing	Photo 2 Downtown Plaza	Photo 3 Downtown Riverwalk	Photo 4 Industrial Land use	Photo 5 Natural Trail	Photo 6 Natural Bridge	Photo 7 Aeration Facility	All Photos[1]
Characteristics	58.3	22.5	35.1	39.4	36.1	28.2	41.3	34.8
Natural environment			*		*			
Aesthetic surroundings	*	*	*	*	*	*	*	*
Condition & maintenance	16.7	6.1	13.5	12.1	17.4	48.7	21.7	18.6
Water condition & maintenance			*			*	*	
Vegetation and landscape condition & maintenance	*			*	*	*		
Development	0.0	49.0	33.8	42.4	29.1	12.8	30.4	31.6
Development mix					*			
Context of development		*	*	*			*	*
Open space development		*		*	*		*	*
Access	0.0	0.0	4.1	6.1	2.3	5.1	0.0	3.8
Activities	25.0	2.0	6.8	0.0	2.3	5.1	0.0	3.8
Safety	0.0	10.2	6.8	0.0	12.8	5.1	4.4	7.4
All other issues	0.0	10.2	0.0	0.0	0.0	0.0	0.0	1.5
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**12**	**49**	**74**	**33**	**86**	**39**	**46**	**339**

*Identified as an issue by around 10% of the group or higher.

[1]This question was not discussed in the Metro East group.

TABLE 2.3.7
Future potential—percentage of key general and specific issue codes by group

	STUDY AREAS											
	Middle Fork Lake Forest	Skokie Lagoons Glencoe	N. Shore Ch. Evanston-Skokie	N. Branch Ravenswood-Albany Park	North Branch Lathrop	Main Branch Loop	South Branch Chinatown	Cal-Sag Palos	Calumet Pullman-Blue Island	Metro East	Metro West	All Groups
River characteristics	9.1	8.0	11.1	22.2	7.4	40.7	0.0	4.0	2.5	22.6	35.0	12.7
Natural environment				*								
Aesthetics			*			*					*	*
Condition and maintenance	13.6	60.0	14.8	27.8	48.2	7.4	7.7	15.2	60.0	34.0	40.0	28.2
Water condition and maintenance		*		*	*			*	*	*	*	*
Vegetation and landscape condition and maintenance	*	*		*	*				*			
Reputation	0.0	0.0	3.7	0.0	0.0	0.0	0.0	4.0	10.0	7.6	10.0	3.8
River development	61.4	20.0	11.1	0.0	25.9	37.0	69.2	61.6	25.0	26.4	15.0	37.9
Prospects of river development							*				*	
Development mix	*	*						*				
Context of development	*	*						*				
Open space development	*				*	*	*	*	*	*		*
River access	2.3	4.0	0.0	0.0	3.7	11.1	7.7	2.0	0.0	1.9	0.0	2.5
Activities	4.6	4.0	7.4	27.8	11.1	3.7	15.4	2.0	2.5	0.0	0.0	4.8
Safety	9.1	4.0	48.2	22.2	3.7	0.0	0.0	8.1	0.0	3.8	0.0	8.4
Other issues	0.0	0.0	3.7	0.0	0.0	0.0	0.0	1.0	0.0	3.8	0.0	1.5
Total (%)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Issue Codes (n)	**44**	**25**	**27**	**18**	**27**	**27**	**13**	**99**	**40**	**53**	**20**	**393**

*Identified as an issue by around 10% of the group or higher.

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NOTES

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C H A P T E R 3

Use Patterns and User Preferences of On-Site River Recreationists

Lynne M. Westphal

SUMMARY OF FINDINGS

Interest in improving the Chicago River corridor for recreation and other benefits has been growing in recent years. Deciding how best to respond to this interest requires an understanding of current recreational visitors' perceptions and uses of the corridor. Toward this end, we interviewed 582 visitors engaged in a wide spectrum of activities at a range of sites throughout the Chicago River corridor. In addition to collecting data on recreational activities, our survey asked people about other characteristics of their use of the river, perceptions of the river corridor, and the river's importance in their enjoyment of recreation activities. Survey questions included both closed-ended and open-ended response formats. Survey sites were grouped into five areas: Skokie Lagoons, North Branch/North Shore Channel (NSC), Loop, Palos, and Cal-Sag areas.

Clear river corridor use patterns emerged. Most activity took place alone or in small groups. Many respondents visited frequently—half reported visiting the area at least weekly. Most drove to the site, except in the Loop where most walked. Visit length varied considerably, but overall, visits of an hour or less were most common.

The respondents to the on-site survey reported 50 different activities. These fell into eight major activity groups: biking, sitting and relaxing, fishing, walking/hiking, boating, having lunch, "other passive" activities (like people watching and nature observation) and "other active" activities (like baseball and frisbee). Some of these activities, like fishing and boating, are traditionally thought of as river recreation activities. In other activities, like relaxing and biking, the river may play an indirect, but still important, role. Activities varied considerably by area, and were somewhat dependent on the facilities available. The Skokie Lagoons area had the greatest variety of activities; the North Branch/NSC area had a combination of active sports and various passive uses like bringing children out to play; in the Loop area, the primary activity was taking a lunch break; in the Palos area biking dominated; and most respondents in the Cal-Sag area were power boaters.

The river was very important to most recreationists, particularly where access—either physical access or visual—was greatest. Increased river access was called for by some of the people we interviewed, particularly respondents in the Loop and power boaters, and the current access was appreciated by even more. The many attributes respondents mentioned—scenic beauty (including both skyline and natural scenery), solitude, and appreciation of natural areas—may be provided in many ways, particularly in areas that lack open space. And, for many respondents, the recreation site where they were interviewed seemed to be an end in itself, and they obtained benefits without "going anywhere" along the river from the recreation site. These two things—the reported importance of scenic beauty, solitude and natural areas in a variety of settings, and that a variety of access points were well used and enjoyed—indicate that all new access need not be highly developed marinas, large parks, or complex trail systems (though these are valued by respondents). Access at street dead-ends, strategically placed benches, and other modest access can also provide these benefits.

Water quality was the predominant issue for respondents. Many of the people we spoke with seemed to feel that the river was quite polluted and a seemingly high number of respondents felt that direct industrial and other dumping was still a significant problem. Some were aware of the recent improvements in water quality, but it seemed that public perception of water quality was low overall. Such findings indicate the need for more public outreach about recent water quality improvements. Some of the recent improvements are less noticeable to the naked eye (and nose) and may need greater explanation to the public. Examples in this category include the changes in aquatic habitat from eliminating chlorine in the waste water treatment process. At the same time, the public's desire for a cleaner river should not be glossed over.

Facilities were also an important issue, ranking second to water quality in importance. Many different aspects of facilities were mentioned by respondents—some praised, others criticized. Respondents liked the bike trails at the Skokie Lagoons and Palos area, Loop visitors liked the benches and river walk there, and Cal-Sag respondents liked the boat ramps in their area. Changes to better accommodate certain activities were mentioned most, particularly stocking fish; increasing path maintenance; improving water fountain and toilet facilities; and increasing tables, grills, and the like. Major new development did not seem to be as important to these respondents as increased maintenance of existing facilities.

Scenic qualities and natural areas were important, and many respondents wanted natural areas improved (which may lead to improved scenic qualities as well). This was particularly true in the Loop where current recreation users called for more green areas. Restoring natural areas or providing more trees and formal landscaping were the nature-related changes suggested most often.

Crime and safety were not reported as major problems by the people we interviewed, except in the North Branch/NSC area, where many respondents requested additional attention to these issues. One possible approach to these concerns could be thinning vegetation in some areas to increase both visual access to the river and perceived safety. Other user conflicts identified by respondents focused on boaters, anglers, and the use of trails and other facilities. Boaters and anglers were specifically interested in stricter law enforcement for their fellow recreationists (e.g., enforcing no-wake zones).

The Chicago River corridor is an important recreational resource enjoyed by the Chicago area residents we interviewed. Respondents reported a wide range of activities and felt that the river was important to their enjoyment of these activities. Scenic beauty and the current facilities are important to, and appreciated by, current recreational visitors. Water quality concerns are prevalent and urgent to these visitors. Managers have opportunities to enhance the enjoyment of the river for current recreationists, and perhaps to open new possibilities for future recreationists.

PART 1
INTRODUCTION TO THE STUDY

PURPOSES AND OBJECTIVES

The Chicago River corridor is used for recreation by many Chicago area residents. People enjoy the varied recreational opportunities the river provides, whether they live near the river or travel several miles to reach it. Some enjoy water-based activities like boating, others appreciate the opportunity to discover turtles with their children, while others find a lunch-time respite from the office on riverside plazas.

In recent years, two factors have led to calls for further enhancement of recreation opportunities along the river. First and foremost are the water quality improvements that have been made and the promising prospects for continued improvement. Second, increased direct use of the river for boating, canoeing, and fishing has been reported, and riverside bike trails are popular. Current recreation visitors' uses and perceptions of—and their concerns about—current river recreation opportunities can inform and help guide possible recreation improvements. This study was initiated to help develop an understanding of these perceptions, uses, and concerns.

The objectives of this study were to identify:

1. The range of activities people engage in along the river corridor.
2. River corridor use characteristics including access to the area, length of visits, distance traveled to the site, and frequency of use.
3. Users' perceptions of the river corridor and its importance to enjoyment of recreation activities.

STUDY METHODS

An on-site user survey provides information for the analysis of current users' activities, attitudes, and perceptions of the river corridor as well as the universe of current users (e.g., nearby residents to out-of-state visitors). Because our objective was to identify the full range of activities people were engaged in along the river corridor, we took a broad view of recreation and the settings in which it takes place (e.g., a lunch break along the river downtown as well as the more traditional fishing and baseball).

SAMPLING

A purposive sampling design was used to get adequate representation of individuals from different use and demographic subgroups as well as from a range of areas along the river. This design facilitates discovery of the current range of river corridor uses, can help delineate the population of current users (e.g. activities engaged in and local vs. regional use), and allows for comparison among user subgroups and areas (e.g., activity groups or gender).

SURVEY DEVELOPMENT AND PRETEST

A 24-item survey was developed by scientists at the USDA Forest Service North Central Research Station (NCRS) in conjunction with the ChicagoRivers partners (Appendix 3.1). The survey was field tested on 35 respondents. Minor revisions simplified both question wording and recording of the answers. The questionnaire included open-ended questions to capture the wide range of activities, user perceptions and attribute preferences, and closed-ended questions to measure attitudes about specific river-recreation related issues. Questions focused on three major areas: ***river use characteristics*** (activities, transportation to the site, distance traveled to the site and the time this took, visit length); ***perceptions of the river*** (the importance of the river, potential problems in the corridor, liked and disliked attributes, perceptions of recent improvements, and suggested changes for rivers in the Chicago area); and ***demographics*** (age, racial/ethnic background, income, residence).

INTERVIEW PROCEDURES

All interviews were conducted on-site and face-to-face, with the interviewer writing respondents' answers to open-ended questions verbatim. The interviews were conducted by a trained research assistant from the NCRS, with some assistance from Northeastern Illinois University students. Survey respondents were selected carefully, controlling for interviewer bias as much as possible, and ensuring that a representative sample of the recreation visitors were interviewed. A minimum number of interviews was established for each site, and a sampling interval was determined based upon the intensity of use at a given site. For instance, where there were few recreationists, each solo visitor or a member of each group was interviewed. In places with, or at times of, higher use, a predefined selection protocol was used (e.g., to interview the second person from the right in every other recreation group).

The face-to-face interviews took place throughout the river study area during May, June, and July of 1993. May, June, and July are believed to be the months when river corridor use is highest. For instance, approximately 60% of the annual bike trail use along the North Branch Bike Trail at the Skokie Lagoons occurs during these months. Interviewers were at each site on weekdays and weekends, during mornings and afternoons. Most sites were visited two or more times in each time period (e.g., weekday mornings).

Most recreationists (nearly 90%) who were approached agreed to participate in the survey. The primary reasons for refusal were lack of time and language barriers (primarily Spanish and Eastern European languages).

STUDY AREAS

Recreation sites in six of the the study reaches were chosen for the on-site survey (Table 3.1 and Figure 3.1). Four study reaches were not surveyed due to lack of access to areas near the river. The West and Middle Forks of the North Branch (Reaches 1 and 2) have a lot of public land along the river, but these areas are undeveloped and not easily accessible. The South Branch and the northern segment of the Sanitary and Ship Canal (Reaches 7 and 8) are highly industrialized areas with few recreational opportunities.

The survey sites were grouped into five areas for analysis (sites in Reaches 4 and 5 were grouped due to proximity). These are described below. We refer to ***areas*** in this report, not the river reaches used in other ChicagoRivers reports, because the sites selected were not intended to represent the entire river reach, but rather to capture the characteristics and sense of place of a smaller area in the corridor.

1. **The Skokie Lagoons (Reach 3):** The Lagoons are part of the Cook County Forest Preserves, located along the Skokie River north of Chicago. They are bounded by the Edens Expressway to the west, the Chicago Botanic Garden to the north, residential areas to the east, and a mixture of private golf courses, forest preserves, and residential areas to the south. Created as the largest WPA project in the country, the Lagoons are a popular recreation area for the Chicago metropolitan region. Survey sites included paved and unpaved trails, shore areas, and boat docks.

TABLE 3.1
Survey areas

		Number of people surveyed				
River reach	Survey site name	**Total (n)**	Weekend am	Weekend pm	Weekday am	Weekday pm
3	Skokie Lagoons	**148**	12	77	29	30
4 & 5	North Branch/NSC	**135**	17	66	24	28
6	Loop area	**165**	18	45	47	55
9	Palos area	**55**	7	23	19	6
10	Cal-Sag area[1]	**79**	33	46	0	0

[1] The Cal-Sag Area was sampled on weekdays, but no recreationists were present.

2. **The North Branch/North Shore Channel (NSC) Area (Reaches 4 and 5):** City parks and county forest preserves edge the river as it runs through residential and commercial areas on the north side of Chicago. For many residents, these open areas are a few minutes' walk from their houses and apartments, and are as accessible as their back yards. Survey sites were either along the North Branch of the Chicago River or the North Shore Channel, and were between Lawrence and Peterson Aves. including the Chicago Park District's Eugene Field and Legion Park, and LaBagh Woods, a Cook County Forest Preserve. Trails, developed facilities like ball areas, and unofficial river access areas were surveyed.

3. **The Loop Area (Reach 6):** The Chicago River flows through the heart of the city, by the popular Wrigley building plaza, the tour boat docks, and other open areas where people enjoy the river sights and sounds. Survey sites included Centennial Fountain; North Pier; and riverside cafes, restaurants, and plazas along the Chicago River between Lake Shore Dr. and Jackson Blvd.

4. **The Palos Area (Reach 9):** The Palos Forest Preserve is the largest open space in Cook County. Hiking and bicycle trails crisscross the preserve. The county's only rock canyon can be found in Palos, as can areas of native vegetation being restored by volunteers and the Forest Preserve District. Sloughs, creeks, and portions of the Chicago River corridor offer water-based recreation. Residential, industrial, and commercial sites surround the Palos Forest Preserve. Portions of the I&M Canal bike trail that parallel the Sanitary and Ship Canal were surveyed (other recreation sites in this area were too far from the river corridor to include, and "user-made" riverside trails were not in use when interviewers were on-site).

5. **The Cal-Sag Area (Reach 10):** The Cal-Sag area has a mixture of industrial, commercial, and residential uses, with recreation and open spaces sprinkled throughout. Several smaller forest preserve sites are located in the area, as are private marinas, and large landfills that have served Chicago for decades. Survey sites include the Alsip boat landing, Beaubien Woods and Calumet Boating Center Cook County forest preserve areas, and private marinas near the O'Brien Locks.

At certain sites a particular type of activity predominated. For instance, the Palos area respondents were primarily bikers and the Cal-Sag area respondents were often power boaters. This reflects the nature of river access in these reaches: the I & M Canal bicycle trail in the Palos area and the marinas along the Cal-Sag channel were virtually the only recreation points near the waterways. The sample reflects these limitations. However, because interviewers were at each location morning and afternoon, on weekdays and weekends, and explored nearly all potential use areas, we are confident that the sample captures overall warm-weather use characteristics of these sites.

FIGURE 3.1
Map of study reaches with location of on-site surveys

CODING OF OPEN-ENDED SURVEY RESPONSES

Responses to open-ended questions such as "What things do you like best about this stretch of the river and the areas around it?" were coded using specific category codes developed to capture the full flavor of their original comment (survey questions 6, 8, 9, and 14, Appendix 3.1). For instance, "color/sound of water" was separate from "cool breeze/fresh air." After data entry was complete, categories with few responses were grouped with other similar response categories: both "color/sound of water" and "cool breeze/fresh air" were grouped in "other nature-related" liked attributes.

We recorded multiple responses for each open-ended question. To analyze responses to open-ended questions by activity group (e.g., boaters), we assumed that the first activity reported was the respondents' main activity (over two-thirds of the people we spoke with reported only one activity), and developed a set of variables based on this first activity. After an initial discussion of activities, we use these single-activity variables in this report.

ANALYSIS

Various statistical methods were used to determine any significant difference based on site, activity, or demographic groups (one-way tables, ANOVA, and cross tabulation with chi-square). We report the probability values in tables as appropriate; all differences discussed in this chapter are significant at the .05 level.

LIMITATIONS

Although the survey provides considerable valuable information for planning future recreation improvements of the river, there are several important limitations to keep in mind.

First, the survey does not, and was not designed to, provide information about the overall percentage of Chicago area residents who participate in various activities along the river. The sampling design does not allow for this kind of inference.

Second, responses to questions about rivers in the Chicago area (survey questions 13 and 14) seemed to focus on the river corridor at the interview site. For instance, responses to "What changes do you think most need to be done to make rivers in the Chicago area better for recreation?" included general comments like "clean it up" and specific suggestions like "we need a rest room here." However, the responses are still useful, and provide many insights into respondents' perceptions of changes in river quality, and changes they would like to see made to the entire Chicago River corridor.

Finally, special characteristics of winter use are not captured in this survey. Cross-country skiing and other winter activities were, of course, not reported. Site attributes that are liked and disliked and characteristics of recreationists may change with the season. To gather this information, this survey would need to be implemented in the other seasons.

PART II
RESULTS OF THE OVERALL SAMPLE

A total of 582 surveys were completed; 344 (59%) on weekends and 238 (41%) on weekdays (Table 3.1). This section presents highlights of the overall sample. Tables in Appendices 3.2 and 3.3 provide detailed information on the responses of the overall sample by river use patterns, perceptions of the river, and demographics, as well as by area and activity groups.

DEMOGRAPHICS

We asked respondents about themselves—their age, place and length of residence, race, gender, and family income level (survey questions 18-24). The demographics of the respondents were similar to those in previous studies of forest preserve recreationists (Young and Flowers 1982). Still, these results characterize the sample only, not all users of the river corridor. Major characteristics of the sample are:

- The respondents were primarily white/European-American (78%). Black/African-American was the second largest racial/ethnic group (10%). The respondents at the North Branch/NSC area were most diverse, and the respondents at the Palos area were least diverse. A higher than overall percentage of the respondents were African-American in the Skokie Lagoons, Loop, and Cal-Sag areas; a higher percentage were Hispanic/Latino in the North Branch/NSC area; and a higher percentage were Asian-Americans/Pacific Islanders in the Skokie Lagoons and North Branch/NSC areas. Table 3.2 summarizes these groups by area.
- The largest age group of respondents were in their thirties (30%). Visitors 50 years or older made up 22% of the sample.

TABLE 3.2
Respondents from racial/ethnic groups, by area

Racial/ Ethnic Group[1]	**Total**	Skokie Lagoons	North Branch and NSC	Loop Area	Palos Area	Cal-Sag Area
		% reporting[2]				
African-American/Black	**10**	13	6	11	0	15
Hispanic/Latino	**6**	3	14	3	7	1
Asian-American/ Pacific Islander	**3**	3	5	1	2	3
North American Indian	**2**	2	4	2	0	1
Euro-American/ white	**78**	78	70	81	89	80

[1] Differences by race/ethnicity across sites were significant: x^2= 46.63, 20 df, p<.01; [2] Percentages may not add to 100 due to rounding.

TABLE 3.3
Activities reported by respondents[1]

Major Activity Categories
- *Sitting, relaxing, resting (95)*
- *Bicycling (93)*
- *Fishing (71)*
- *Lunch hour/eating (69)*
- *Walking, hiking (58)*
- *Boating (power) (54)*

Other Passive Activities (276)
- Watching park, general sightseeing (32)
- Picnicking, barbecuing (27)
- Reading/writing (27)
- Sunbathing (27)
- Taking children out to play (22)
- Taking dog out to walk or play (22)
- "Vacationing," "hanging out" (15)
- Working on car/boat (13)
- Working (paid—often reading) (11)
- Just passing through, commuting (8)
- Talking, socializing, get together (8)
- Play cards or board games/crafts (7)
- Shopping (7)
- Watch/meet people, "girl watching" (7)
- Studying (5)
- Unorganized partying, drinking (5)
- Waiting for someone (5)
- Watch sports (5)
- Photography (4)
- Smoking (4)
- Bird, animal watching (3)
- Participate in organized festival/event (3)
- Dating, kissing, affection (2)
- Boat tours (1)
- Horseshoes (1)
- Leading a river tour (1)
- Listening to music (1)
- Picking up trash/recycling (1)
- Playing an instrument (1)
- Taking in fresh air (1)

Other Active Activities (90)
- Roller-blading (27)
- Play baseball/softball (17)
- Jogging, running (11)
- Canoeing, kayak (10)
- Frisbee (6)
- Play volleyball (6)
- Play basketball (3)
- Play football (2)
- Play soccer (2)
- Waterskiing (2)
- Play other sports (1)
- Play tennis (1)
- Tubing (1)
- Windsurfing (1)

[1] 806 responses were given. Up to five responses were coded per interview, all are reported here. Frequencies are given in parentheses. Activity groups used for comparison are in italics.

- Half of the respondents were Chicago residents. In the North Branch/NSC area, virtually all visitors were Chicago residents. The Palos Area visitors were predominantly suburban residents. In other areas, there were varying degrees of mix between Chicago and suburban residents.
- There were more men than women in the sample (62% male, 38% female).

RIVER USE CHARACTERISTICS

We asked river users about what activities they engaged in during their visit, how long they planned to stay on site, how often they visit, how they got there, and what size their group was (survey questions 1-6 and 15-17). Highlights of those results follow.

ACTIVITIES

Respondents reported engaging in 50 different activities (Table 3.3). The six most commonly mentioned activities were: walking/hiking, biking, motor boating, fishing, sitting and relaxing, and eating lunch. The remaining array of activities were grouped into "other passive" activities and "other active" activities. The "other passive" activities ranged from taking in fresh air to dog training, from trumpet practice to photography. The "other active" group included sports, canoeing, and other more vigorous activities. Activity highlights include:

- "Other passive" activities was the largest category, both in number of responses and number of activities mentioned. This suggests that river areas are used for many different kinds of activities—some structured, others unstructured. The most common passive activities were watching the park/sightseeing, picnicking, reading or writing, sunbathing, taking the kids or the dog out to play, and "hanging out." Some of these activities appear to be independent of the river; in others the river may be an integral part of the experience (for instance, watching the river flow by might have been important to someone who said they were "hanging out"). That so many different activities are engaged in along the river suggests that the river is a place that facilitates creativity and individual expression.
- Activities varied considerably by site; characteristics of the river and its corridor and available facilities affected this to some extent. The Skokie Lagoons had a mix of active and passive use; fishing and biking were important activities. "Other passive" activities were prominent at the North Branch/NSC area. Major activities in the Loop were eating lunch and relaxing. The Palos area had many cyclists and roller-bladers. Boating was the main activity in the Cal-Sag area. Table 3.4 summarizes the activity groups by area.

TABLE 3.4
Activity groups, by area[1]

	Total	Skokie Lagoons	N. Branch and NSC	Loop Area	Palos Area	Cal-Sag Area
Activity		% reporting[2]				
Other Passive	**28**	16	47	31	0	32
Bike	**14**	26	6	1	64	0
Sit/relax	**13**	4	13	29	0	4
Fish	**11**	29	10	1	2	5
Other active	**10**	10	13	2	22	1
Walk/hike	**9**	10	11	13	2	0
Motor boat	**8**	0	0	1	0	57
Eat lunch	**7**	4	0	21	0	1

[1]Based on first response to activity questions.
[2]Percentages may not add to 100 due to rounding.

TRANSPORTATION, VISIT LENGTH AND FREQUENCY, AND GROUP SIZE

Respondents varied greatly in their transportation to the site, their visit length, group size, and frequency of visiting the river. Respondents traveled to the area by a variety of means, stayed anywhere from a few minutes to several days, recreated alone or in groups as large as 200, and had come for the first time or nearly every day. Use pattern highlights include:

- Most of the recreation took place in small groups or individually. Groups of more than six people were reported by only 8% of respondents. Recreating alone was the predominant pattern in the Loop, but larger groups were most common in the North Branch/NSC area. Groups of two to six people were more common in the other areas. Children were more likely to be a part of the group in the North Branch/NSC and Cal-Sag areas.
- Most respondents drove to the area—including cyclists. The Loop was the only area where walking was the most common means of transportation to the area.
- Most visitors either lived or worked nearby (within one mile) *or* traveled over four and a half miles to the area. Visitors from nearby walked, drove, and biked to the area. Nearby use was most common in the North Branch/NSC area and in the Loop. The Skokie Lagoons, Palos, and Cal-Sag areas had more regional use.
- Half of the respondents were frequent visitors, coming to the area at least weekly. Daily visits were most common in the North Branch/NSC and Loop (the two areas with heavier local use).
- Visit length varied considerably by area and activity; visits of one hour or less were most common overall. Visits of less than an hour were the rule in the Loop. The longest visits were reported in the Cal-Sag area, where 15% planned overnight stays on their boats.

PERCEPTIONS OF THE RIVER

Respondents were asked three questions about their perceptions of the stretch of river where they were interviewed, and two questions about rivers in the Chicago area in general. Two open-ended questions were asked about what they liked and disliked about the site where they were interviewed (survey questions 8 and 9). Respondents were also asked closed-ended questions about the importance of the river to their enjoyment of their recreational activities that day, and about their perceptions of potential problems such as water quality interfering with their use and enjoyment of the river (survey questions 7 and 10). Questions about rivers in the Chicago area in general were used to assess what they thought most needed changing to improve the rivers for recreation, and whether they felt river recreational quality had improved, stayed the same, or gotten worse in the past few years (survey questions 13 and 14). Highlights from the sample include:

- The majority of the respondents—65%—indicated that the river in their area was "very important" to their enjoyment of their recreation activity. It was particularly important to respondents in the Skokie Lagoons, Loop, and Cal-Sag areas.
- The qualities of the river mentioned most often as "likes" were scenic beauty, facilities (like parking, picnic areas, plazas, rest rooms), solitude/quiet, peacefulness, and other nature-related features (like landscaping). The importance of attributes varied by area: scenic qualities were more important in the Skokie Lagoons, Loop, and Palos areas; facilities were more important in the Loop and Cal-Sag areas; and opportunities for solitude were more important in the North Branch/NSC area.
- When asked what they did not like about the river, many respondents (32%) said "nothing." Those that did express a dislike cited water pollution, poor facilities, user conflicts, and trash. Water pollution was mentioned the most in the Skokie Lagoons and Cal-Sag areas. Poor facilities were mentioned as a problem in all areas, but was *less* often mentioned in the Loop. User conflicts were more commonly reported in the North Branch/NSC and Cal-Sag areas.
- Water quality and garbage dumping were the most-cited problems that might interfere with the use and enjoyment of the site; they were mentioned by over half of the entire sample. Water quality was rated more of a problem in the southern areas (Cal-Sag and Palos). Dumping was rated a problem by at least half of the respondents in all areas.
- Respondents wanted a cleaner river. When asked what changes were needed to improve Chicago area rivers, 37% said clean up the water, and 9% said clean up the trash and the corridor. Activity- and facility-related improvements were also mentioned frequently.

PART III
ISSUES OF MANAGERIAL INTEREST

Results of this survey can help managers deal with many issues about public use of the Chicago River Corridor. These general issues include:

- How important is the Chicago River to current recreation users? What is the nature of this importance, and what effect might this have on management?
- What is the public's meaning of "clean?" Will they know a clean Chicago River when they see it? What emphasis should managers place on education and on remediation?
- How much access is desirable? What *kinds* of access—physical, visual, both? What problems might arise from, or be reduced by, increased access?
- How important are opportunities to experience nature and scenic beauty to current recreational users?
- What developments do current users most want to see? What level of development should be aimed for—large or small scale, riverside trails or pocket parks?
- Do people feel safe recreating along the river? Are there important safety concerns that need to be addressed?

These questions can not be fully answered by these survey results, but useful information is available. The issues discussed in this section are based on questions like these that we have been asked by managers and planners, as well as on prevalent themes in the survey responses. Particular attention is given to respondents' likes and dislikes of the specific site where they were interviewed; their perceptions of specific problems' effects on their recreational enjoyment of the interview site; their impressions of river recreational quality improvements, and the changes they would like to see made to rivers in the Chicago area. Respondents' comments and ideas in each of these areas can contribute to our understanding of the issues affecting current and potential use of the Chicago River (see Study Methods discussion and Appendix 3.1 for more detail on the survey questions).

Five key issue areas are discussed here: importance of the river to recreational enjoyment and river access issues; water quality; facilities and development; crime, safety, and user conflicts; and nature, natural areas, and scenic qualities. Each issue area will begin with a brief report of pertinent findings and then introduce relevant differences between respondents by survey area, activity, and demographic group.

IMPORTANCE OF RIVER USE AND ACCESS

The river was very important to most visitors; few rated the river as unimportant or detrimental to their recreational enjoyment. The importance of the river was associated with river access. Where access was greatest, so too was the importance of the river to recreationists. For this reason, importance and access are discussed together. This discussion is based on several survey items about the river at the interview site, including ratings of the river's importance and of some specific problem areas, the likes and dislikes mentioned, and comments about desired changes for Chicago area rivers (survey questions 8, 9, 10, and 14).

RECREATION USERS

When asked "how important do you feel the river here is to the enjoyment of your recreation activities today (very, somewhat, not important, or detrimental)?" the majority of respondents said "very." This was the case in most areas and for most activity groups. At least three-quarters of respondents in the Cal-Sag, Skokie Lagoons, and Loop areas rated the river as very important, while respondents in the North Branch/NSC and Palos areas reported more diverse feelings about the importance of river (Table 3.5).

Water-based activity groups like boaters and anglers were most likely to rate the river very important, and this is not surprising. But the river was also important to walkers and people on their lunch breaks (Table 3.6). The river was rated very important to more than 50% of the respondents in each activity group except biking. However, bikers' perceptions vary considerably by area: 62% of the cyclists in the Skokie Lagoons rated the river as very important, but only 26% of the cyclists in the Palos area did so.

TABLE 3.5
Importance of the river for recreational enjoyment, by area[1]

	Very important	Somewhat important	Not important or detrimental[2]
		% reporting	
Cal-Sag area	82	14	4
Skokie Lagoons	80	15	5
Loop area	75	19	6
N. Branch/NSC area	40	23	37
Palos area	31	58	14
Total	**65**	**22**	**13**

[1] Based on survey question 7; differences across sites significant at the .01 level.
[2] These two response categories are reported together because only 4 of the 582 respondents reported the river was "detrimental" to their enjoyment.

TABLE 3.6
Importance of the river for recreational enjoyment, by activity[1]

	Very important	Somewhat important	Not important or detrimental[2]
		% reporting	
Fish	97	3	0
Motor boat	87	9	4
Lunch	76	21	2
Walk	73	15	12
Other Passive	59	15	26
Sit/relax	56	35	9
Other Active	55	31	15
Bike	43	44	13
Total	**65**	**22**	**13**

[1] Based on survey question 7; differences across sites significant at the .01 level.
[2] These two response categories are reported together because only 4 of the 582 respondents reported the river was "detrimental" to their enjoyment.

ACCESS TO THE RIVER

Lack of open space on the river was rated a problem by at least a third of respondents in every area except the Skokie Lagoons, and by over half in the Cal-Sag area (Table 3.7). Although Cal-Sag respondents rated lack of open space along the river as a problem, they also appreciated the current access—they were the group most likely to mention it as an important attribute. Loop respondents were most likely to mention *increased* access as a way to improve Chicago area rivers. North Branch/NSC respondents were the only ones bothered by fences blocking access; almost a quarter of these respondents rated fences a problem. Unlike those in other areas, Skokie Lagoons respondents did not rate lack of open space along the river or fences blocking access as problems, and they were relatively unlikely to suggest increased access to Chicago area rivers as a change they wanted.

TABLE 3.7
River access, by area

Area	Likes access[1,3,5]	Wants increased river access[1,4,5]	Lack of open space a problem[2,3]	Fences a problem[2,3]
	% reporting			
Skokie Lagoons	3	7	16	1
N. Branch/NSC area	3	9	32	24
The Loop area	7	10	34	12
Palos area	2	4	42	17
Cal-Sag area	23	3	55	6
Total	**7**	**7**	**33**	**12**

[1]Differences across sites significant at the .01 level. [2]Differences significant at the .05 level. [3]From questions 8 & 10, based on the interview site. [4]From question 14, based on Chicago area rivers in general. [5]Sparse cells may affect stability of results.

TABLE 3.8
River access, by activity

Area	Likes access[1,3,5]	Wants increased river access[1,4,5]	Lack of open space a problem[2,3]	Fences a problem[2,3]
	% reporting			
Walk	2	4	25	16
Bike	1	4	27	6
Motor boat	38	2	60	9
Fish	5	0	25	8
Sit/relax	3	7	37	13
Lunch	10	14	35	10
Other Passive	6	12	30	12
Other Active	4	11	33	22
Total	**7**	**7**	**33**	**12**

[1]Differences across sites significant at the .01 level. [2]Differences significant at the .05 level. [3]From questions 8 & 10, based on the interview site. [4]From question 14, based on Chicago area rivers in general. [5]Sparse cells may affect stability of results.

For activity groups, access was most important to boaters—over a third mentioned access as a liked attribute (Table 3.8). A majority of boaters also rated lack of open space along their stretch of the river as a problem. Access was important for recreationists engaged in other activities as well. At least one-quarter of respondents in each activity group rated lack of open space along their stretch of the river as a problem. This was particularly a problem for people on-site to eat lunch or to sit and relax. "Other active" recreationists were most likely to rate fences blocking their access to the river as a problem.

DISCUSSION

Importance of the river and access to it appear to be linked. The areas with the highest ratings of the river's importance were also the areas where physical or visual access was greatest. For instance, in the Cal-Sag and Skokie Lagoons areas, it is easy to get to the river's edge, and each area has boat ramps. Similarly, visual access was high in the Loop and, again, the Skokie Lagoons—it is easy to see the river from trails and plazas, and therefore easier to enjoy its presence.

Activity groups, too, show a clear association between physical or visual access and importance of the river. Boaters and anglers, who rated the river as very important, need direct access to the river. Walkers and people on their lunch breaks, who also rated the river as important, were generally in the Loop or Skokie Lagoons—two areas with higher levels of visual access to the river. And the greater visual access in the Skokie Lagoons may explain some of the difference in river-importance ratings between cyclists on the Palos area bike trails and those on the Skokie area trails.

In the North Branch/NSC and Palos areas, two areas where the river was rated less important, several factors limit accessibility. Both areas have dense vegetation along the river, are often fairly steeply banked, and the river is lower than the prevailing grade, making visual access of the channel more difficult. Neither the North Branch/NSC area or the Palos area has accommodations for direct access to the river, although informal access points have been created, such as the low-head dam on the North Branch/NSC near Foster Avenue for fishing.

The river is also important to different activity groups whether or not the activity depends on water. For instance, neither walking nor taking a lunch break relies on the river the way that boating does, but respondents in both of these activity groups rated the river as very important to their recreational enjoyment.

Although increased access may be desirable in some areas, it could also bring difficulties. For instance, crowding may become more of an issue with additional use, and safety issues may also be affected.

In our study, crowding was not rated as a significant problem in any area except the Skokie Lagoons on Sundays, so the possibility of crowding as a problem may be slight. But, the potential of this is difficult to gauge with this data.

Increased access could also affect perceptions of safety. Like crowding, concerns about personal safety were limited in our results. Safety may be perceived as better with more people around or worse due to more strangers in the area. Dense vegetation can also play a role in perceived safety; this will be discussed further in the crime, safety, and user conflict issue area.

The increased river access called for by many respondents may be provided in many ways, not just by highly developed marinas and large parks. Access at street dead-ends, strategically placed benches, and other modest access can provide the scenic beauty, solitude, appreciation of natural areas, and other attributes desired by users. Access need not always be a trail or access to in-stream use of the river; some recreationists just enjoy a site without "going anywhere" along the river.

WATER QUALITY

Water quality is a major issue to the recreational users of the Chicago River that we interviewed. Many respondents' comments echo the original Clean Water Act's goals of achieving

fishable, swimmable waters. Although some were aware of recent water quality improvements, many were not. Few, however, thought that water quality in Chicago area rivers had gotten worse. A gap seems to exist between the progress that has been made and the public perception of that progress. At the same time, recreation users' desires for even cleaner water were apparent.

Several different interview questions provided information about respondents' perceptions of the larger issue of water quality. Some focused specifically on the stretch of the river where the interview took place; others dealt with rivers in the Chicago area in general. Concerns about dumping along the banks and water odor, comments about water pollution, and perceived improvements in Chicago-area river recreational quality all provide insights into respondents' overall assessment of water quality (survey questions 8-10 and 13-14). Water quality and dumping garbage in the river and along the banks were very important issues to many people we interviewed in every area. Water odor was a very important issue in some areas, but not in others. In order to look at water quality as an overall issue, we developed an index that averages the percent of the sample who indicated that water quality was a problem on the separate items dealing with water quality (Table 3.9).

Although water quality was a critical issue, the news is not all bad. Not only were respondents in some areas less concerned about water quality, but a third felt that, overall, the rivers in the Chicago area had improved for recreation, and some specifically mentioned that they like the fact that the river corridor is clean or getting cleaner. As with water quality as a problem, we developed an index that averages the percent of the sample who indicated improvements in water quality on the separate water quality items (Table 3.10). These observations of recent improvements, and desire for continued cleanup, however, often accompanied negative impressions of present water quality.

TABLE 3.9
Perceptions of water quality deterioration, by area

	WQ[1] mentioned by respondent[2]	WQ rated a problem[2]	Dumping rated a problem[2]	Water odor rated a problem[2]	Want improved WQ[3]	Overall WQ Deterioration Index
	%					avg. %[4]
Cal-Sag area	33	67	67	43	52	52
Palos area	16	66	76	56	31	49
Skokie Lagoons	22	56	61	18	39	39
N. Branch/ NSC area	13	46	61	35	42	39
The Loop area	19	55	51	25	32	36
Total sample	**20**	**56**	**60**	**31**	**38**	**41**

[1]WQ = water quality. [2]From questions 9 and 10, based on the interview site. [3]From question 14, based on Chicago area rivers in general. [4]Average of columns 1-5.

TABLE 3.10
Perceptions of water quality improvements, by area

	Area river quality has improved[3] %	The river is getting cleaner[2] %	Overall WQ[1] Improvement Index avg. %[4]
Cal-Sag area	56	11	34
The Loop area	36	11	24
Skokie Lagoons	34	5	20
Palos area	31	4	18
N. Branch/NSC area	22	10	16
Total sample	**34**	**9**	**22**

[1]WQ = water quality. [2]From question 8, based on the interview site. [3]From question 13, based on Chicago area rivers in general. [4]Average of columns 1 and 2.

WATER QUALITY BY AREA

Respondents in the Cal-Sag area were the most likely to feel that water quality was a problem (Table 3.9). Respondents in these areas mentioned it most often, and when asked, were most likely to rate it as a major problem. At the same time, respondents in this area saw both the most improvement in Chicago-area river quality, and most wanted continued water quality improvements in area rivers (Table 3.10). In short, they saw the progress that had been made, liked it, and wanted more done to solve what they saw as a still serious problem. With other study areas, the picture is less clear. Different aspects of the water quality issue were critical in some areas and unimportant in others. The Palos area ranks second in the overall water quality deterioration index. Respondents in this area were more concerned with dumping and water odor than were respondents in the other surveyed areas, and Palos respondents rated water quality a problem almost as often as Cal-Sag respondents. The remaining three areas had very similar water quality deterioration index totals. Respondents at the Skokie Lagoons were the second most likely to mention water quality as a problem; dumping was also a concern. Respondents in the North Branch/NSC area rated water odor as a particular problem, were the second most likely group to want improved water quality in Chicago area rivers, were much less likely to rate Chicago-area river quality as improved, and considered dumping along the river in their area a problem. Respondents in the Loop were, overall, the least concerned with water quality, and ranked second in their perceptions of recent improvements.

WATER QUALITY BY ACTIVITY

Boaters, "other active" recreationists, and walkers differed the most from other activity groups in their perceptions of water quality (Table 3.11). Boaters in particular were most likely to think that water quality was a problem. Their responses mirror those from the Cal-Sag area—seeing many problems as well as seeing recent improvements (Table 3.12). This is not surprising given that 57% of respondents in the Cal-Sag area were boaters. Still, "other active" recreationists were more likely than boaters to rate water quality and water odor as problems.

Water quality was much less of an issue for walkers—as a group, they were the least concerned about all of the water quality related issues except odor. Walkers were also second only to boaters in their likelihood of noticing recent water quality improvements in Chicago area rivers (Tables 3.11 and 3.12).

Although anglers were similar to the total sample in the overall water quality index, they mentioned water quality as a dislike often—second only to boaters in frequency. This suggests that water quality has a greater importance to anglers, even though their overall opinion on all factors affecting water quality was average. Anglers were also much *less* likely to feel that river quality in the metropolitan area had improved, and they were twice as likely as the overall sample to rate area river quality as having gotten *worse.*

TABLE 3.11
Perceptions of water quality deterioration, by activity

	WQ[1] mentioned by respondent[2]	WQ rated a problem[2]	Dumping rated a problem[2]	Water odor rated a problem[2]	Want improved WQ[3]	Overall WQ Deterioration Index
	%					avg. %[4]
Motor Boat	34	66	68	43	51	52
Other Active	26	68	62	49	33	48
Lunch	24	67	60	31	43	45
Bike	14	54	64	41	36	42
Fish	27	53	66	16	36	40
Other Passive	18	53	56	27	41	39
Relax	15	59	53	28	39	39
Walk	11	37	46	21	27	28
Total Sample	**20**	**56**	**60**	**31**	**38**	**41**

[1]WQ = water quality. [2]From questions 9 and 10, based on the interview site. [3]From question 14, based on Chicago area rivers in general. [4]Average of columns 1-5.

TABLE 3.12
Perceptions of water quality improvements, by activity

	Area river quality has improved[3] %	The river is getting cleaner[2] %	Overall WQ[1] Improvement Index avg. %[4]
Motor Boat	55	9	32
Walk	39	14	27
Lunch	38	7	23
Bike	42	2	22
Other Passive	33	10	22
Relax	24	13	19
Fish	27	8	18
Other Active	27	7	17
Total Sample	**34**	**9**	**22**

[1]WQ = water quality. [2]From question 8, based on the interview site. [3]From question 13, based on Chicago area rivers in general. [4]Average of columns 1 and 2.

RESPONDENTS' PERCEPTIONS OF SOURCES OF DUMPING AND POLLUTION

Respondents' feelings about water quality problems and the source of the pollution are shown in their responses to the open-ended questions about what they dislike about the site where they were interviewed and what changes they want for rivers in the Chicago area. The perception that illegal dumping and industrial pollution are common occurrences seemed widespread. Comments included: "stop industrial dumping," "pollution laws enforced—change laws, make 'em stronger," "control dump sites and pollution," "stop industrial runoff/drainage," "less chemical dumping," "clean debris, pollution, old beds, cars etc." and "less pollution—EPA get a handle on factories."

WATER QUALITY BY DEMOGRAPHIC GROUPS

Respondents in their teens or twenties were more likely to consider water quality a serious problem than those in older age groups. Also, the percentage of respondents rating water quality as a problem—major or somewhat—declined through the age categories. People of color were more likely to rate Chicago area river quality as having gotten worse, which is not surprising because 30% of these respondents were anglers, a group with similarly low impressions of improvements in river quality.

DISCUSSION

Over the past decade, many significant water quality improvements have been made throughout the corridor. Some of these improvements are readily apparent, such as the cleaning of trash from the river by the Metropolitan Water Reclamation District's skimmer boats, and the reduction in solid waste in the river due to their Deep Tunnel project. Other improvements are less discernible to the average person, but are none the less important, such as increased dissolved oxygen concentrations and decreased ammonia levels. Together, these improvements are significant and have important ramifications for recreational use of the river system.

These improvements have been noticed by some respondents. Although we asked about perceived improvements to rivers in the Chicago area in general (survey question 13), the response patterns indicated that respondents often answered with the stretch of river where interviewed in mind. Where the respondent was most familiar with the river, or the changes were most visible—litter cleanup in the Loop, reduced pollution and dumping in the Cal-Sag area—the perception of improved quality was greater. Views on river quality improvements differed between boaters and anglers. Boaters perceived increased quality more than other activity groups, perhaps because they have more direct contact with the water. However, anglers, too, come in close contact with the water, and many of them perceive river recreation quality as worse than several years ago. Yet, anglers and boaters are very similar in their perceptions of dumping as a major issue.

Responses to open-ended questions showed that perceptions of the effectiveness of current environmental laws and the successful efforts of local and federal agencies to control point-source pollution may not accurately reflect the actual changes in the area's waterways. Still, some of the areas in the survey, such as the Cal-Sag area, do face serious pollution problems. Respondents there were aware of this. But comments about industrial dumping and other pollution were made in each area we surveyed in the Chicago River corridor, even if industry was relatively far away.

Water quality was *the* predominant issue for the recreationists we interviewed. Some of our findings clearly show the great need for more public outreach about recent water quality improvements. Some of these improvements are less noticeable to the naked eye (and nose) and may need greater explanation to the public. Examples in this category include the changes in aquatic habitat from eliminating chlorine in the waste water treatment process.

Public outreach and education may improve general understanding of the positive trends in water quality. But outreach alone will not address the concerns of many river corridor recreationists about water quality or their interest in continued water quality improvements. The respondents clearly want continued cleanup.

FACILITY AND DEVELOPMENT ISSUES

Facilities were important to the people we interviewed but were also sometimes seen as problems. Respondents rated lack of facilities such as benches and paths third to dumping and water quality as overall problems, mentioned facilities as both likes and dislikes, and suggested many facility-related changes (e.g., maintenance) and specific activity-related changes (e.g., stocking fish) to improve Chicago area rivers (survey questions 8-10 and 14). These responses can help guide planning for specific areas or activities.

FACILITY ISSUES BY AREA

Just over a third of Skokie Lagoon respondents rated lack of facilities a problem, and they were also most likely to mention poor facilities as a disliked feature of the area. Facility-related comments include: "[I] prefer a walking path isolated from the bike path," "[I'd like] more water access for canoes, boat rentals, and more space between the dams." A third of the respondents at the Skokie Lagoons suggested activity-related changes to improve Chicago area rivers (Table 3.13). They particularly wanted fish stocked in the Lagoons (bluegill, crappies, northern, muskie, and various kinds of bass).

North Branch/NSC respondents complained about the lack of water fountains and rest rooms, and were most likely to mention facility-related changes. Comments include: "Peterson Park has a nice washroom. We should have one here, too." They also indicated a need for park furniture: "[I'd like] a porta-potty, grills, and picnic tables."

Respondents in the Loop liked the facilities available to them—they mentioned facilities as a liked attribute more often than respondents in other areas. Comments include: "I really just like the water; I also appreciate the tables set up along the river, and all the other areas where the public can enjoy the river." Still, there were some complaints. Some indicated that Lower Wacker Dr. and the empty lot behind it was unsightly (the lot is now a golf course), or that they were frustrated that the riverwalk was not continuous. One respondent said, "clean it up a bit, plant more trees, [put in] more benches."

In the Palos area, the bike trails were liked by many—not surprising as we were talking primarily with bikers. But Palos respondents also reported a need for more washrooms and drinking fountains: "There's no toilet at this place!" They rated lack of facilities and boat ramps as a bigger problem than in most other areas: "We could use some boat launches and restaurants." When making suggestions for changes, however, these respondents rarely returned to the facilities issue—their percentages of facility- and activity-related changes are some of the lowest of the areas (Table 3.13).

TABLE 3.13
Facility likes and dislikes, by area

	Likes[2]		Dislikes[2]		Problems[2]		Changes[3,5]	
	Facilities[1]	Trails[1]	Poor facilities	Toilets[1] water fountain[1,4]	Lack of facilities	Lack of boat ramps[1]	Facility-related[1]	Activity-related[1]
	Percent reporting							
Skokie Lagoons	10	10	25	5	37	17	10	33
N. Branch/NSC area	20	1	20	12	39	19	27	19
The Loop area	39	0	10	2	48	13	15	12
Palos area	7	40	22	26	56	42	7	13
Cal-Sag area	33	0	19	1	62	44	14	33
Total	**20**	**6**	**17**	**8**	**46**	**22**	**15**	**22**

[1]Differences across sites significant at the .01 level. [2]From questions 8, 9, & 10, based on the interview site. [3]From question 14, based on Chicago area rivers in general. [4]Sparse cells may affect stability of results. [5]Facility-related changes refer to general issues like maintenance and related issues, while activity-related changes refer to activity-specific recommendations like stocking fish.

The Cal-Sag respondents liked the boat ramps, docks, and marinas: "[This is the] friendliest marina, a nice group of business owners, it's kept up clean and nice, not dealing with drunk rowdies." Still, these respondents rated lack of facilities and boat and canoe landing areas as problems more often than in any other area. The changes they suggested were more often specifically boating-related changes. These included removing underwater obstacles and increasing the number of boat fueling areas and docks: "[We need] more marinas—revitalize deserted industrial sites."

FACILITY ISSUES BY ACTIVITY

Some of the activity groups' facility-related responses were not surprising: Cyclists liked the bike trails, anglers were very interested in stocking the fishing areas, and boaters were most likely to rate lack of boat ramps a problem (Table 3.14). But other activity group responses were less predictable.

People on site to walk and hike were somewhat more likely to mention poor facilities as a dislike, but they were the activity group least likely to rate lack of facilities as a problem. Cyclists mentioned poor facilities and lack of toilets and water fountains as dislikes. People on their lunch breaks mentioned facility-related likes most often—usually referring to the benches and plazas available to them along the river in the Loop. "Other active" recreationists mentioned poor facilities, lack of toilets, and lack of water fountains as dislikes, and they rated lack of boat ramps a problem nearly as often as boaters did.

DISCUSSION

Facilities were an important issue, ranking only behind garbage dumping and water quality. But the respondents focused on maintaining existing facilities; many specifically mentioned garbage pickup and trail maintenance. They were less interested in developing a new, large-scale complex of shops, boat slips, and other entertainment facilities like the North Pier development (although some did mention an interest in this type of facility development). There is some interest in additional boating facilities as indicated by the "other active" recreationist group's interest in more boat ramps, and the Skokie Lagoon and North Branch/NSC visitors' interest in canoeing and boating related facilities (e.g., rentals).

One of the clear interests of current users was in more and better toilet and drinking water facilities in several areas (particularly the Palos and North Branch/NSC areas), and more benches, tables, or grills in most areas. Changes to better accommodate certain activities, particularly by stocking fish, and other changes like path maintenance, water fountain and toilet improvements, and an increase in tables, grills and the like, were the changes mentioned most. Garbage pick up and trail maintenance were specifically mentioned by many respondents.

CRIME, SAFETY, AND USER CONFLICTS

Concerns about crime and safety issues could affect the recreational use of the river corridor. We asked current recreationists whether or not personal safety (e.g., concern about attack), public safety (e.g., concern about falling in the water), or vandalism were problems at the site where they were interviewed (survey question 10). Respondents also offered crime, safety, and user conflict related information when asked about their likes and dislikes about the river corridor and when they suggested changes for rivers in the Chicago area (survey question 8, 9, and 14).

TABLE 3.14
Facility likes and dislikes, by activity

	Likes[2]		Dislikes[2]		Problems[2]		Changes[3]	
	Facilities[1,4]	Trails[1,4]	Poor facilities	Toilets[1,4] water fountain[1,4]	Lack of facilities	Lack of boat ramps[1]	Facility-related[1,4]	Activity-related[1,4]
	Percent reporting							
Walk/hike	29	6	23	2	33	12	19	19
Bike	12	30	24	15	49	27	8	21
Motor Boat	32	0	19	0	55	51	11	26
Fish	6	3	14	0	39	8	17	55
Sit/relax	28	0	15	5	51	11	13	12
Lunch	40	0	12	0	57	17	19	5
Other Active	7	13	25	17	47	46	15	11
Other Passive	31	0	17	10	43	19	19	22
Total	**20**	**6**	**17**	**8**	**46**	**22**	**15**	**22**

[1]Differences significant at the .01 level. [2]From questions 8, 9, & 10, based on the interview site. [3]From question 14, based on Chicago area rivers in general. [4]Sparse cells may affect stability of results. [5]Facility-related changes refer to general issues like maintenance and related issues, while activity-related changes refer to activity-specific recommendations like stocking fish.

CRIME AND SAFETY

Concerns about crime were most significant in the North Branch/NSC area. Those concerns included gangs, vandalism, and the need for more police protection (Table 3.15). Comments from North Branch/NSC area respondents include: "[There are] too many criminal elements, winos, gangs," and "Control the gangs—weekends and weekdays, late afternoon and evenings."

In the Palos area, crime and safety were also concerns, but were less often mentioned than in the North Branch/NSC area. About one-quarter of Palos respondents rated public and personal safety as problems. In the Cal-Sag area, public safety was rated a problem by one-fifth of the respondents. Still, most respondents in each area did not report concerns about accident or assault as problems.

USER CONFLICTS

Respondents mentioned several forms of non gang-related user conflicts, from disregard of no-wake zones to dog owners who let their dogs run off the leash. Both boaters and anglers wanted increased surveillance of other boaters' and anglers' activities—and these two groups were the most likely to see non gang-related user conflicts as a problem (Table 3.16). Many boaters mentioned a need for licensing of boaters, with required education and increased enforcement of existing laws. No wake zones and drunk driving were particular concerns: "[Those] ding-a-lings not knowing what a no-wake area is," "Enforce tougher laws about drinking on the boat." Anglers, too, wanted increased enforcement—specifically in enforcing catch limits and checking that all anglers have the necessary licenses. Trail conflicts were another area of user conflicts. Some walkers felt that cyclists went too fast and that the trails were crowded. Some respondents wanted wider or separate trails for different uses (e.g., separate biking and walking paths).

TABLE 3.15
Safety-related issues, by area

	Public safety like water accidents a problem[3]	Personal safety a problem[1,3]	Graffiti, vandalism a problem[1,3]	Dislikes user conflicts[1,3]	Mentioned user conflict related changes[2,4]
	Percent reporting				
Skokie Lagoons	9	14	14	14	7
N. Branch/ NSC area	7	32	62	41	15
The Loop area	7	12	15	4	4
Palos area	26	27	25	6	9
Cal-Sag area	20	9	15	34	15
Total	**11**	**18**	**26**	**17**	**10**

[1]Differences significant at the .01 level. [2]Differences significant at the .05 level. [3]From question 9 and 10, based on the interview site. [4]From question 14, based on Chicago area rivers in general.

TABLE 3.16
Safety-related issues, by activity

	Public safety like water accidents a problem[4]	Personal safety a problem[1,4]	Graffiti, vandalism a problem[1,4]	Dislikes user conflicts[1,4]	Mentioned user conflict related changes[2,5]
	Percent reporting				
Walk/hike	10	29	25	19	5
Bike	15	15	19	8	11
Motor boat	12	9	11	23	9
Fish	5	17	20	30	9
Sit/relax	9	17	27	13	9
Lunch	2	14	17	7	7
Other Active	18	23	44	18	13
Other Passive	9	16	33	27[3]	10
Total	**11**	**18**	**26**	**17**	**10**

[1]Differences significant at the .01 level. [2]Differences significant at the .05 level. [3]Reflects North Branch/NSC responses, primarily focused on gang problems. [4]From question 9 and 10, based on the interview site. [5]From question 14, based on Chicago area rivers in general.

DISCUSSION

Crime is a major issue in urban areas, and therefore could be expected to be a very important issue to recreationists in Chicago, but this was generally not the case for the recreationists we interviewed. Crime and safety were a concern in some areas (particularly the North Branch/NSC area), but were not critical issues to many of the current recreational users that we interviewed. The issues of crime and safety may converge with lack of visual access to the river in the North Branch/NSC area. Previous research shows that perceptions of safety in parks are often linked to dense vegetation (Schroeder and Anderson, 1984; Talbot and Kaplan, 1984). Dense vegetation may be feared as a place where criminals can hide, or guns and drugs can be stashed. Increased visual access could, therefore, lead to a greater sense of safety. Thinning the vegetation along the river—as in the North Branch/NSC area where safety is an issue and visual access to the river is low—would be one way of increasing visual access, and perhaps increasing perceptions of safety as well. Of course, different management of vegetation will not eliminate gangs and other safety issues. But it could affect the impact of these concerns on recreation enjoyment along the river corridor.

Whether or not fencing helps personal safety has been an issue for the MWRD and other managers (Kelly and Bielenberg, 1993). Do fences protect people from accidents along the river, or hinder their rescue when these accidents occur? Respondents to this survey did not make a connection between safety and fences: they did not call for increased fencing, or for large-scale removal of existing fences (Table 3.7). If a problem, fences are seen more as an issue of access.

Other user conflicts identified by respondents focused on boaters, anglers, and the use of trails and other facilities. These can be managed in several ways including public education or creating new facilities (like separate walking paths).

While safety is always important, it was not a primary concern for most of those we interviewed.

NATURAL AREAS AND SCENIC QUALITIES

The opportunity to experience nature was important to many respondents, and the river—whether flowing between high-rises or through forest preserves—provided these opportunities. Scenic qualities were also important to many respondents; these qualities were the attributes mentioned most often as liked about the interview site. Still, users differed in their appreciation of scenic qualities and natural areas currently available at their interview site and in the enhancements they would like to see made to rivers in the Chicago area (survey questions 8-10 and 14).

NATURAL AREAS AND SCENIC BEAUTY BY AREA

The lack of natural areas along the river was rated a problem by at least a quarter of the respondents everywhere except the Skokie Lagoons. Loop respondents expressed the most concern—55% rated lack of natural areas for vegetation and wildlife a problem (Table 3.17). Loop respondents also most often mentioned wanting nature-related *changes to* improve Chicago area rivers. This is another example where the respondents' comments seemed to refer to the specific site rather than to Chicago area rivers in general: they suggested restoring natural areas and increasing the amount of landscaping and trees. At the same time, many of these respondents appreciated the changes made recently: "I like the recent improvements, the hotels, park areas, seating," and "It may be in the middle of the city, but you wouldn't know it." Loop respondents also often mentioned scenic qualities as an attribute they liked about their site.

Scenic qualities and nature-related attributes were not mentioned often in any of the open-ended questions by respondents in the Cal-Sag area, but this response group was second highest in rating lack of natural areas a problem. This pattern

TABLE 3.17
Nature-related issues, by area

	Likes scenic qualities[1,3]	Likes nature-related features				Dislikes nature-related feature[1,3]	Lack of natural areas a problem[1,3]	Suggested improved natural areas[1,4,5]
		Wildlife[1,3]	Trees[2,3]	Nature areas[3]	Other nature[1,3,5]			
	Percent reporting							
Skokie Lagoons	28	14	8	16	3	3	17	5
N. Branch/NSC area	13	7	12	12	8	7	29	5
The Loop area	27	2	7	1	17	5	55	13
Palos area	22	16	16	11	9	11	26	4
Cal-Sag area	13	3	1	4	6	5	37	0
Total	**22**	**8**	**8**	**9**	**9**	**5**	**34**	**6**

[1]Differences significant at the .01 level. [2]Differences significant at the .05 level. [3]Based on questions 8, 9, & 10, about the interview site. [4]Based on question 14, about rivers in the Chicago area. [5]Sparse cells may affect stability of the results.

TABLE 3.18
Nature-related issues, by activity

	Likes scenic qualities[1,3]	Likes nature-related features				Dislikes nature-related feature[3]	Lack of natural areas a problem[1,3]	Suggested improved natural areas[4]
		Wildlife[1,3,5]	Trees	Nature areas	Other nature[1,3]			
	Percent reporting							
Walk/hike	23	12	4	12	15	8	33	10
Bike	32	16	11	12	6	4	18	2
Motor Boat	11	2	0	0	2	0	43	0
Fish	13	6	5	9	3	6	17	5
Sit/Relax	20	1	9	3	15	3	41	4
Lunch	19	5	14	10	17	10	52	14
Other Active	33	11	15	13	9	9	35	6
Other Passive	21	7	9	9	9	6	38	9
Total	**22**	**8**	**8**	**9**	**9**	**5**	**34**	**6**

[1]Differences significant at the .05 level. [2]Differences significant at the .01 level [3]Based on questions 8, 9, & 10, about the interview site. [4]Based on question 14, about rivers in the Chicago area. [5]Sparse cells may affect the stability of the results.

is even clearer in responses by activity group—boaters, too, almost never mentioned scenic qualities or nature-related attributes in open-ended questions, but again were second in rating lack of natural areas a problem when specifically asked about them (Table 3.18).

Natural features (wildlife, trees, nature areas, and other nature) were mentioned most often as a liked attribute in the Palos area. However, these respondents also cited nature-related *dis*likes the most. Palos respondent's comments include: "The river seemed stagnant in places," "I like the look of the area and the natural habitat," and "[This is] like being in the country."

In the North Branch/NSC area, natural features were an appreciated, if not the most important, attribute to these respondents. In their words: "[I like that there are] a lot of birds to listen to," "[I like] the fact that [the river] is here—one of the few natural things—place for birds and small animals," and "I like the turtle!" Visitors in this area also liked the trees and expressed some interest in riverside nature trails.

Many fewer Skokie Lagoons respondents rated lack of natural areas a problem. They also mentioned scenic qualities as a liked attribute most often. Comments such as "Seems like you are in wilderness" and "It's pretty—I saw two deer" were common at the Skokie Lagoons.

DISCUSSION

Urbanites often indicate that trees and water features are important attributes in their recreation settings, that they are more likely to choose sites with these attributes, and that they are very willing to pay for these features (Dwyer, et al., 1989). The on-site survey responses seem to support these earlier findings.

Interacting with nature and appreciating the scenic qualities of the river corridor were important to most respondents. For some, it seems these opportunities allowed for recuperation and rest: "[I like the] scenery, peaceful…," "[The] river makes you feel good—makes you cool," "[The river is] really relaxing. You can forget about your problems."

Other research on human/environment interactions underscores the importance of nature and its role in rejuvenation that these respondents report. Nearby nature has been shown to have many important effects on people's lives, including reducing stress, increasing job satisfaction, increasing a sense of community, and speeding recovery from surgery (Kaplan, 1993; Lewis, 1992; Ulrich, 1984; Ulrich and Parsons, 1992). The comments made by many respondents show that the river may be playing an important restorative role in their lives.

In the Loop, respondents indicated specifically that they were interested in enhanced nature, not just in enhanced open space. Recent riverside developments like the park with Centennial Fountain and the golf course south of Wacker Drive both help meet the needs expressed by these respondents.

Recreation visitors to the river may be specifically seeking out a less urbanized place to recreate, and the river corridor offers this to them. Given the evidence of the importance to urbanites of trees and other vegetation in recreation areas, as well as the benefits of nearby nature to beleaguered urban dwellers, the public expenditure required to enhance the natural features of the Chicago River corridor may be warranted.

PART IV CONCLUSIONS

The various branches of the Chicago River range in settings from the pastoral to the industrial, with recreational opportunities throughout. The recreationists we interviewed were taking advantage of many of these opportunities. They were engaged in a wide array of activities, many of them not traditional river recreation activities like boating and fishing. Chicago area residents made use of the open space and facilities along the river to play softball, to spend time with their children as they learned about turtles and other aquatic life, to read and write, and to relax and let go of the cares of the day. The river corridor accommodated all of these activities and more.

Some respondents lived or worked near the site where we interviewed them, but others regularly traveled miles from their homes to the bike trails, fishing holes, great birding spots, and boat ramps they prefer. And, most of the visitors we interviewed came often, making use of the recreation opportunities offered by the river and its corridor on a daily and weekly basis.

Current uses of the river corridor can guide future improvements. Trails are well used and liked, but respondents report that maintenance is crucial and facilities like rest rooms are necessary. But not all development needs to be trails—smaller areas along the river can be an end in themselves. These types of spaces are also well used and enjoyed by current recreationists. Increasing the number of, and access to, these types of areas is worth exploring and may facilitate the recuperative benefits some recreationists reported. And while areas like the North Pier development are popular, current users did not call for significantly more development along these lines.

Although recreation enhancement opportunities abound, continued attention to water quality is important. The trends in improved water quality do not seem to be widely understood, and there is an opportunity here for outreach. Still, there is a clear interest among respondents in achieving even better water quality. This issue came out in most every question we asked, whether it was about what people like about the area or what they don't like, what they want changed, and what they consider a problem. Water quality matters.

The Chicago River Corridor is an important recreational resource enjoyed by the Chicago area residents we interviewed. Scenic beauty and the current facilities are important to and appreciated by current recreational visitors. Water quality concerns are prevalent and urgent to these visitors as well. Managers have opportunities to enhance the enjoyment of the river for current recreationists, and perhaps to open new possibilities for future recreationists. Given the chance, people seem to come to love the river.

APPENDIX 3.1
SURVEY INSTRUMENT

Location:

Date:

Day:

Time:

Friends of the Chicago River

Summer 1993 River User Survey

Hi, I'm *(your name)* from Northeastern Illinois University and we are working with the not-for-profit group Friends of the Chicago River on a study of how people use rivers and adjacent areas for recreation and leisure. This information will be used to help plan for future river improvements in the metropolitan area. May I ask you a few questions about your use of the river and areas around it? Your answers will be strictly confidential. ***(If they hesitate, tell them it will only take a few minutes and that their input is important. Record reason for refusal, if any _____.)***

First I'd like to ask you some questions about your recreation and leisure at this place today…

1. How did you get to this place today? ____ auto ____ bike ____ on foot ____ public transportation
   ____ other: _____
2. About how long did it take you to get to here today? _____ minutes
3. About how far is that in miles? _____ miles
4. How often do you visit this place? *(probe for first time, once a year or less, 2-3 times/year, 4-10 times/year, 11-25 times/year, nearly every week, nearly everyday).*
5. About how long do you plan on being at this place today? _____ hours
6. What kinds of things are you doing here today? *(Probe for activities—"anything else?")*
7. How important do you feel the river here is to the enjoyment of your recreation activities today?
   ____ **very important;** *(I would not be here if the river wasn't here)*
   ____ **somewhat important;** *(river plays some part in the enjoyment of my recreation here)*
   ____ **not important;** *(river just happens to be here and plays no part in the enjoyment of my recreation)*
   ____ **detrimental;** *(river detracts from the enjoyment of my recreation)*
8. What things do you **LIKE BEST** about this stretch of the river and the areas around it? *(Probe for other positive attributes, and if appropriate, **why?**)*
9. What things do you **NOT LIKE** about this stretch of the river and the areas around it? *(Probe for other negative attributes, and, if appropriate, **why?**)*
10. To what extent do you feel each of the following items are problems that interfere with your use and enjoyment for this stretch of the river? For each potential problem I mention, please indicate if it is "not a problem," "somewhat of a problem," "a major problem," "don't know," or "doesn't apply."

Item	Not a Problem	Somewhat of a Problem	A Major Problem	Don't Know/ NA
a. Water quality				
b. Water odors				
c. Noise from boats, industry, or traffic *(circle which)*				
d. Garbage dumping on bank or in river				
e. Lack of public open space on the river				
f. Fencing blocking access to the river (✓ if not enough _____)				
g. Lack of shore recreation facilities like paths & benches				
h. Lack of canoe or boat landings				
i. Poor Fishing				
j. Mosquitos and other insects				
k. Public safety—water accidents, etc.				
l. Personal safety from crime				
m. Graffiti and vandalism				
n. Crowding and conflicts among boaters				
o. Crowding and conflicts among recreationists on shore				
p. Not enough natural areas for vegetation and wildlife				

The next few questions refer in general to rivers in the metropolitan area...

11. Are there places **on rivers** in the Chicago area that are especially important to you for recreation or other reasons?

    ____ No ____ Yes——> 11a. Where? *(probe for special places, views, history, etc.)*

    11b. Why are these areas important to you?

12. Besides what you're doing today, are there other things you do on rivers in the metropolitan area, including different seasons or special events? *(Probe for activities, in* ***other locations, or with other people, or special events)***

13. Over the last several years, do you think the quality of rivers in the Chicago area has gotten better for recreation, gotten worse, remained about the same, or are you not sure?

    ____ gotten better ____ gotten worse ____ remained about the same ____ not sure

14. What changes do you think most need to be done to make rivers in the Chicago area better for recreation? *(Probe for add'l suggestions—development & facilities, land policies, programs, etc.)*

    _____ not sure

~~~~~~To be filled out by respondent~~~~~~

The last few questions are for statistical purposes only. We need to be sure that we have talked with a broad spectrum of people, so that we can be more confident about the results of the survey. All answers will be strictly confidential.

15. How many people are you here with today in addition to yourself? ____ others
16. How many of these are 12 years of age or younger? ____ 12 or younger
17. Are you here as part of an organized group? ____ no ____ yes
18. What is the zip code where you live? ___ ___ ___ ___ ___
19. How many years have you lived in the Chicago area? _____ years in total
20. What is your occupation? (include student, homemaker, retired, unemployed, self-employed):
21. What is your age? ____ years
22. Are you ____ Female ____ Male
23. How do you identify your race? (check all that apply) ___ Black/African Amer. ___ Hispanic/Latin

    ___ Asian ___ White ___ Native American/N. Amer. Indian ___ Other: _____
24. What was your total family income last year, before taxes? (Check one)

    _____ less than $15,000 _____ $15 - $25,000 _____ $25 - $50,000

    _____ $50 - $75,000 _____ $75 - $100,000 _____ more than $100,000

Thank you very much! We really appreciate your help.
~~~~~~

APPENDIX 3.2 AREA TABLES

TABLE 3.2.1
Demographics by area

	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
		Percent reporting by area[1]				
RACE/ETHNICITY[2,3]						
White/European-American	**78**	78	70	81	89	80
Black/African-American	**10**	13	6	11	0	15
Hispanic/Latin	**6**	3	14	3	7	1
Asian-American	**3**	3	5	1	2	0
N.A. Indian/Native American	**2**	2	4	2	0	3
Other/mixed	**1**	1	1	1	2	1
AGE[2]						
Teens & 20s	**24**	24	26	31	16	11
30s	**30**	26	28	33	38	29
40s	**19**	18	17	19	16	25
50+	**22**	30	27	12	22	23
FAMILY INCOME[2,3]						
<15,000	**8**	7	13	7	2	5
15,000-25,000	**15**	16	22	10	18	9
25,000-50,000	**29**	28	27	26	47	28
50,000-75,000	**14**	11	10	18	7	22
75,000-100,000	**8**	5	6	13	7	6
100,000+	**6**	10	3	7	6	4
Not given	**20**	23	20	18	13	27
RESIDENCE[2]						
Chicago	**50**	37	91	46	18	37
Other	**45**	60	7	50	75	51
GENDER[2]						
Male	**62**	68	63	50	64	76
Female	**38**	32	37	49	36	24
ACTIVITY GROUP						
Walk/hike	**9**	10	11	13	2	0
Bike	**14**	26	6	1	64	0
Motor Boat	**8**	0	0	1	0	57
Fish	**11**	29	10	1	2	5
Sit/Relax	**13**	4	13	29	0	4
Eat Lunch	**7**	4	0	21	0	1
Other Active	**10**	10	13	2	33	1
Other Passive	**28**	16	47	31	0	32

[1]Percents may not total 100 due to rounding and responses not given. "Not given" is included in income due to large number of non-responses. [2]Significant at the .01 level. [3]Sparse cells may affect stability of the results.

TABLE 3.2.2
River use characteristics by area

	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
		Percent reporting by area[1]				
TRANSPORTATION TO SITE[2,3]						
Car	**58**	78	57	18	91	94
Bike	**7**	17	7	3	7	0
On foot	**30**	4	39	66	2	4
Public transportation	**4**	0	2	12	0	0
Other	**1**	1	0	0	0	3
DISTANCE TRAVELED[2,3]						
Less than 1 mile	**36**	7	59	67	6	11
1 - 3 miles	**6**	7	10	4	2	6
3 - 4½ miles	**9**	10	10	4	7	14
4½ - 10 miles	**28**	43	19	8	55	42
11 miles or more	**19**	32	2	15	27	24
HOW LONG TO GET TO SITE[1]						
Less than 5 minutes	**32**	9	44	56	11	18
6 - 10 minutes	**18**	17	24	13	22	18
11 - 15 minutes	**12**	16	10	3	26	17
16 - 30 minutes	**23**	37	19	10	27	32
31 - 90 minutes	**11**	17	2	13	11	14
VISIT LENGTH[1]						
Less than half an hour	**20**	10	16	41	2	10
30 - 60 minutes	**24**	19	22	36	29	8
1 - 3 hours	**34**	51	40	11	62	23
4 hours - full day	**19**	20	18	10	7	44
Overnight	**3**	0	1	2	0	15
VISIT FREQUENCY[1]						
First time	**14**	12	9	23	15	10
2 times/year or less	**5**	6	7	6	0	4
2 - 3 times/year	**7**	10	7	6	4	8
4 - 10 times/year	**9**	14	4	6	15	9
11 - 25 times/year	**15**	21	16	6	13	22
Weekly	**19**	14	20	14	38	22
Daily	**31**	24	36	41	16	27
GROUP SIZE[2,3]						
Self	**32**	34	28	41	27	18
One other person	**31**	27	25	38	49	22
3 - 5 people	**28**	35	28	18	16	48
6 - 11 people	**5**	2	7	2	4	11
12-200 people[4]	**3**	1	12	1	0	0
CHILDREN IN GROUP[2,3]						
Yes	**23**	23	42	9	9	32
No	**76**	76	59	91	87	66
ACTIVITY GROUP						
Walk/hike	**9**	10	11	13	2	0
Bike	**14**	26	6	1	64	0
Motor boat	**8**	0	0	1	0	57
Fish	**11**	29	10	1	2	5
Sit/relax	**13**	4	13	29	0	4
Eat Lunch	**7**	4	0	21	0	1
Other Active	**10**	10	13	2	33	1
Other Passive	**28**	16	47	31	0	32

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Sparse cells may affect stability of results.
[4]One respondent reported a group of 200; the next largest was 81.

TABLE 3.2.3
Perceptions of the river by area

	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
		Percent reporting by area[1]				
IMPORTANCE OF RIVER FOR ENJOYMENT[3]						
Very important	**65**	80	40	75	31	82
Somewhat important	**22**	15	23	19	58	14
Not important or detrimental	**13**	5	37	6	11	4
IMPRESSIONS OF QUALITY IMPROVEMENT[3]						
Better	**34**	34	22	36	31	56
Worse	**15**	14	20	13	15	14
Same	**21**	18	33	17	18	19
Not sure	**29**	35	24	34	36	11
MOST LIKED ATTRIBUTES[5]						
Scenic qualities[2]	**22**	28	13	27	22	13
Facility related[2,4]	**20**	10	20	39	7	33
Solitude[3]	**15**	19	22	10	15	10
Peaceful[2]	**10**	14	4	15	7	4
Other nature-related[2]	**9**	3	8	17	9	6
MOST DISLIKED ATTRIBUTES[5]						
Water pollution[2]	**20**	22	13	19	16	33
Poor facilities	**17**	25	20	10	22	19
User Conflicts[2]	**17**	14	41	4	6	34
Trash[2]	**12**	23	16	4	7	4
Nothing[2]	**32**	28	24	48	20	30
PERCEIVED PROBLEM AREAS[6]						
Garbage dumping[3]	**60**	61	61	51	76	67
Water quality	**56**	56	46	55	66	67
Lack of shore recreation facilities	**46**	37	39	48	56	62
Mosquitos and other insects[2]	**36**	35	45	10	67	54
Lack of natural areas[2]	**34**	16	29	55	26	37
DESIRED CHANGES[5]						
Clean the water[3]	**38**	39	42	32	31	52
Activity Improvements[2,4]	**22**	33	19	12	13	33
Facility Improvements[2,4]	**15**	10	27	15	7	14
Clean the corridor[2,4]	**13**	22	17	9	4	9
ACTIVITY GROUP						
Walk/hike	**9**	10	11	13	2	0
Bike	**14**	26	6	1	64	0
Motor boat	**8**	0	0	1	0	57
Fish	**11**	29	10	1	2	5
Sit/relax	**13**	4	13	29	0	4
Eat Lunch	**7**	4	0	21	0	1
Other Active	**10**	10	13	2	22	1
Other Passive	**28**	16	47	31	0	32

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Significant at the .05 level. [4]Sparse cells may affect stability of results. [5]Based on open-ended survey items (questions 8, 9, and 14). [6]Percentages of responses indicating issue as "somewhat" or a "major" problem (question 10).

TABLE 3.2.4
"To what extent do you feel each of the following items are problems that interfere with your use and enjoyment for this stretch of the river?," by area

Area:	Total (n=582)			Skokie Lagoons (n=148)			N. Branch/NSC (n=135)			The Loop (n=165)			Palos Area (n=55)			Cal-Sag Area (n=79)		
Level of problem[1]:	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not
ITEM	Percent reporting[2]																	
Garbage dumping on bank or in river[4]	**33**	**27**	**40**	31	30	37	32	29	39	29	22	50	38	38	24	43	24	33
Water quality	**28**	**28**	**44**	21	35	42	24	22	55	33	22	45	29	36	35	39	28	33
Lack of shore recreation facilities like paths & benches	**15**	**31**	**54**	11	26	62	13	26	61	16	32	53	18	38	44	19	43	38
Mosquitos and other insects[3]	**15**	**21**	**63**	13	22	64	13	32	55	1	9	91	29	38	32	39	15	46
Not enough natural areas for vegetation and wildlife[3]	**13**	**21**	**65**	7	10	82	11	18	72	18	37	45	6	20	75	19	18	61
Poor fishing[4]	**12**	**9**	**79**	16	10	74	14	10	76	2	2	95	9	16	75	20	13	67
Lack of public open space on river[3]	**11**	**21**	**67**	5	11	83	12	20	68	12	22	66	13	29	59	20	35	45
Water odors[3]	**10**	**21**	**69**	3	15	80	13	22	66	7	18	75	16	40	44	18	25	57
Graffiti and vandalism[3]	**9**	**17**	**73**	2	12	85	27	34	38	1	13	86	9	15	76	5	10	85
Lack of canoe or boat landings[3]	**8**	**14**	**77**	5	12	82	6	13	81	6	7	88	13	29	58	20	24	56
Noise from boats, industry, traffic[3]	**5**	**21**	**74**	11	34	54	2	16	82	6	24	71	7	9	84	0	6	93
Personal safety from crime[3]	**5**	**14**	**81**	2	12	84	10	22	69	1	11	88	11	16	73	3	6	92
Fencing blocking access to river[3,5]	**4**	**8**	**88**	0	1	98	8	16	77	2	10	88	4	13	84	5	1	94
Conflicts and crowding among recreationists on shore	**2**	**13**	**85**	1	19	79	3	11	86	1	12	87	4	7	89	0	8	90
Public safety—water accidents, etc.	**2**	**8**	**89**	1	7	90	3	4	93	0	7	93	9	16	75	4	17	80
Crowding, conflicts among boaters[4,5]	**1**	**5**	**93**	0	3	96	0	1	99	2	4	94	2	4	95	1	20	79

[1]Major = "a major problem;" "some"= "somewhat of a problem;" "not" includes "not a problem" and "don't know/does not apply" response categories. [2]Percent may not total 100 due to rounding and missing answers. [3]Differences between areas significant at the .01 level. [4]Differences between areas significant at the .05 level. [5]Sparse cells may affect stability of results.

TABLE 3.2.5
"What things do you like best about this stretch of the river and the areas around it?," by area

Attribute	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
		Percent reporting[1]				
Scenic[2]	**22**	28	13	27	22	13
Other facility related attributes[2]	**20**	10	20	39	7	33
Solitude[3]	**15**	19	22	10	15	10
Peaceful[2]	**10**	14	4	15	7	4
It's clean/getting cleaner	**9**	5	10	11	4	11
Other nature-related attributes[2]	**9**	3	8	17	9	6
Natural areas/features[2]	**9**	16	12	1	11	4
Wildlife[2]	**8**	14	7	2	16	3
Trees[3]	**8**	8	12	7	16	1
Other activity-related attributes	**8**	3	11	11	6	9
River[3]	**7**	9	3	10	2	4
Access[2]	**7**	3	3	7	2	23
Location[2]	**6**	6	7	0	4	15
Trails[2]	**6**	10	1	0	40	0
Boats (watching)[2]	**5**	5	1	10	2	4
Fishing[2]	**5**	11	4	3	2	1
Open space[3]	**5**	3	9	7	0	1
Being outdoors	**3**	3	3	4	0	1

[1] Percent will total more than 100 as multiple responses were recorded. [2]Differences significant at the .01 level. [3]Differences significant at the .05 level.

TABLE 3.2.6
"What things do you like least about this stretch of the river and the areas around it?," by area

Attribute	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
		Percent reporting[1]				
Nothing[2]	**33**	28	24	48	20	30
Water pollution[2]	**20**	22	13	19	16	33
Poor facilities	**17**	25	20	10	22	19
Other users[2]	**17**	14	41	4	6	34
Trash[2]	**12**	23	16	4	7	4
Other problems with the built environment[3]	**8**	5	4	14	6	10
Other problems with the natural environment	**5**	3	7	5	11	5
Toilets (lack of, dirty)[2]	**5**	3	9	1	13	1
Noise (traffic)[2]	**4**	10	2	3	2	0
Water fountains (lack of)[2,4]	**3**	2	3	1	13	0
Smells[2,4]	**3**	1	3	3	11	0

[1]Percent will total more than 100 due to multiple responses. [2]Difference significant at the .01 level. [3]Differences significant at the .05 level.
[4]Sparse cells may effect stability of results.

TABLE 3.2.7
"What changes do you think need to be done to make rivers in the Chicago area better for recreation?," by area

Change	Total (n=582)	Skokie Lagoons (n=148)	N. Branch & NSC (n=135)	The Loop (n=165)	Palos Area (n=55)	Cal-Sag Area (n=79)
	Percent reporting[1]					
Clean the water[3]	**38**	39	42	32	31	52
Activity Improvements[2,4]	**22**	33	19	12	13	33
Not sure[2]	**17**	15	11	22	36	8
Facility Improvements[2,4]	**15**	10	27	15	7	14
Clean the corridor[2,4]	**13**	22	17	9	4	9
Mediate user conflicts[3,4]	**10**	7	15	4	9	15
Increase river access	**7**	7	9	10	4	3
Nature Improvements[2,4]	**6**	5	5	13	4	0

[1]Percent will total more than 100 due to multiple responses. [2]Difference significant at the .01 level. [3]Differences significant at the .05 level.
[4]Sparse cells may effect stability of results.

APPENDIX 3.3
ACTIVITY TABLES

TABLE 3.3.1
Demographics by activity

	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Boat (n=47)	Lunch (n=42)
		Percent reporting by activity[1]							
RACE/ETHNICITY[2,3]									
White/European-American	**78**	78	88	81	50	84	89	85	71
Black/African-American	**10**	8	2	8	31	6	0	11	19
Hispanic/Latin	**6**	9	2	3	8	9	6	0	7
Asian-American	**3**	4	4	1	6	0	2	0	0
N.A. Indian/Native American	**2**	2	2	5	3	0	2	0	2
Other/mixed	**1**	0	1	1	2	2	2	2	0
AGE[2]									
Teens & 20s	**24**	27	17	24	25	31	12	15	41
30s	**30**	31	37	33	25	29	15	32	33
40s	**19**	16	17	21	20	24	25	19	12
50+	**22**	24	23	15	30	11	48	15	10
FAMILY INCOME[2,3]									
<15,000	**8**	11	1	9	16	6	6	0	7
15,000-25,000	**15**	15	16	8	39	15	6	6	12
25,000-50,000	**29**	29	39	35	17	31	25	23	26
50,000-75,000	**14**	15	7	15	5	16	15	21	19
75,000-100,000	**8**	9	7	9	0	9	14	6	12
100,000+	**6**	5	10	1	2	7	8	4	19
Not given	**20**	17	20	23	22	16	27	38	5
RESIDENCE[2]									
Chicago	**50**	63	31	51	73	47	35	28	50
Other	**45**	34	63	43	25	47	65	55	45
GENDER[2]									
Male	**62**	58	69	53	86	56	60	72	48
Female	**38**	42	31	45	14	44	40	28	52
AREA									
Skokie Lagoons	**25**	15	46	8	67	27	29	0	14
North Branch/NSC	**23**	39	10	24	22	31	29	0	0
The Loop	**28**	31	2	64	3	7	40	4	83
Palos Area	**10**	0	42	0	2	33	2	0	0
Cal-Sag Area	**14**	15	0	4	6	2	0	96	2

[1]Percents may not total 100 due to rounding and responses not given. "Not given" is included in income due to large number of non-response. [2]Significant at the .01 level. [3]Sparse cells may affect stability of the results.

TABLE 3.3.2
River use characteristics by activity

	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Motor Boat (n=47)	Lunch (n=42)
		Percent reporting by activity[1]							
TRANSPORTATION TO SITE[2,3]									
Car	**58**	59	64	29	84	78	31	98	21
Bike	**7**	4	36	3	0	2	0	0	10
On foot	**30**	33	0	60	14	15	58	2	62
Public transportation	**4**	4	0	8	2	2	10	0	7
Other	**1**	1	0	0	0	4	2	0	0
DISTANCE TRAVELED[2,3]									
Less than 1 mile	**36**	41	6	67	22	26	54	6	71
1 - 3 miles	**6**	6	5	7	3	11	10	9	2
3 - 4½ miles	**9**	6	8	5	9	9	10	21	7
4½ - 10 miles	**28**	31	50	7	25	42	12	40	7
11 miles or more	**19**	12	27	13	39	11	15	23	12
HOW LONG TO GET TO SITE[2]									
Less than 5 minutes	**32**	35	7	53	16	33	35	17	67
6 - 10 minutes	**18**	18	20	21	9	20	21	26	5
11- 15 minutes	**12**	10	16	5	22	16	15	11	2
16 - 30 minutes	**23**	24	33	8	39	20	10	34	14
31 - 90 minutes	**11**	9	18	11	14	6	15	13	5
VISIT LENGTH[2]									
Less than half an hour	**20**	26	7	40	2	9	27	4	31
30 - 60 minutes	**24**	20	24	32	5	16	42	11	55
1 - 3 hours	**34**	27	57	20	50	60	27	21	7
4 hours - full day	**19**	18	11	7	42	13	4	57	7
Overnight	**3**	7	0	1	2	0	0	6	0
VISIT FREQUENCY[2,3]									
First time	**14**	9	14	25	13	16	25	13	2
2 times/year or less	**5**	10	4	7	3	0	4	6	0
2 - 3 times/year	**7**	8	5	1	16	6	10	9	5
4 - 10 times/year	**9**	6	14	7	13	13	8	9	5
11 - 25 times/year	**15**	14	19	8	16	16	10	23	14
Weekly	**19**	16	18	13	17	29	19	26	19
Daily	**31**	37	26	39	23	20	25	15	55
GROUP SIZE[2,3]									
Self	**32**	36	36	39	19	26	35	9	45
One other person	**31**	23	38	32	41	31	40	15	38
3 - 5 people	**28**	28	23	25	38	27	21	57	17
6 - 11 people	**5**	6	0	3	3	9	2	17	0
12-200 people[4]	**3**	9	0	0	0	6	2	0	0
CHILDREN IN GROUP[2,3]									
Yes	**23**	19	12	16	30	29	17	38	7
No	**76**	72	85	83	70	69	83	57	93
AREA									
Skokie Lagoons	**25**	15	46	8	67	27	29	0	14
North Branch/NSC	**23**	39	10	24	22	31	29	0	0
The Loop	**28**	31	2	64	3	7	40	4	83
Palos Area	**10**	0	42	0	2	33	2	0	0
Cal-Sag Area	**14**	15	0	4	6	2	0	96	2

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Sparse cells may affect stability of results.
[4]One respondent reported a group of 200; the next largest was 81.

TABLE 3.3.3
Perceptions of river by activity

	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Motor Boat (n=47)	Lunch (n=42)
		Percent reporting by activity[1]							
IMPORTANCE OF RIVER FOR ENJOYMENT[2]									
Very important	**65**	59	43	56	99	55	73	87	76
Somewhat important	**22**	15	44	35	3	31	15	9	21
Not important or detrimental	**13**	26	13	9	0	15	12	4	2
IMPRESSIONS OF QUALITY IMPROVEMENT[2]									
Better	**34**	33	42	24	27	27	39	55	38
Worse	**15**	10	4	21	30	22	17	9	17
Same	**21**	28	17	23	23	26	12	19	10
Not sure	**29**	29	38	32	20	26	33	17	36
MOST LIKED ATTRIBUTES[5]									
Scenic qualities[3]	**22**	21	32	20	13	33	23	11	19
Facility related[2]	**20**	31	12	28	6	7	29	32	40
Solitude[3]	**15**	17	16	16	25	11	21	2	5
Peaceful [2]	**10**	5	11	20	13	6	14	2	14
Other nature related[3]	**9**	9	6	15	3	9	15	2	17
MOST DISLIKED ATTRIBUTES[5]									
Water pollution[3]	**20**	18	14	15	27	26	11	34	24
Poor facilities	**17**	17	24	15	14	25	23	19	12
User Conflicts	**17**	27	8	13	30	18	19	23	7
Trash	**12**	14	11	8	19	20	4	6	7
Nothing[3]	**32**	28	30	44	34	15	44	34	38
PERCEIVED PROBLEM AREAS[6]									
Garbage dumping	**60**	56	64	53	66	62	46	68	60
Water quality[3]	**56**	53	54	59	53	68	37	66	67
Lack of shore recreation facilities	**46**	43	49	51	39	47	33	55	57
Mosquitos and other insects[2]	**36**	35	43	19	39	53	35	45	21
Lack of natural areas[2]	**34**	38	18	41	17	35	33	43	52
DESIRED CHANGES[5]									
Clean the water	**38**	41	36	39	36	33	27	51	43
Activity Improvements[2,4]	**22**	21	20	12	55	11	19	26	5
Facility Improvements	**15**	19	8	13	17	15	19	11	19
Clean the corridor	**13**	10	11	11	25	18	6	13	22
AREA									
Skokie Lagoons	**25**	15	46	8	67	27	29	0	14
North Branch/NSC	**23**	39	10	24	22	31	29	0	0
The Loop	**28**	31	2	64	3	7	40	4	83
Palos Area	**10**	0	42	0	2	33	2	0	0
Cal-Sag Area	**14**	15	0	4	6	2	0	96	2

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Significant at the .05 level. [4]Sparse cells may affect stability of results. [5] Based on open-ended survey items (questions 8, 9 and 14). [6]Percentages of responses indicating issue as "somewhat" or a "major" problem (question 10).

TABLE 3.3.4
"To what extent do you feel each of the following items are problems that interfere with your use and enjoyment for this stretch of the river?," by activity

Activity:	Total (n=582)			Other Passive (n=163)			Bike (n=84)			Sit/Relax (n=75)			Fish (n=64)			Other Active (n=55)			Walk/hike (n=52)			Motor Boat (n=47)			Lunch (n=42)		
Level of problem[1]:	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not	Major	Some	Not
Item	Percent reporting[2]																										
Garbage dumping on bank or in river	**33**	**27**	**40**	28	28	44	27	37	36	36	27	37	44	22	34	38	24	36	17	29	52	43	26	32	41	19	41
Water quality[3]	**28**	**28**	**44**	25	28	47	20	33	46	35	24	41	30	23	36	24	44	31	21	15	62	43	23	34	41	26	33
Lack of shore recreation facilities like paths & benches	**15**	**31**	**54**	17	26	58	11	38	51	15	36	49	17	22	61	20	27	51	6	6	87	15	40	45	14	43	43
Mosquitos and other insects[4]	**15**	**21**	**63**	15	20	65	14	29	56	4	15	81	22	17	61	16	36	44	12	23	65	28	17	53	10	12	79
Not enough natural areas for vegetation and wildlife[4]	**13**	**21**	**65**	11	27	62	4	14	80	16	25	59	11	6	83	11	24	60	17	15	67	21	21	55	19	33	48
Poor fishing	**12**	**9**	**79**	9	7	83	8	10	80	9	3	88	31	20	48	13	18	65	4	2	94	19	9	70	2	2	95
Lack of public open space on river[3]	**11**	**21**	**67**	15	15	70	7	20	73	11	27	63	6	19	75	7	24	67	10	15	73	21	38	41	12	24	64
Water odors[3]	**10**	**21**	**69**	7	20	73	11	30	60	9	19	72	5	11	84	16	33	49	8	14	77	19	23	57	10	21	69
Graffiti and vandalism[4]	**9**	**17**	**73**	9	25	67	11	8	79	11	16	73	8	13	80	16	27	53	8	17	75	2	9	87	2	14	83
Lack of canoe or boat landings[4]	**8**	**14**	**77**	8	11	81	7	20	77	7	4	89	2	6	92	15	31	53	6	6	87	23	28	49	2	14	83
Noise from boats, industry, traffic[4,5]	**5**	**21**	**74**	2	23	76	12	23	66	4	23	73	3	13	83	7	20	71	10	27	62	2	4	94	10	31	60
Personal safety from crime	**5**	**14**	**81**	4	12	84	5	10	83	4	13	83	6	11	83	7	26	64	6	23	71	2	6	89	2	12	86
Fencing blocking access to river[3,5]	**4**	**8**	**88**	7	5	88	0	6	94	0	13	87	5	3	92	7	15	76	6	10	83	6	2	92	0	10	90
Conflicts and crowding among recreationists on shore	**2**	**13**	**85**	2	10	88	2	18	77	1	16	83	0	14	86	2	13	80	6	4	90	0	13	85	0	12	88
Public safety—water accidents, etc.	**2**	**8**	**89**	1	8	91	5	10	85	0	9	91	2	3	95	7	11	78	2	8	90	6	15	77	0	2	98
Crowding, conflict among boaters[3,5]	**1**	**5**	**93**	2	4	94	1	0	96	1	1	91	0	3	97	0	6	89	0	6	94	2	28	68	0	2	98

[1]Major = "a major problem;" "some"= "somewhat of a problem;" "not" includes "not a problem" and "don't know/does not apply" response categories. [2]Percent may not total 100 due to rounding and missing answers. [3]Differences between areas significant at the .05 level. [4]Differences between areas significant at the .01 level. [5]Sparse cells may affect stability of results.

TABLE 3.3.5
"What things do you like best about this stretch of the river and the areas around it?," by activity

Attribute	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Motor Boat (n=47)	Lunch (n=42)
	Percent reporting[1]								
Scenic[3]	22	21	32	20	13	38	23	11	19
Other facility related attributes[2,4]	20	31	12	28	6	7	29	32	40
Solitude[3]	15	17	16	16	25	11	21	2	5
Peaceful[2]	10	5	11	20	13	6	14	2	14
It's clean/getting cleaner	9	10	2	13	8	7	14	9	7
Other nature-related attributes[3]	9	9	6	15	3	9	15	2	17
Natural areas/features	9	9	12	3	9	13	12	0	10
Wildlife[3,4]	8	7	16	1	6	11	12	2	5
Trees	8	9	11	9	5	15	4	0	14
Other activity-related attributes	8	11	7	8	3	4	14	6	10
River	7	9	5	9	5	2	8	2	7
Access[2,4]	7	6	1	3	5	4	2	38	10
Location[2,4]	6	4	1	3	9	6	6	21	2
Trails[2,4]	6	0	30	0	3	13	6	0	0
Boats (watching)[2,4]	5	4	2	11	0	0	10	0	14
Fishing[2,4]	5	2	2	3	28	0	6	2	0
Open space[2,4]	5	11	1	4	2	4	4	0	5
Being outdoors[2,4]	3	2	4	3	0	2	2	0	12

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Significant at the .05 level.
[4]Sparse cells may affect stability of results.

TABLE 3.3.6
"What things do you like least about this stretch of the river and the areas around it?," by activity

Attribute	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Motor Boat (n=47)	Lunch (n=42)
	Percent reporting[1]								
Nothing[3]	33	28	30	44	34	15	44	34	38
Water pollution[3]	20	18	14	15	27	26	12	34	24
Poor facilities[4]	17	17	24	15	14	25	23	19	12
Other users[4]	17	27	8	13	3	18	19	23	5
Trash	12	14	11	8	19	20	4	6	7
Other problems with the built environment[2,4]	8	12	6	5	3	7	10	13	7
Other problems with the natural environment[3]	5	6	4	3	6	9	8	0	10
Toilets (lack of, dirty)[3,4]	5	7	10	3	0	6	2	0	0
Noise (traffic)	4	3	8	5	2	4	2	0	10
Water fountains (lack of)[2,4]	3	3	5	3	0	11	0	0	0
Smells[3,4]	3	1	6	5	0	7	2	0	2

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Significant at the .05 level.
[4]Sparse cells may affect stability of results.

TABLE 3.3.7
"What changes do you think need to be done to make rivers in the Chicago area better for recreation?," by activity

Change	Total (n=582)	Other Passive (n=163)	Bike (n=84)	Sit/ Relax (n=75)	Fish (n=64)	Other Active (n=55)	Walk/ Hike (n=52)	Boat (n=47)	Lunch (n=42)
	Percent reporting[1]								
Clean the water[3]	**38**	41	36	39	36	33	27	51	43
Activity Improvements[2,4]	**22**	22	20	12	55	11	19	26	5
Not sure[2,4]	**17**	14	21	24	3	26	27	9	14
Facility Improvements	**15**	19	8	13	17	15	19	11	19
Clean the corridor	**13**	10	11	11	25	18	6	13	22
Mediate user conflicts	**10**	10	11	9	9	13	6	9	7
Increase river access[2,4]	**7**	12	4	7	0	11	4	2	14
Nature Improvements	**6**	9	2	4	5	6	10	0	14

[1]Percents may not total 100 due to rounding and responses not given. [2]Significant at the .01 level. [3]Significant at the .05 level.
[4]Sparse cells may affect stability of results.

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NOTES

This project was designed and implemented by the author and co-principal investigator Paul Gobster. Marcia Henning, Northeastern Illinois University student and NCRS staff member, collected and entered the bulk of the survey information. Her diligence and cheerfulness are appreciated. Lola Lewis, a Forest Service summer intern, and members of William Howenstein's "Chicago River Issues" course at Northeastern Illinois University also helped with data collection. We thank them all. This chapter benefited from helpful comments from Laureen van Klan of Friends of the Chicago River and Paul Gobster, Susan Stewart, and John Dwyer of the Forest Service.

CHAPTER 4

Resource Experts: Discussion of Issues Related to Key Recreation Opportunities

Paul H. Gobster

SUMMARY OF FINDINGS

We conducted this study to identify the types and range of outdoor recreation and open space opportunities available in the Chicago River corridor and to learn more about how these opportunities relate to the physical and social characteristics of the resource. We turned to four major types of resource experts for this information: public land managers, non-profit recreation and environmental interest groups, commercial recreation providers, and commercial and industrial interests. In all, we conducted 38 formal and informal interviews with 55 people, representing 33 agencies, organizations, and companies. Principal questions addressed the current and projected supply of recreation and open space opportunities, issues and concerns related to current use and potential increased use for various activities, and recommendations for improving opportunities in the corridor. To help answer these questions, we supplemented the interviews with information from more than 100 secondary sources.

PROFILES OF RESOURCE EXPERTS

Three major sets of findings are presented. The first is a profile of the principal groups active in the corridor, focusing on the major public land holders, but also describing other important agencies, groups, and companies. Findings here show a long history of public agency activity in open space protection and recreation development in the corridor, an increasing concern for the ecological management of land holdings, and an optimistic outlook for increased open space acquisition and recreational access to lands. Diverse private not-for-profit groups also have an interest in the corridor, including conservation, recreation, historic preservation, and economic development concerns. These groups help plan for the corridor, provide recreation opportunities, and assist in land and water management on public lands. Partnerships between public agencies and not-for-profits are becoming increasingly important as agencies expand their management responsibilities with limited funding. The private sector's role in providing recreation opportunities has long been established in the corridor through marinas and other boating-oriented businesses. With recent improvements in water quality, this role has focused more directly on the river corridor rather than solely on Lake Michigan or other water bodies in the region. Three types of commercial and industrial interests are also found along the river: 1) Real estate companies interested in developing vacant industrial properties for commercial and residential uses. In both downtown Chicago and in suburban reaches of the corridor, developers are generally aware of the public value of the river edge and willing to work with public agencies to provide public access and amenities. 2) Businesses that see their riverfront as more than a functional asset and are amenable to aesthetic and/or recreational improvement of their properties. This may include landscaping the shoreline and providing some type of access to their employees and/or the public. 3) Businesses that do not see their riverfront as more than a functional asset and are concerned that recreational use by employees or the public would be unsafe or undesirable because of possible theft, vandalism, and/or liability.

CURRENT AND POTENTIAL RECREATION OPPORTUNITIES

The second set of findings is a reach-by-reach description of the current and potential supply of recreation and open space opportunities. Information is provided in tabular and map form. Discussion highlights four major activity types: boating, fishing, trails, and natural and cultural resource-based recreation and education. Our findings show a wealth of opportunities now available in the corridor, with plans for future increases (Table 4.1).

ISSUES RELATED TO RECREATION USES

The third set of findings presented here discuss the salient issues related to recreational use of the corridor for boating, fishing, trails, and natural and cultural resource-based recreation and education. We organized interview information and secondary data sources under the following topics: historical background, current uses, opportunities and constraints to use, prospects and implications of increased use, and recommendations by interviewees for improving recreation and open space opportunities. Findings show that although problems do exist and could increase as the corridor becomes more popular for recreation, resource experts were mostly enthusiastic about the potential of the Chicago River to supply quality recreation and open space opportunities for the metropolitan area. Major concerns and

TABLE 4.1
Summary of current and potential recreation and open space opportunities

REACH 1: WEST FORK OF THE NORTH BRANCH

- **Description:** 14 miles; narrow, shallow, and channelized; mostly residential land use with significant open and forested areas
- **Boating:** Marginal; lower part navigable by canoe/kayak with adequate flow
- **Fishing:** Little activity; bass and panfish but not a large fishery
- **Trails:** Planned 12-mile Techny Trail with links to North Branch Bicycle Trail
- **Nature/Culture:** 70-acre Somme Prairie Nature Preserve and restoration site
- **Other:** 4 parks, 1 forest preserve picnic grove, 4 golf courses

REACH 2: MIDDLE FORK OF THE NORTH BRANCH

- **Description:** 24 miles; upper stretch shallow/wetlands, channelized, mixed land use of residential, farm, and diverse open space ecosystems
- **Boating:** Marginal except for lower 3+ miles for canoe and kayak
- **Fishing:** Little activity but good potential in lower part for pike, bass, panfish
- **Trails:** Developed trails, footpaths, and part of the North Branch Bicycle Trail; proposed link of Lake County forest preserve sites with nature trail
- **Nature/Culture:** Middle Fork Savanna natural area, restoration sites in Cook and Lake County forest preserves
- **Other:** 2 municipal parks, 7 forest preserve picnic groves, 4 golf courses

REACH 3: EAST FORK OF THE NORTH BRANCH (SKOKIE RIVER)

- **Description:** 17 miles; headwater wetlands/shallow-channelized upper reach; Skokie Lagoons includes 7 pools/190 acres of water; below, river is wider and navigable; land use is residential, forest preserve, and golf courses
- **Boating:** Excellent and popular canoeing, boating (electric motors allowed), and sailing in Lagoons (7-mile round trip); canoe/kayak below Lagoons
- **Fishing:** Recently restocked Skokie Lagoons popular for bass, catfish, walleye, and panfish; little fishing below Lagoons and marginal fishery above except for fishing ponds at Greenbelt Forest Preserve
- **Trails:** 5-mile multi-use trail at Lake County Greenbelt preserve; planned nature trails through Lake County conservancy sites; North Branch Bicycle Trail, hiking and horse trails through Cook County forest preserves
- **Nature/Culture:** Several restoration sites in Lake & Cook County; Lagoons popular nature area
- **Other:** 4 municipal parks, 5 forest preserve picnic areas, 12 golf courses

REACH 4: NORTH SHORE CHANNEL

- **Description:** 17.5 miles; straight, human-created channel, 8' deep, 150' wide; owned by Metropolitan Water Reclamation District—leased mostly as open space
- **Boating:** Navigable by motorboat and canoe in its entirety; no outlet to Lake
- **Fishing:** Little activity; fishery is limited but improving
- **Trails:** 7 miles of discontiguous bike trail segments with plans to link them
- **Nature/Culture:** Ladd Arboretum/Evanston Ecology Center; birding increasingly popular
- **Other:** Several community parks, mostly passive use; 1 golf course

REACH 5: NORTH BRANCH

- **Description:** 17 miles; upper reach is winding, primarily natural forest preserves and parks; lower is channelized, deeper and wider, and industrialized
- **Boating:** Upper reach navigable by canoe and kayak; lower reach by motorboat
- **Fishing:** River Park dam popular for bullhead, carp; little activity otherwise
- **Trails:** North Branch Bicycle Trail on upper reach; proposed linkage of trails in Chicago parks w/North Branch Riverwalk; partial Chicago Riverwalk
- **Nature/Culture:** Numerous forest preserve restoration sites
- **Other:** 11 picnic groves, 12 public parks, several private parks, 3 golf courses

TABLE 4.1 (Continued)
Summary of current and potential recreation and open space opportunities

REACH 6: CHICAGO RIVER–MAIN STEM	
• **Description:**	1.4 miles; wide, deep, mostly high-rise commercial and riverwalk uses
• **Boating:**	Popular motorboating, rowing club, excursion boats; some industrial use
• **Fishing:**	Increasingly popular; bass and seasonal runs
• **Trails:**	Chicago Riverwalk is partially completed and discontiguous
• **Nature/Culture:**	Many historic and contemporary cultural sites; seasonal bird migrations
• **Other:**	Riverside cafes, public parks and plazas, interim use golf course
REACH 7: SOUTH BRANCH AND BUBBLY CREEK	
• **Description:**	4 miles (+ Bubbly Creek 1 mile); wide, deep; commercial/industrial use
• **Boating:**	Popular motorboating, rowing, excursion boats in downtown area
• **Fishing:**	Limited; some fishing (bass, carp) in turning basin and Bubbly Creek
• **Trails:**	Chicago Riverwalk proposed connection to Chinatown, points south
• **Nature/Culture:**	Many historic buildings and bridges; some vacant industrial wildlands
• **Other:**	Planned 12-acre park in Chinatown
REACHES 8 & 9: CHICAGO SANITARY AND SHIP CANAL	
• **Description:**	30 miles; straight channel for wastewater and transportation created by Metropolitan Water Reclamation District; industry and open space
• **Boating:**	Increasingly used for recreational motorboating, but heavy barge traffic
• **Fishing:**	Limited in channel; some good fishing in adjacent ponds and quarries
• **Trails:**	9 mile I&M Canal Bike Trail, 3 mile Lockport Historic Trail; planned 20 mile Centennial Trail with linkages to existing and planned trails running the length of the reach. Developed trail network in Palos forest preserve
• **Nature/Culture:**	Significant natural areas and restoration sites in Cook, Will, and Du Page Co. forest preserves; environmental education centers; historic canal towns Lemont and Lockport, Great Lakes-Mississippi portage site
• **Other:**	10 forest preserve picnic groves, 2 parks, 4 golf courses, tourism
REACH 10: CALUMET RIVER, LITTLE CALUMET RIVER, AND CALUMET-SAG CHANNEL	
• **Description:**	30 miles; wide and deep; channelized and partly human-created; largely industrial with some significant stretches of forest preserve and wetlands
• **Boating:**	Numerous marinas in eastern half; increasingly popular for recreation motorboating but heavy barge traffic
• **Fishing:**	Limited in channel, but increasing; good fishing in adjacent ponds
• **Trails:**	Presently limited except for Palos Forest Preserve network and Lake Katherine Nature Center; plans for trails running length of reach with links to existing/proposed systems
• **Nature/Culture:**	Several Palos area restoration sites and natural areas; exceptional wetlands, birding around Lake Calumet; nature centers
• **Other:**	8 forest preserve picnic groves, 6 parks, 3 golf courses

interviewee recommendations are summarized in Table 4.2 for the principal activities we covered.

The Chicago River corridor is at a turning point in recreational use and open space development; planning and management decisions made in the next few years will determine how use and development of these opportunities can be encouraged and merged with other corridor values. This chapter identifies use, resources, concerns, and issues from across the corridor, and it documents perspectives from the past, present, and proposed future. Along with findings from the companion studies in the ChicagoRivers project, this information can help guide efforts to ensure a broad spectrum of recreation and open space opportunities in the corridor.

TABLE 4.2
Summary of interviewee concerns/recommendations for primary corridor activities

BOATING

Interviewee Concerns:

- Poor access to most reaches
- Once on the river (especially downtown), there are few destinations for power boaters
- Vertical walls of waterway make it difficult for small craft operators to get out of river in emergency
- Conflicts between paddle boats and power boats
- Conflicts between recreational boats and commercial boats
- Concern about the continued livelihood of commercial carriers if their river use is restricted
- Lack of boating regulation and enforcement; intoxicated recreational boaters
- Potential increases in crowding, conflict, and safety problems as boating increases in popularity

Interviewee Recommendations:

- Develop canoe trails at appropriate locations along the waterway
- Encourage development of private marinas and public boat landings where needed
- Encourage development of boat-oriented commercial and amenity attractions
- Install ladders along the vertical river walls downtown for emergency use
- Create activities and facilities to draw boaters to little-used stretches of the corridor
- Expand and publicize boater safety training courses
- Expand the current staffing of waterway enforcement for boating
- Establish a river authority to coordinate planning and regulation of river boating use
- Expand boat tour programs to other reaches besides downtown

FISHING

Interviewee Concerns:

- Poor fishing access to river from public land
- Increasing closure of fishing access from private property
- Questions about the safety of fish consumption
- Need to sustain recreational fishery under increased fishing pressure
- Potential for increased use conflicts as fishing increases in popularity

Interviewee Recommendations:

- Incorporate fishing and other shore-oriented activities into new park development
- Develop new management and regulatory frameworks for evolving urban fisheries
- Identify and examine new opportunities for fishing
- Expand public fisheries management programs
- Expand work with volunteer groups to improve recreational fishing programs

TRAILS

Interviewee Concerns:

- Limited public access to the waterfront
- Current network of trails is fragmented
- High weekend use levels on North Branch Bicycle Trail
- New trail development may not be popular with adjacent neighbors
- Inappropriate/high use levels could harm the natural environment near the trails

Interviewee Recommendations:

- Aim for a continuous, linked network of trails
- Aim for diversity in the trail system
- Aim for an appropriate level of trail development
- Phase in new trail development in conjunction with urban redevelopment projects
- Develop coordinated signage for trails

RESOURCE-BASED RECREATION AND EDUCATION

Interviewee Concerns:

- Poorly planned corridor development could impact cultural-natural environmental quality
- Inappropriate and high levels of use of natural areas by trail riders (e.g., equestrians, mountain bicyclists) could harm restoration projects or rare plant communities
- High levels of use of natural areas by nature enthusiasts might also degrade the environment

Interviewee Recommendations:

- Enhance existing river properties for natural and wildlife benefits
- Expand existing programs and facilities oriented toward natural and cultural resource education
- Expand volunteer stewardship activities in the corridor and increase attention to the river proper, e.g., shoreline vegetation restoration and in-stream cleanup and monitoring

PART I
INTRODUCTION TO THE STUDY

PURPOSE AND OBJECTIVES

Chapters 2 and 3 provided insights into two major groups who use the Chicago River corridor: nearby neighborhood residents and on-site recreational users. By studying how these groups perceived and used the river and how they would like to see it enhanced for recreation, we were able to understand the current and future ***demand*** for recreation opportunities. To provide realistic strategies for river planning, design, and management, however, we must also have an idea of the current and potential ***supply*** of opportunities. The information needed to complete the picture of demand and supply is presented in this chapter, which reports on a study of Chicago River resource experts.

The purpose of this study was to understand what types and range of recreation opportunities are available along the river and how these activities relate to physical and social characteristics of the resource. Specific study objectives were:

1. To identify key and representative groups and individuals who influence the recreational use of the corridor, and describe their impacts on current and future opportunities;
2. To obtain information about the current supply of recreation opportunities, as well as plans for future development of land and water resources for recreation and related values;
3. To summarize the perceptions of these key groups and individuals on current recreation use-related issues and the prospects for increasing and/or enhancing recreational use;
4. To suggest how study findings might be used to develop planning, design, and management strategies for the river corridor.

STUDY METHODS

IDENTIFICATION OF RESOURCE EXPERTS

We defined resource experts as those individuals who, because of their own interests and experience or as representatives of an agency, organization, or business, could provide key information relating to the study objectives. With the assistance of ChicagoRivers project staff from the Friends of the Chicago River and the National Park Service, we developed a preliminary list of resource experts to include in the study. Four major groups of resource experts were identified: public land managers, non-profit recreation and environmental interest groups, private commercial recreation providers, and commercial and industrial land and water interests.

From these broad categories, we began to select specific agencies, organizations, and businesses that were prominent in the corridor. Many of these choices were obvious; for example, major public land holders in the corridor include the Metropolitan Water Reclamation District of Greater Chicago, the Forest Preserve District of Cook County, Lake County Forest Preserves, and the Chicago Park District. In other cases, where there were many agencies, groups, or companies to select from, we chose those that had key projects or issues of special importance or that otherwise represented the interests of the wider population. Finally, we identified individuals within each agency, group, and company with whom we could schedule a formal, face-to-face interview. If we did not already know the appropriate individuals to interview, we asked to interview those most closely involved in activities related to the Chicago River corridor, whether land or business management, property leasing or development, or regulation and enforcement.

We conducted 27 formal interviews with 44 people, representing 25 agencies, organizations, and companies. We also contacted several additional individuals and groups to fill in the gaps on topics that had not been sufficiently covered through the formal interview process. These informal interviews were usually targeted toward specific information needs about current facilities, programs, and activities. Groups formally and informally interviewed are listed in Table 4.3; the names and titles of specific contacts are listed in the Information Sources section at the end of this chapter.

INTERVIEW DISCUSSION QUESTIONS

Based on the study objectives, we developed an outline of questions to guide the formal interviews. This outline included three basic sets of questions aimed at profiling the groups interviewed and obtaining specific information about current use and perceptions. These questions were modified for each of the four group types we interviewed; some questions were emphasized or de-emphasized and others were added or deleted as appropriate. Copies of the outlines can be found in Appendix 4.1.

To characterize resource experts (Objective 1), all interviews began with a set of introductory questions to help profile the agency, organization, or company as well as to understand the position and role of the individual(s) being interviewed. For public land managers, this section solicited specific information on land holdings in the corridor and on activities, policies, and programs for managing that land for recreation and other uses. For commercial and industrial interests, this section focused on how companies used and managed the riverfront area where they were located. For commercial recreation and non-profit groups, this section included questions about their customers or members and the programs and services the groups provide.

The next major part of the interview focused on the supply of current and potential recreation opportunities (Objective 2). The interview included questions about existing sites and facilities and about plans for future development of land and

TABLE 4.3
Groups and individuals interviewed

Group	Interviews n interviews	Interviews n people
PUBLIC LAND MANAGERS	**16**	**20**
Metropolitan Water Reclamation District of Greater Chicago	1	3
Forest Preserve District of Cook County	3	5
Lake County Forest Preserves	1	1
Chicago Park District	2	2
Village of Glenview	1	1
City of Evanston Parks and Recreation	1	1
Village of Palos Heights	1	1
Informal interviews	6	6
NON-PROFIT GROUPS	**8**	**8**
Friends of the Chicago River and Cook County Clean Streams Committee	1	1
North Branch Restoration Project	1	1
Chicago Audubon Society	1	1
Chicago River Aquatic Center	1	1
Chicago Riverwalk Corporation	1	1
Informal interviews	3	3
PRIVATE COMMERCIAL RECREATION PROVIDERS	**5**	**9**
Wendella Sightseeing Boats	1	1
Chicagoland Canoe Base, Inc.	1	3
Marina City Marina	1	1
Windjammer Enterprises (marina)	1	3
North Pier Chicago	1	1
COMMERCIAL AND INDUSTRIAL INTERESTS	**7**	**15**
CSX Real Property, Inc.	1	1
Tribune Properties, Inc.	1	2
Commonwealth Edison Co.	1	2
Chicago Union Station Co.	1	2
Illinois River Carriers Association[1]	1	6
Farley Candy Co.	1	1
Informal interviews	1	1
MISCELLANEOUS	**2**	**3**
Chicago Police Dept.—Marine Unit	1	2
Informal interviews	1	1
TOTAL	**38**	**55**

[1]This was a group interview with six principal participants.

water resources for recreation and related values. This discussion was quite detailed for some of the public land managers who oversaw many acres of river corridor. For commercial and industrial interests, the section was oriented toward public access to and use of their property; for those groups that did not allow access, this section of the interview was very brief.

The final portion of the interview focused on issues related to recreational use of the corridor (Objective 3). The interview here included questions about resource experts' and/or their constituents' perceptions of river recreation problems and opportunities and their prospects and recommendations for increasing and/or improving recreational use. Again, for those who were closely involved in providing recreation opportunities, this part of the interview was quite involved, but for others it was brief.

INTERVIEW PROCEDURES

Both principal investigators were present during the first 10 interviews, which covered each of the group types. Interview outlines were discussed after each interview and were improved for succeeding interviews. When we were comfortable with the outline and routine, we split up to be more efficient in our use of time.

The actual interviews ranged between 20 minutes and 2 hours in length. The shortest interviews were with individuals from companies that had little recreational interest in the corridor, and the longest were with public land managers that had major property holdings, recreational facilities, and programs. All 27 formal interviews were tape recorded, except in two cases where interviewees requested otherwise (and one where the recorder's batteries failed), and notes were taken to emphasize key points. Where no tape was available, we wrote summaries of the interviews immediately afterwards.

Informal interviews were conducted mostly by phone and ranged from short inquiries on specific topics to hour-long interviews. These were not tape recorded, but comprehensive notes were taken and summaries were written up immediately after the interviews.

SECONDARY DATA SOURCES

Although our interviews supplied the primary information needed to address study objectives, some data we required were more effectively obtained through secondary sources. Specifically, these data included statistics on land holdings, programs, facilities, and related information. This information was compiled from more than 100 maps, brochures, plans, reports, newsletters, newspaper articles, and scientific and popular papers. It was used in conjunction with the interview data to profile groups and to understand the current and potential supplies of recreation opportunities. A full listing of secondary data sources can be found at the end of this chapter.

ANALYSIS OF DATA AND PRESENTATION OF FINDINGS

Our data collection efforts resulted in 320 pages of interview transcripts, over 100 pages of interview notes, and thousands

of pages of published documents. The following strategy was used to analyze and present our study findings:

To characterize resource experts (Objective 1), we developed profiles for each of the groups we interviewed formally. The most detailed of these were the major land management agencies, but each profile included a summary of the group's background, its land management activities (if any), and key current and proposed programs, policies, and plans aimed at recreation in the corridor. This information provides a context for examining questions about recreation perception and use, and forms Part II of this chapter.

To address the supply of recreation opportunities (Objective 2), we compiled information about current and potential recreation and open space opportunities on a reach-by-reach basis. For existing opportunities, we relied heavily on secondary data sources, particularly maps and land and facility inventories provided by the major public agencies in the corridor. The Map of Greenway Opportunities compiled by the Northeastern Illinois Planning Commission and Openlands Project for their 1992 Northeastern Illinois Regional Greenways Plan was especially useful in this respect which indicated locations of existing public land, proposed greenways, existing and proposed trails, and designated Illinois Nature Preserves and Natural Area Inventory sites. For proposed opportunities, we relied on planning documents and information obtained through our interviews with resource experts. For each reach, we first described the landscape, land use, and channel characteristics present. Secondly, current and potential recreation and open space opportunities were identified and listed in tables that describe each site, the municipality in which it is located and its owner, and characteristics of the site such as acreage (when available), facilities, use or purpose, and public access. Sites listed in the tables were keyed to maps showing their location within the reach. Finally, principal land and water recreation opportunities were summarized for the reach. These opportunities were grouped into five main activity categories: boating, fishing, trails, natural and cultural resource-based recreation and education, and "other" recreation opportunities such as picnicking and golfing. These findings are presented in Part III.

To address the important issues related to recreation in the corridor (Objective 3), we synthesized information on current and potential recreation opportunities from Objective 2 to show what was happening over the entire corridor. Interview and secondary data sources were used to provide a historical context for understanding present and future use. We used the same five activity groupings for this synthesis, but detailed results by specific activities:

Recreational boating

1. Canoeing and kayaking
2. Rowing
3. Motorboating
4. Excursion boating

Fishing (no further breakdowns)

Trails

1. Foot paths
2. Developed trails (unpaved—horse, hiking)
3. Multiple-use bicycle-grade trails (paved)

Resource-based recreation and education

1. Natural and cultural resource appreciation
2. Education
3. Volunteer stewardship
4. Consumptive nature activities (e.g., hunting, foraging)

Other activities

1. Picnicking and related passive uses
2. Active sports
3. Golfing

This activity differentiation was also a good way to identify and address key problems and opportunities, as well as prospects and recommendations for increased recreation use. For many of the resource experts we interviewed, perceptions of such issues as safety, access, use conflict, and potential for increased use hinged on whether recreation was land or water based, motorized or non-motorized, active or passive, and so forth. Using the activity focus, we re-ordered each transcript and set of notes to combine all comments related to a given activity category. Within these activity categories, we then re-ordered comments by topics of current use, problems and opportunities, prospects for increased use, and recommendations. Relevant interview comments were summarized and illustrative quotes were included for each topic area. Findings for this objective are presented in Part IV.

Finally, in Part V we draw conclusions for developing planning, design, and management strategies for the river corridor.

PART II
PROFILES OF RESOURCE EXPERTS

PUBLIC LAND MANAGERS

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AGENCY BACKGROUND

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is a regional government agency charged with the primary responsibility for wastewater management. The district includes 125 member communities in a planning area of more than 870 square miles (primarily in Cook County) and serves more than 5 million residents. The MWRD owns more than 8,000 acres of waterway property, primarily along Reaches 4, 8, 9, and 10 (see Figure 4.1). Much of this property is highly contiguous, and it is leased to private and public entities for various water-dependent and non-water-dependent uses.

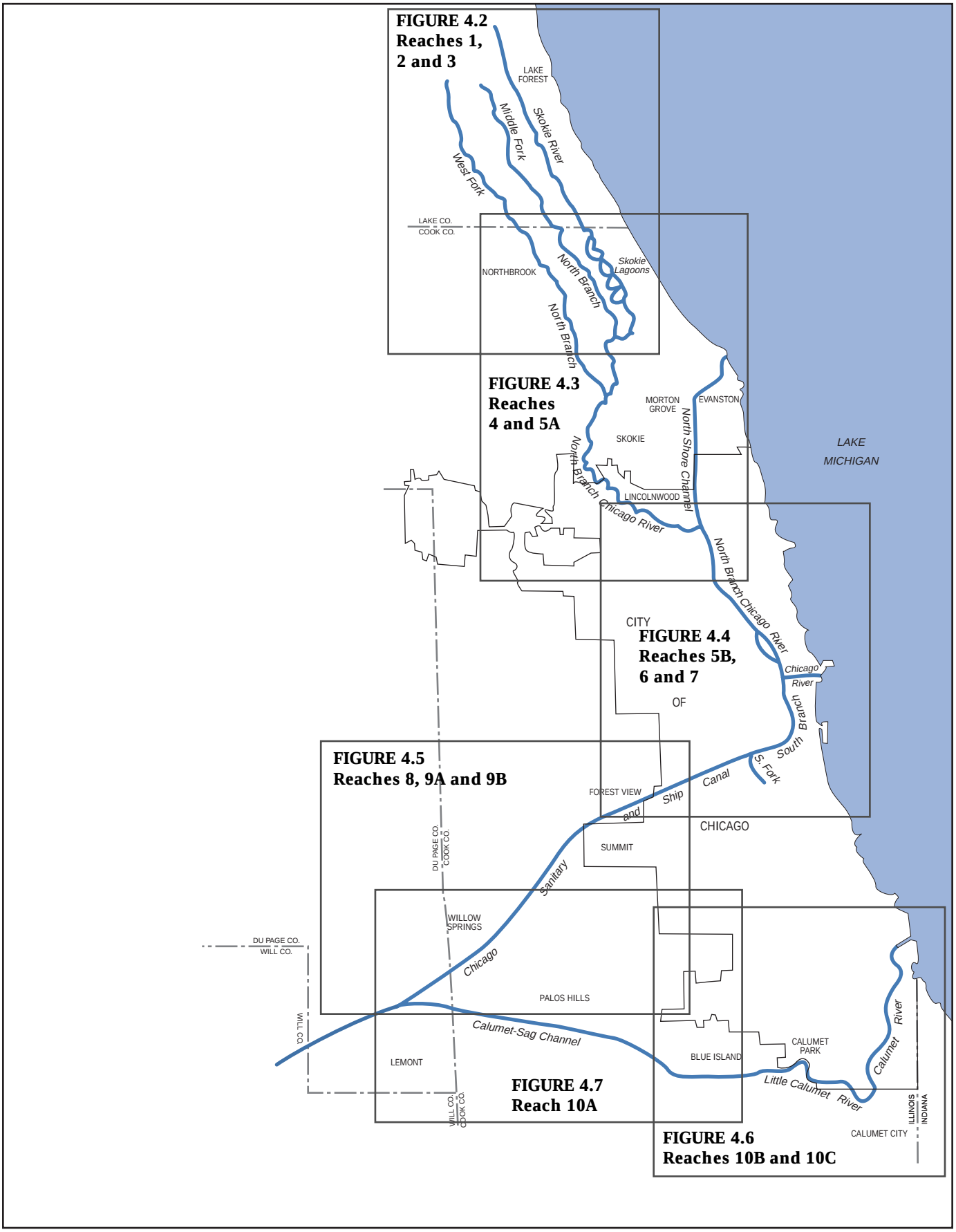

FIGURE 4.1
Map of study reaches with location of recreation-open space maps (Figures 4.2-4.7)

Established in 1889, the MWRD began with a utilitarian role. It reversed the flows of the Chicago (Reach 6), South Branch (Reach 7), and Calumet Rivers (Reach 10) to reduce pollution of Lake Michigan, the city's drinking water source. The MWRD constructed 54 miles of canals to carry the city's stormwater and effluent down the Illinois/Mississippi drainage basin instead. These canals include the North Shore Channel (Reach 4), the Chicago Sanitary and Ship Canal (Reaches 8 and 9), and the Cal-Sag Channel (Reach 10A); the latter two double as barge transportation routes.

Beginning in the 1960s, increasing public environmental consciousness and federal and state legislation expanded the MWRD's utilitarian role to encompass broader water quality goals. The major effort has been the Tunnel and Reservoir Plan (TARP) or Deep Tunnel project, begun in 1972 and continuing today. TARP includes a regional system of underground tunnels and surface reservoirs to store water from the network of combined sewers during periods of heavy rain, thus avoiding release of wastewater into the area's waterways before it can be treated. Aeration plants have been installed along the waterway to reintroduce oxygen into the water. These include two instream aeration plants on the North Shore Channel (Reach 4) and North Branch (Reach 5b), installed in 1979-80, and five Sidestream Elevated Pool Aeration (SEPA) plants installed along the Cal-Sag Channel in 1993-94. Centennial Fountain on the Main Branch shoots an arc of water across the river, which helps aerate the water and also creates an exciting visual display. Major technical improvements and the discontinuance of water chlorination at several of the MWRD's seven water reclamation plants have improved the quality of the discharge and the ability of the river to sustain fish and other organisms. Together with other activities such as daily surface cleanup of waters in the Loop with "skimmer boats" and annual trimming of shoreline vegetation, these activities have had a directly perceivable effect on resource quality—improving water clarity and reducing odor—and in turn increasing the aesthetic and recreational use potential of the waterway.

LAND MANAGEMENT

The impact of these improvements has caused MWRD planners and policymakers to expand their thinking about their role as managers of metropolitan land and water resources.

According to MWRD planner David Bielenberg:

> *The money that's expended in this region for water management, the money we spend as a society to clean up the water, does not end with just getting the clean water. Clean water is not an end in itself. This board and this government have attempted to say, "What value does clean water have for the region?" and "What are the synergistic benefits of clean water?" We did that directly by addressing the lands that are adjacent to this clean water, and we said among other things that we would look at the land along the waterway and insist that its use be public land and that no matter where the lease was—in the public or private sector, for commercial, industrial, or residential use—there must be a public recreation component to ensure that the water use benefits are received by the taxpayers who expended the resources to clean it up.*

This philosophical change is being realized through recent policies that strike a balance between recreational and non-recreational uses of waterway lands that are leased, as well as in how the MWRD manages its unleased properties and the land around its own facilities.

Land leasing: The MWRD does not actively use most of the 8,000+ acres of land it owns along its waterways; instead, much of it is leased to public and private entities for open space, commercial, industrial, and other uses. Past lease agreements often allowed exclusive use of property for as long as 100 years. Leasing criteria implemented in 1984 changed this exclusive arrangement and opened up waterfront lands for a wider range of public uses:

> *...Now therefore, be it resolved by the Board of Commissioners of the Metropolitan Sanitary District of Greater Chicago: That henceforth all Metropolitan District Waterway property leases will encourage public open space, recreation and water edge accessibility in harmony with appropriately scaled industrial, commercial, and residential development thus motivating an extension of the benefits of Chicago's magnificent lakefront throughout the inland waterway system (1992 Facilities Plan Update, p. U91-VI-6).*

Two sets of criteria that direct lease arrangements are helping carry out this policy. The River Edge Renaissance Criteria govern leases on 1,200 acres (16 miles) of the Cal-Sag Waterway, and the North Shore Channel Criteria govern leases on 380 acres (17 miles) of the North Shore Channel. Both sets of criteria are aimed at balancing built uses such as commercial, office, research, industrial, and residential development with recreational and open space development; and both call for establishing a continuous trail system and protecting the natural appearance of the water's edge. The River Edge Renaissance criteria aim at fuller utilization of currently unleased district properties, but specify that all new leases and lease renewals provide public access along the water's edge when practicable. The North Shore Channel Criteria encourage greater streamside and in-stream use of the water for recreation. Besides providing a continuous land trail, this expanded recreational objective encourages development of a water trail with water-level boating- and fishing-oriented facilities, expanded park and recreational areas, and modification of channel width and shoreland slope to better facilitate water level development.

Management activities: Much of the MWRD's waterfront land not under intensive industrial or commercial use appears very natural. In fact, despite the strong linearity of these artificial channels, many stretches of the North Shore Channel, Sanitary and Ship Canal, and Cal-Sag Channel offer good opportunities to view wildlife and experience the feeling of isolation while in the midst of the densely populated urban setting. New leasing criteria mentioned above emphasize the conservation, restoration, or landscaping of leased properties to maintain a natural appearance at shore and street levels. The district's undeveloped property includes several sites of exceptional natural value and ecological integrity such as the Lockport Prairie. Finally, the district emphasizes landscaping with native trees and plants at its

own facilities and at some of the open space sites it helps develop. The MWRD operates a tree nursery at one of its water reclamation plants and plans to expand it and specialize in trees and other plants native to the region.

Recreational facility development: Because the MWRD's mission is water treatment and management, land management and recreational development activities are often carried out in cooperation with other public and private groups. Partnerships have long been established between groups and the MWRD for recreational and other public purposes, but under recent policy and program changes these partnerships have increased in number and variety. Examples of MWRD partnerships where recreational facility development is an important outcome include:

- **"Traditional" leases:** Under its original "purchasing act," the MWRD can lease land for public uses without competitive bids, on a dollar-per-year basis. In practice, these leases range from a year-to-year renewable lease with the Worth Boys Club for a Little League playfield the club developed, to several long-term leases with forest preserves and park districts for major park and open space development.
- **Land transfers:** In a few cases, the MWRD has turned over property to a public agency, notably a 280-acre transfer of lands along the Cal-Sag Channel to the Forest Preserve District of Cook County in 1981 (with MWRD retaining a 50-foot easement along the bank for access, shore stabilization, and scenery conservation).
- **River Edge Renaissance Criteria:** Under these criteria, the MWRD is seeking to enter into multi-government, public-private partnerships to develop its lands for recreation and other compatible uses. Their first successful venture was the Lake Katherine development in Palos Heights, which established a Tax Increment Financing (TIF) district linking MWRD and private parcels along the river to create a mixed-use industrial-commercial-residential-open space development centered around an artificial lake.
- **The North Shore Channel Criteria:** These criteria are encouraging the recreational development of the North Shore Channel. A recent prototype development following these criteria is the Northshore Sculpture Park and bike trail.
- **Downtown redevelopment:** MWRD partnerships along the Main Branch of the Chicago River are helping with commercial and high-rise residential development of Cityfront Center, where the river will play a key role as an open space amenity. MWRD facilities along this stretch include Centennial Fountain and South Bank Park.
- **Heritage Canal Corridor:** The MWRD has been an important partner in the recreational development of lands along the Chicago Sanitary and Ship Canal as part of the Illinois & Michigan Canal National Heritage Corridor, the centerpiece of which is the MWRD's 20-mile Centennial Trail.

Finally, the MWRD provides public recreational facilities at some of its developed sites, most notably the parks built in conjunction with the new SEPA plants along the Cal-Sag Channel. See Part III of this chapter for a detailed listing of recreational facilities on MWRD lands.

FOREST PRESERVE DISTRICT OF COOK COUNTY

AGENCY BACKGROUND

The county forest preserve system originated in plans by Dwight Perkins, Jens Jensen, Daniel Burnham, and other open space visionaries of the early 20th century. These plans were given the force of law in 1913, when the Illinois General Assembly passed a resolution giving counties the power to:

> *...acquire and hold lands containing natural forests, or lands connecting such forests for the purpose of protecting and preserving the flora, fauna and scenic beauties, and to restore, restock, protect and preserve the natural forests and said lands, together with their flora and fauna, as nearly as may be, in their natural state and condition, for the purpose of education, pleasure and recreation of the public...*

The Forest Preserve District of Cook County was formally established in 1915, and as a separate taxing body, began acquiring land. By 1925, more than 25,000 acres had been purchased, often in remote areas of the county that some thought would never be accessible to most residents of Chicago. But today more than 67,000 acres of forest preserves are within easy reach of most of the county's 5.5 million residents. Cook County forest preserve lands in the Chicago River corridor include properties along Reaches 1, 2, 3, 5, 8, 9, and 10 (see Figure 4.1). Most of these lands are wholly owned by the forest preserve district, are highly contiguous, and often include both sides of the waterway.

LAND MANAGEMENT

Acquisition: Principles set forth in the forest preserve enabling legislation of 1913 have guided land acquisition, management, and development philosophy of the Forest Preserve District of Cook County to the present day. This is especially the case for acquisition of property along the Chicago River corridor; in a regional landscape dominated by prairie, forested lands tended to occur within the river corridors. The Chicago and Calumet Rivers have broad floodplains undesirable for most development, but ideal for recreation, the conservation of wildlife, and other natural values. Much of the land along these corridors was purchased early in the history of the district; other parcels were obtained as they became available to amass larger, more contiguous holdings. Partnerships with the MWRD mentioned previously have allowed the forest preserve district to own and/or manage lands along the Sanitary and Ship Canal and Cal-Sag Channels. A land acquisition plan released by the forest preserve district in June 1994 examines county open space needs and opportunities and sets forth a vision for expanding the current system. This vision is based on an inventory of open land that identified more than 40,000 acres suitable for forest preserves; a public outreach process to understand the

perceptions, concerns, and issues raised by Cook County citizens and opinion leaders; guidance from a broad-based working committee; and linkages with past and current open space plans for the region. Acquisition criteria spelled out in the plan are summarized in the following guidelines:

> *As a general mission guideline, the District favors properties that manifest significant size and significant ecological features while providing linkages to other forest preserves or other open space properties. The next most important sites are greenways, open space buffers, or lands that assist in the management of natural resources. Recreation is generally accommodated as a complementary benefit of properties identified in the previous categories, except a special recreation site—a golf course, for instance—that might be of acquisition interest to the District. Structures or buildings on properties are always evaluated for their potential as nature centers, or for their educational, cultural, or historic value in line with the District's mission.*

Opportunity areas along the Chicago River corridor identified through these criteria include segments of the West Fork of the North Branch south of Somme Woods Forest Preserve, a segment of the Sanitary and Ship Canal southwest of the Palos Preserves, and segments of the Cal-Sag Channel around Beaubien Woods Forest Preserve, including the Lake Calumet area. Acquisition criteria are balanced with the feasibility of purchasing a site or using other strategies such as leases and easements to protect it. An implementation agenda includes short- and long-term legislative, financing, and partnership strategies.

Management: Until recently, the district managed its undeveloped lands under fairly narrow definitions of the terms "forest" and "preserve." Lands forested at the time of purchase were left largely untouched, while open lands were planted with trees and shrubs. This policy employed the best knowledge of the time, yet as rare forest communities were obtained, it became clear that just leaving them alone could be detrimental to their long-term ecological health. Moreover, "reforestation" policies were being called into question, for many of the lands purchased were historically prairie or other open ecosystems and not forests. "Hands-off" policies ignored the great amount of change happening to forest preserve lands through the invasion of exotic plant species, suppression of natural fire regimes, and other human and natural activities and processes that were altering the very values for which these lands were originally purchased.

Ecological restoration of forest preserve prairie sites along the North Branch of the Chicago River began in earnest in the late 1970s by a volunteer group, the North Branch Prairie Project. Although some of the sites along the North Branch come quite close to the river, there has been little actual restoration of shoreline vegetation. Plans to do this, however, have been proposed by the North Branch Prairie Project, and future district plans for restoration of Skokie Lagoons call for greater attention to emulating the ecological structure and functions of a wetland ecosystem.

Restoration of other district lands has also been significant and recently became a principal goal for land management. In the late 1970s, forest preserve district staff person Ralph Thornton began restoring prairie and savanna sites in the Palos-Sag Preserves. Activities by private groups and the district blossomed; through controlled burning, brush cutting, seeding, and other techniques, staff and volunteers have been instrumental in restoring prairie, savanna, woodland, and wetland communities on district lands. The Nature Conservancy established the Volunteer Stewardship Network in 1983 to coordinate and assist restoration efforts, helping to establish new groups such as the Palos Restoration Project. Today, the district embraces the need for active ecological management of its lands. In the recently created position of Land Manager, Ralph Thornton began a comprehensive restoration plan for district properties; this plan received a boost in 1995 through funding of the Ecosystem Management Project in the Greater Chicago Metropolitan Area. This project is working to preserve, conserve, and manage the unique biological diversity found in the forests, woodlands, savannas, and prairies across all lands managed by the district. It is carried out by a partnership consisting of the Forest Preserve District of Cook County, The Nature Conservancy, USDA Forest Service, USDA Natural Resource Conservation Service, and Illinois Department of Natural Resources—Division of Forestry.

Development: A 1929 plan for the Cook County forest preserves recommended that 75 percent of acquisitions be kept in their natural state, 14 percent as picnic and play areas, 5 percent as water recreation areas, 4 percent as golf courses, and 2 percent as a zoo and an arboretum. These percentages have been held to quite closely, and recreational development has generally been kept low key in type and style. For example, major facilities construction by the Civilian Conservation Corps (CCC) during the 1930s used stone, rough-hewn wood, and other natural materials that gave sites a rustic feel. Many of these facilities remain today, and contemporary site amenities similarly aim not to intrude on the naturalness of the forest preserve setting. Major recreational developments along the Chicago River Corridor include the following:

- **North Branch (Reaches 1, 2, 3, and 5):** Forest preserves along these reaches are separated into the North Branch (1,650 acres) and Skokie (3,351 acres) Divisions. Facilities include the 20-mile North Branch Bicycle Trail, the Chicago Botanic Gardens, several picnic groves and related facilities, 3 golf courses, a toboggan slide, a swimming pool, and other assorted amenities. A historic centerpiece of landscape development and one of the district's greatest recreational attractions is the Skokie Lagoons, a series of 7 lagoons dug from an extensive wetlands area by the CCCs during the 1930s. The Lagoons offer boating, fishing, and a host of complementary shoreland activities, drawing large numbers of residents from throughout the metropolitan region (see Chapter 3 and Part III of this chapter for more information). The North Branch restoration sites mentioned above are considered by many to be important recreation sites as well; as more people view restoration as a form of leisure, these sites will attain increasing recognition as important components in the recreation delivery system of forest preserves.

- **Sanitary and Ship Canal/Cal-Sag Channel (Reaches 8, 9, and 10):** Forest preserves along these reaches are part of the Palos (6,523 acres), Sag Valley (8,990 acres), and Calumet (1,679 acres) Divisions. The contiguous block of land forming the bulk of the Palos and Sag Valley Divisions is commonly called the Palos Preserves; with more than 13,000 acres of hilly uplands, marshes, and lakes, it is the largest and most diverse forest area in the county. The Palos Preserves has a full range of facilities, including picnic groves, fishing sites, 2 nature centers, a canoe trail (along the Des Plaines River), and an extensive trail system. Few of these facilities relate directly to the Sanitary and Ship Canal or Cal-Sag Channels, primarily because the shorelines along these waterways were heaped with stone debris when the original channels were dug. The I&M Canal Bicycle Trail parallels the Sanitary and Ship Canal as the trail follows the old tow path of the historic I&M Canal. Several plans are in the works, however, to increase recreational access to and use of these waterways. These plans, described fully in Part III, will link forest preserve sites and existing trails together with new trails.

Forest preserve sites along the Little Calumet River are more directly related to the waterway than those along the Cal-Sag or Sanitary and Ship Canal. In addition to several picnic groves, playfields, and a golf course, two boating centers offer access to the Chicago River system and Lake Michigan. Flatfoot Lake, near the Little Calumet River in Beaubien Woods Forest Preserve, has been designated as a ChicagoRivers demonstration project with partial funding provided under the federal Urban Resources Partnership program. This project includes restoration of shoreline vegetation and improved fisheries, along with increased recreational access and use.

LAKE COUNTY FOREST PRESERVES

AGENCY BACKGROUND

Lake County Forest Preserves was established in 1958, and its holdings today amount to more than 18,000 acres. As guided by the 1913 Illinois enabling statutes, the district provides a county-wide system of sites "acquired and managed for the purposes of preservation, restoration, education, and recreation." Today, the system serves Lake County's 400,000 residents, with sites distributed throughout the county. Of these properties, the district owns about 1,500 acres of land along the Chicago River corridor (Reaches 1, 2, and 3), including the 536-acre Greenbelt Forest Preserve at the headwaters of the Skokie River (Reach 3), which is technically outside the boundaries of the ChicagoRivers study area.

LAND MANAGEMENT

Acquisition: Much of the district's recent land acquisition has focused on the county's river corridors, especially the Des Plaines River, the major waterway in the county. Currently the district holds around 7,000 acres on the Des Plaines, about 40 percent of all Lake County forest preserve property. The West Fork, Middle Fork, and Skokie River flow through the more densely populated parts of the county, so opportunities for acquisition along these reaches have been more limited. These Chicago River corridor lands do, however, have significant environmental resources; a recent land acquisition plan and natural areas inventory have resulted in the purchase of some important properties. One recent purchase is the Middle Fork Savanna, a 477-acre site containing virgin prairie and savanna areas.

Management: The long-term land management goal for the Lake County Forest Preserves is to retain or restore a high percentage of holdings to a natural state. Many recently obtained properties remain undeveloped for recreation; these include sites purchased primarily for their natural values, such as the Middle Fork Savanna, as well as several parcels where reservoirs have been constructed for flood control. In addition to these sites, about 15 percent of the district's land is under cultivation and not open to public use. These are recently purchased lands that were under cultivation at the time of purchase; rather than letting the land lie fallow and become overrun by weeds, the district is keeping these lands under cultivation until funds and plans are in place to convert them to natural areas or recreational facilities.

Much of the management activity at forest preserve sites along the Chicago River corridor is aimed at restoration, recreation, or, in some cases, creation of natural communities of water, wetland, woodland, prairie, and savanna. Lake County is the headwaters of the North Branch, and the marshy landscape around all three of its tributary forks was severely modified for agriculture early in this century. Restoration of the natural hydrology of these sites is an important factor in overall site restoration. District activities include breaking drain tiles, increasing the meandering and widening of the ditched river channel, and re-creating wetland areas. When new flood control reservoirs are developed, a related goal is to maximize their potential for wildlife and recreation. Preferred methods are to buy larger sites that offer opportunities to create more than the "steep-walled, deep hole in the ground" characteristic of older reservoirs in the corridor. Vegetation management involves collection of seed from nearby native sources, planting, burning, brush cutting, and other activities. Volunteers play an active part in these aspects of ecosystem restoration.

Development: Because of the small size of the waterways and the importance and fragility of the natural ecosystems present, many of the forest preserve sites along the East, Middle, and West Forks do not lend themselves to large-scale recreational development. Sites that will be developed for recreation will be geared mostly to nature-oriented recreation. Examples of sites include:

- **Bannockburn Basin:** This flood control site is the only district property on the West Fork. This small (40 acres) site was developed in the 1970s as a conventional, steep-walled reservoir. It is fenced off as required by the Village of Bannockburn and has no public access.

- **Middle Fork Savanna:** Presently at 477 acres, this Middle Fork site contains some high-quality virgin prairie and savanna areas. Restoration plans are underway in cooperation with Lake Forest Open Lands, a private non-profit land conservation group. Development of a foot trail system is being considered for recreation and nature study.
- **Lake Forest site:** This 431-acre Middle Fork site was purchased for flood control. Much of the land is leased for farming and has not yet been developed for flood control or recreation. Prairie Wolf Slough, a 28-acre section of this site, is being restored as part of a ChicagoRivers demonstration project in partnership with Lake County Forest Preserves and the federal Urban Resources Partnership program.
- **Berkeley Prairie:** This 18-acre Middle Fork site is surrounded by suburban housing development and contains informal trails through a restored prairie ecosystem.
- **Lake Bluff site:** This 85-acre flood control site along the East Fork has not yet been developed for flood control or recreation. There are informal trails through the site, with plans to link a foot trail to a Lake Forest Open Lands conservancy site to the south. A new trail links the property to a Village of Lake Bluff site to the north.
- **Greenbelt site:** This 536-acre site at the headwaters of the East Fork stands out from the other sites because of its full-scale recreational development. Located near Waukegan and North Chicago, this high-use site provides picnic grounds, ball fields, play equipment, a biking/hiking trail, and two 6-acre stocked fishing ponds.

CHICAGO PARK DISTRICT

AGENCY BACKGROUND

Established in 1934 from a merger of five regional park districts, the Chicago Park District is the major provider of park and open space opportunities within the City of Chicago. The district has 552 parks ranging in size from small playlots to the 1,200+ acre Lincoln Park. Properties owned, used, and/or maintained by the Chicago Park District amount to more than 7,400 acres and serve a city population of 2.8 million. Of these properties, 16 parks on the Chicago River corridor are owned or leased by the district, for a total of 240 acres and 6 miles of river frontage. These properties are located primarily on the North Branch (Reach 5), but also include some land on the North Shore Channel (Reach 4), the Main Branch (Reach 6), and the South Branch (Reach 7).

LAND MANAGEMENT

Acquisition: New park space of significant size is very hard to come by within the city limits, but the park district recently used innovative means for obtaining some key properties along the Chicago River Corridor. One of these is the 12-acre Chinatown site, a $1.4 million purchase of vacant industrial land on the east bank of the South Branch between 16th Street and Cermak Rd. This property is significant not only because it will be the first park on the South Branch, but also because it will provide needed open space to the Chinatown and Bridgeport Community Areas identified by the park district as "underserved" in terms of per capita park acreage. Leasing is another means to provide new park space; the park district leases 83 acres of riverfront land from the Metropolitan Water Reclamation District and the City of Chicago. A recent example of such an arrangement is Ronan Park on the North Branch, owned by and being developed in partnership with the MWRD. Possibilities for further leasing and purchasing of land are mentioned in the "development" section below.

Management: In contrast to the forest preserve districts, Chicago Park District land is managed mostly for high-use active and passive recreational activities. This means the predominant land cover is mown grass, with many areas that are open and other areas that have groves of widely spaced trees. Most river parks relate only indirectly to the river, and it has been park district policy to fence the river off for public safety. Vegetation along the immediate shore is usually left in an unmanaged state, often growing up and around fences and obscuring river views. This policy may change in the future, for park district legal research has found no legal requirement for fencing. More importantly, park district landscape management and policy directors, along with selected staff, are attempting to establish an ecological approach to landscape management and restoration; as a basis for instituting such an approach, they conducted a natural areas inventory of the parks to identify promising lagoon, wetland, prairie, savanna, and woodland areas for ecological restoration and management. Many of the river parks are included in the wetlands category, the most promising of which is Gompers Park (Reach 5a). The Gompers wetland restoration site was identified as a ChicagoRivers demonstration site, and partial funding for the restoration has been secured through the federal Urban Resources Partnership program. This restoration is being carried out by the Chicago Park District in a community-based volunteer effort, with cooperation and assistance from federal, state, and local agencies.

Development: Existing river parks are developed with a variety of facilities for recreation. The larger river parks like Horner, Gompers, and River Park include fieldhouses and gymnasiums, and most of the parks have playfields, ball courts, and playground facilities. New river park development ranges from facilities currently under construction to plans still in the concept stage. Highlights of this development activity include the following:

- **North Branch Riverwalk:** The park district has begun to implement a 1990 riverwalk plan prepared by Friends of the Chicago River, the North River Commission, and the Albany Park Planning Committee. In summer 1994, construction of a bike trail began in Legion (Reach 4) and River (Reach 5) Parks, and trail and other facility development began in Ronan Park. When completed, these three parks will be linked by a trail, supplementing an older foot path system not geared to bicycle use. Long-range plans

include the linkage of park district parks on the North Branch above River Park to form a 3-mile trail with connections to Forest Preserve District of Cook County lands and the forest preserve district's 20-mile-long North Branch Bicycle Trail.

- **North Shore Channel development:** The Chicago Park District and the MWRD are also negotiating the possible transfer or lease of MWRD property along the North Shore Channel in Lincolnwood to the park district. This 25-acre addition would be developed with a bike trail and related facilities for passive use, and it would connect to the trail at Legion Park. If completed, this segment would link with the North Branch Riverwalk and North Branch Bicycle Trail and with trails along the North Shore Channel in Skokie and Evanston.
- **Turning Basin, Marina, and Gateway Park:** The Chicago Park District has developed a conceptual plan for the mouth of the Chicago River, improving the turning basin to create a gateway to the city and linking the lakefront park and trail system with the Chicago Riverwalk. The plan also calls for developing marina space in the basin. The land is currently in multiple jurisdictions, including the MWRD, Army Corps of Engineers, Illinois Department of Transportation, U.S. Coast Guard, and the City of Chicago. This large-scale redevelopment poses major challenges for integrating increased recreational use of the turning basin with current uses of the basin and lock by commercial, industrial, and tour boats.
- **Chinatown Park/Bubbly Creek Wetland Park:** Already mentioned, the 12-acre Chinatown park site along the South Branch will bring significant new park space to the underserved communities on the southwest side of Chicago. In 1993, a visiting architect from China developed a conceptual design for the park, integrating Chinese cultural symbols and activities (such as a tea house) within a plan that would respond to the recreational needs and preferences of the community. These needs and preferences were examined in a 1994 Forest Service-sponsored study of the Chinatown community. Just south of the Chinatown Park site is Bubbly Creek, where a "wetlands park" has been proposed. Lead agencies in this project include the Chicago Park District, the Illinois Department of Natural Resources, and the U.S. Army Corps of Engineers. This project is still in the conceptual stage, and all land is currently in private ownership.
- **Chicago Origins Park and Interpretive Site:** In cooperation with the Illinois Department of Natural Resources and the Canal Corridor Association, the park district is planning a 1.5-acre park on the South Branch at 28th Street and Ashland Avenue on the site that was the gateway to the historic I&M Canal. The land is presently owned by the Department of Natural Resources.

VILLAGE OF GLENVIEW

This suburban community of 37,000 includes long stretches of the West Fork and North Branches in Cook County. Within the community boundaries, the North Branch is wholly surrounded by forest preserve (Harms Woods), except for a small piece of frontage owned by the Wilmette Golf Club. However, most of the land along the West Fork is privately owned and in residential development. The Glenview Park District owns three small parks along the West Fork: Tall Tree, Sleepy Hollow, and Riverside. Two large, private landholdings along the West Fork include the Techny Basin and the Glenview Country Club. The village includes other significant open spaces not on the Chicago River corridor, including forest preserve land along the Des Plaines River; Kennicott's Grove, a historic-natural area under the jurisdiction of the Glenview Park District; and the recently closed 1,200-acre Glenview Naval Air Station, which includes a golf course and several undeveloped land parcels, including a 14-acre remnant prairie.

Glenview's park district oversees management of its park spaces along the West Fork, while its planning commission guides overall planning and development of open space. Three examples highlight current open space activities in Glenview:

- **West Fork Green/River Avenue project:** A plan to develop the downtown section of the West Fork as an open space focal point was first proposed in the 1970s and was resurrected in Glenview's 1990 comprehensive plan. The plan calls for expanding the green open space areas along the river and for building a new pavilion, tot lot, and parking lot.
- **West Fork Greenway:** Using this new downtown park as a central focus, a related plan by the village calls for developing a bikeway along the West Fork, leading north to Sleepy Hollow Park and South to Riverside Park. The Glenview section of the greenway would be connected with trail segments along the Middle Fork in Northfield, the West Fork in Northbrook and Golf, and the North Branch in Morton Grove. Segments of the trail corridor might also follow the Metra commuter rail right-of-way. The long-term goal of this plan is to have an interconnected trail linking these suburbs with the 20-mile North Branch Bicycle Trail of the Forest Preserve District of Cook County.
- **Techny Basin:** In the north part of Glenview lies a privately owned, 300-acre site that is being developed as a corporate office park. The site is owned by Marathon U.S. Realties, but the MWRD has easements and has built two detention basins near the river corridor on the site. Plans are to develop this part of the site (around 80 acres) as a conservation/public use area, and the village is working with the developers, the MWRD, Friends of the Chicago River, and other groups to carry out this plan. Plan elements include development of a trail, a wetland and native plant restoration area, and a 10-15-acre park site that was donated to the village.

CITY OF EVANSTON

This community of 78,000 includes a significant portion of the North Shore Channel (Reach 4). Established in 1863, the city has long placed a high priority on open space, which is reflected in its wide residential lots and parkway strips, many parks and access sites to Lake Michigan, and its nationally renowned street tree program. Evanston was one of the first communities along the North Shore Channel to develop the recreational potential of the channel; through lease arrangements with the MWRD, it established the Jans Community Golf Course (90 acres, including a portion in neighboring Wilmette), Ladd Arboretum and Evanston Ecology Center (21 acres), Channel Bike Path, and many neighborhood Canal Land parks (55 acres total) along its banks. Except for four small private and institutional leaseholders, the entire North Shore Channel in Evanston is in public open space.

Past policies and activities that have shaped management of these properties are being reviewed in light of renewed interest in the North Shore Channel as a recreational resource. Some of the issues that have recently surfaced include:

- **Canoe access to the Channel:** A canoe landing was built in the early '70s behind the Ecology Center and was used by the Voyageur Brigade canoe club until the late '70s. The landing has been used periodically for special events since then, but the City of Evanston has been reluctant to open the landing to wider use because of potential liability and safety issues. If the landing was improved and opened to public use, these issues would need to be resolved.
- **Land access to the Channel:** Under new MWRD leasing criteria, the City of Evanston and other leaseholders along the North Shore Channel will be required to remove fencing, modify river banks, develop a pathway, and provide other improvements and amenities that will make the waterway more accessible to the public. The City of Evanston and other municipalities along the channel have expressed reservations about modifying river banks because of the cost (estimated near $1 million for Evanston). Because of safety concerns, they have also objected to fence removal along the waterway and development of a bike path through the golf course.

VILLAGE OF PALOS HEIGHTS

The Palos Heights Park District manages the Lake Katherine Nature Center, which attracts south suburban residents and school groups. As mentioned in the MWRD profile, the Lake Katherine project was initiated in the late 1980s through the creation of a Tax Incremental Financing district linking public and private parcels along the river to form a mixed-use development. The 93-acre nature center surrounds a 20-acre artificial lake. Trails encircle the lake and provide access to a 2-acre prairie restoration, a wetland, a children's forest, and the Cal-Sag Channel. Lands along the channel form the "wildest" part of the nature center and include wooded areas and varied topography. Many different species of birds have been observed along the channel, which is also well used by recreational boaters and commercial barges. More than 1,500 people may use the nature center on a Saturday. More than 120 volunteers help the full-time naturalist with environmental education programs and landscape restoration activities.

PUBLIC AGENCIES NOT FORMALLY INTERVIEWED

Although the profiles above give a reasonably good picture of public agency activities at the regional, county, and municipal levels, the activities of other groups not formally interviewed are also important. These include numerous federal agencies who own, manage, regulate, or help manage lands in the corridor; many of these agencies are active participants in the ChicagoRivers Project.

At the state level, the **Illinois Department of Natural Resources** owns some properties in the corridor, most notably the William Powers Conservation Area near the Calumet River. The department is also responsible for fish and wildlife conservation, enforcement of recreational boating laws, and other activities that impact the corridor.

At the regional level, the **Northeastern Illinois Planning Commission** has been instrumental in inventorying and planning for the natural resources of the region. One of its most important contributions to the Chicago River corridor is the 1992 Regional Greenways Plan, developed in conjunction with Openlands Project.

At the county level, the **Forest Preserve District of DuPage County** and the **Forest Preserve District of Will County** each have significant property holdings on the Sanitary and Ship Canal. Each is involved in active programs of land acquisition, trail development, and ecological restoration that will increase corridor recreation opportunities.

At the local level, the City of Chicago **Department of Planning and Development** has initiated or cooperated in many planning efforts that focus in whole or part on the river corridor within the city, including the 1990 Chicago River Urban Design Guidelines for the Downtown Corridor (with Friends of the Chicago River), the current **CitySpace** plan (with the Forest Preserve District of Cook County and the Chicago Park District), and the current **Inland Waterway Guideline Review Committee**. The **Department of Environment** has also made its presence felt on the river corridor; it produced an inventory report on the natural areas and potential natural areas of Chicago, which identifies several sites on the river corridor.

Outside the city, 40 suburbs line the Chicago River corridor from Park City on the north to Calumet City on the south. These include 19 suburbs along the North Branch and its tributaries, 10 southwestern suburbs along the Sanitary and Ship Canal, and 12 south suburbs along the Cal-Sag Channel and Calumet River. Through their planning departments and park districts, many of these local units of government are also contributing to the protection and enhancement of the corridor.

PRIVATE NOT-FOR-PROFIT GROUPS

FRIENDS OF THE CHICAGO RIVER

Established in 1979, the Friends of the Chicago River is a non-profit citizens group whose mission is to protect and improve the environmental quality of the Chicago River and its related waterways; encourage appropriate economic activity and development that is sensitive to the environment; and increase awareness, involvement, and appreciation of the river by the public and policy makers. The Friends guided the passage of the 1983 City of Chicago river protection ordinance; co-authored the 1990 Chicago River Urban Design Guidelines for the Downtown Area; published a series of river trail maps; and continues to sponsor river walks, canoe trips, and special river-related social events. The group sponsored two "Voices from the Stream" workshops in 1990 and 1992, which brought together diverse groups and individuals concerned about the Chicago River, leading to the ChicagoRivers project. One of the initiatives stemming from this activity is the RiverWatch program, which organizes volunteers to monitor the environmental quality of river reaches. The North Branch Riverwalk is one of several current projects the group is working on, furthering its mission to ensure appropriate development of the river. Finally, as part of the ChicagoRivers program, the Friends are working with communities and neighborhoods along the river to identify problems and opportunities and to organize constituencies for work on local projects.

COOK COUNTY CLEAN STREAMS COMMITTEE

The Cook County Clean Streams Committee, a citizens group sponsored by the Forest Preserve District of Cook County, acts as a watchdog for problems on rivers throughout the county. The committee is organized by reach, and the Chicago River corridor is divided into North Branch, South Branch, and Calumet reaches. Volunteers walk and canoe their reach regularly to identify problems and work with the forest preserve district and other agencies to solve them. The group also acts as a liaison between local citizens and the many public agencies who have jurisdiction over the river. Most of the problems are identified by visual monitoring and include dumping, vegetation management, and other threats to the water quality, aesthetics, or navigability of the river.

NORTH BRANCH RESTORATION PROJECT

The North Branch Restoration Project is a volunteer stewardship group formed in 1977 to maintain, enhance, and restore ecosystems along the North Branch of the Chicago River. The group has focused on Forest Preserve District of Cook County prairies, but has also taken on savanna, woodland, and wetland sites on and off of forest preserve-owned land. Although most of the site restoration does not occur directly on the river, the North Branch of the Chicago River functionally unites all of the restoration sites, serving as a corridor for plant and animal movement. The group is, however, conducting some experiments on riverbank stabilization using native plants. Individual sites are managed by a steward, and workdays are organized for restoration activities such as burning, brush cutting, seed collecting, and planting. The North Branch Restoration Project has almost 1,000 members, including a very active core group of about 150. The group is part of the larger Volunteer Stewardship Network organized by the Illinois Chapter of The Nature Conservancy.

CHICAGO AUDUBON SOCIETY

The Chicago Audubon Society is a chapter of one of the nation's largest and oldest established environmental groups. Its purpose is broadly oriented around the preservation of wildlife and habitat, and its activities are wide-ranging and global in concern. The Chicago chapter, in existence since 1972, has more than 6,000 members, including a core group of about 100-200. Within the broad-scale mission of the national group, the chapter has a special concern for the landscape of the Chicago area. A major environmental feature of this region is the Chicago River corridor, and the group organizes outings to view and count birds at the Skokie Lagoons, the mouth of the Chicago River, the Palos Preserves, and Lake Calumet.

CHICAGO RIVER AQUATIC CENTER

The Chicago River Aquatic Center was founded in 1979 to demonstrate and promote the potential of the Chicago River for non-motorized water sports in the context of current motorized recreational and non-recreational uses. The group uses the downtown sections of the river corridor as a training course for rowing, and stores its sculls and operates activities out of the old U.S. Coast Guard Station at the mouth of the river. As part of its mission in promoting the river for non-motorized water sports, the Chicago River Aquatic Center hosts major rowing events, such as the Iron Oars Marathon, a 15-mile race from Evanston to downtown Chicago, which is billed as the "world's longest smooth-water sculling race," and the Chicago Regatta, in which top collegiate rowing teams compete for Midwest, U.S., British, and International titles. The 50 members who belong to the center also include kayakers and canoeists.

CHICAGO RIVERWALK CORPORATION

The Chicago Riverwalk Corporation was established in 1991 by the Chicago Central Area Committee and the Friends of the Chicago River to implement the Chicago Riverwalk Project: a continuous system of walkways, plazas, and recreational areas along the downtown riverfront from Navy Pier on Lake Michigan to Chinatown on the South Branch. The Riverwalk Corporation is governed by a board that includes

the major local public agencies, the Friends of the Chicago River, and downtown businesses and riverfront property interests. The corporation inventoried current land use and open space opportunities within these project boundaries and prepared a master plan, phased development program, and budget for implementation. The plan and program focus on the public land in the project area, about 30 percent or 2.5 miles of the total river frontage; the plan identifies how new and existing private development on this land can be used to complete the riverwalk system.

NON-PROFIT GROUPS NOT FORMALLY INTERVIEWED

In addition to the non-profit groups we formally interviewed, many others are making important contributions toward improving the Chicago River corridor for recreation and other values. These include local groups such as **Lake Forest Open Lands** and **Lake Bluff Open Lands** who purchase lands within their villages and then hold them in trust for conservation, restoration, and recreation purposes. These groups have also leased properties from their villages for similar objectives.

Regional groups such as **Openlands Project** are also active in the corridor. River corridors have been an important focus of Openlands' activities since the group was formed in 1963. Friends of the Chicago River started as a program of Openlands, and the project's current Greenways program and affiliate groups **CorLands** and **Wetlands Research, Inc.** are closely tied to river corridor planning and development. Openlands' 21st Century Open Space Plan was one of the first regional plans to identify the Chicago River corridor as a key component in a metropolitan greenway system, and further study by Openlands and the Northeastern Illinois Planning Commission in the 1992 Northeastern Illinois Regional Greenways Plan provided detailed recommendations for greenway development along specific reaches of the corridor. A major update of the Greenways plan is in progress.

The Nature Conservancy is another group that is active regionally. Its Volunteer Stewardship Network, established in 1983, coordinates ecological restoration activities and currently has more than 5,000 members. Two groups affiliated with the network are working in the Chicago River Corridor: the North Branch Restoration Project, discussed previously, and the **Palos Restoration Project**, which conducts restoration activities in the Palos Forest Preserves that border on the Chicago Sanitary and Ship Canal and Cal-Sag Channel. The Palos and North Branch sites form two core areas of the recently announced Chicago Wilderness Bioreserve Initiative, a program through which The Nature Conservancy works in partnership with area forest preserves, public agencies and institutions, and other partners to increase the region's biodiversity.

The **Canal Corridor Association** (CCA) was established in 1982 to help preserve and improve the cultural and natural resources of the Illinois & Michigan Canal National Heritage Corridor. This 120-mile-long corridor—the first of its kind to receive national designation—overlaps the ChicagoRivers study area from downtown Chicago to Lockport and Calumet Harbor. CCA activities include planning and technical assistance as well as cultural and educational events. Its Main Street Partnership trains and organizes volunteers in local communities along the I&M Canal National Heritage Corridor to work on historic preservation and economic revitalization projects. The partnership involves six communities along the I&M Canal, including three (Blue Island, Lemont, and Lockport) that fall within the ChicagoRivers study area. In addition, CCA coordinates activities with other Heritage Corridor interest groups and agencies, including the National Park Service and the **Friends of the I&M Canal National Heritage Corridor**.

The **Calumet Ecological Park Association** is concerned with protecting and enhancing the rich ecological diversity of the Lake Calumet area in the southeastern part of the ChicagoRivers study area. The association has identified seven environmental resource corridors in the Lake Calumet area that would form the components of an ecological park. Two of these corridors, the Cal-Sag Channel/Little Calumet River and the Calumet River, are part of the ChicagoRivers study area. In these and the other five corridors, the association has identified existing ecological sites such as marshes and other potential open space sites such as landfills that would make up the actual park lands. Proponents see the park as forming the missing link between the I&M Canal National Heritage Corridor to the west and the Indiana Dunes National Lakeshore to the east.

PRIVATE COMMERCIAL RECREATION PROVIDERS

WENDELLA SIGHTSEEING BOATS

Founded in 1935, Wendella is the oldest of several companies that offer regularly scheduled or chartered boat tours of the Chicago River. Its three boats are docked at the Michigan Avenue bridge, in a central location for local and out-of-town tourists. The company offers regular 1-, 1½-, and 2-hour tours of the downtown portions of the lake and river (from the lock at the mouth to River City on the South Branch). They offer an average of 10 trips per day on weekdays and up to 20 trips during peak summer weekends. A tour commentary informs tourists about the river and highlights special points of interest. Wendella also offers special charter tours, including 7-hour spring and fall tours of the navigable portions of the Chicago River waterway system that begin on the Main Channel, go up the North Branch to the turning basin, back down to the South Branch, Chicago Sanitary and Ship Canal, up the Cal-Sag Channel and Calumet River to Lake Michigan, and up the lake shore back to downtown. Since 1962, the company has also offered a weekday commuter service between Michigan Avenue and Madison Street Boats depart every 10 minutes during rush hours and make an efficient and pleasant 7-minute trip between the Michigan Avenue shopping district and Union Station.

CHICAGOLAND CANOE BASE, INC.

The Chicagoland Canoe base is a primary source for rental canoes and information about canoeing opportunities on the Chicago River corridor and other rivers in the metropolitan area and beyond. Owned and managed by long-time Chicago River advocate Ralph Frese, the store also has a large selection of crafts, accessories, books, and maps for canoeing, kayaking, and rowing. In addition to sales and rentals, Frese offers service, lessons, and special guided tours to make the public and policymakers more aware of the beauty, recreational potential, and problems with metropolitan Chicago rivers. Active in the Cook County Clean Streams Committee, the Prairie State Canoeists, and the Chicago Area Sea Kayaking Association, Frese and the Chicagoland Canoe Base serve as a clearinghouse for information on the past, present, and future of the Chicago River.

MARINA CITY MARINA

The Marina City Marina was built by Phillips 66 in the early 1960s as part of the Marina City development and has been an independent operation since 1977. The full-service marina can store up to 65 boats, 12 in slips and the rest in dry storage. It also offers gas, repairs, accessories, and launching. However, it does not have a ramp and few boaters who do not store their boats at the marina will pay the expense of having their boats lifted by crane into the water. The marina has a few slips available for transient docking, but these are often filled on summer weekends.

WINDJAMMER ENTERPRISES

Windjammer Enterprises is one of a group of marinas located on the Calumet River on Chicago's far Southeast Side. The marina, in operation since 1929, offers slip rentals, boat service, refreshments, launching, and winter storage for 135 boats.

NORTH PIER CHICAGO

North Pier is a historic shipping warehouse and storage building that was converted in 1989 into an indoor mall containing retail stores, restaurants, and entertainment establishments. Located on Ogden Slip near the mouth of the Chicago River downtown, it is one of only a few places downtown where one can tie a boat to shore. The river is a main feature of the site, and dock and upper level promenades offer attractive views of the river and city. Three restaurants have outdoor seating on floating docks. Anglers frequent the slip during seasonal runs. Docking and rafting facilities in the slip can accommodate 50-60 boats; a $10 per hour docking fee encourages rapid turnover. The slip is also the dock for the "Chicago from the Lake" tour boat, and North Pier houses offices for other major tour boats including the "Odyssey" and the "Spirit of Chicago."

PRIVATE COMMERCIAL AND INDUSTRIAL INTERESTS

CSX REAL PROPERTY, INC.

CSX is a Fortune 500 corporation whose major holdings are in railroad, barge, and other transportation companies. The real estate assets of the corporation are managed by CSX Real Property, Inc., which attempts to maximize profit on surplus railroad and other properties through sale or development. In Chicago, CSX Real Property owns the property along the East Bank of the South Branch between Harrison and Polk Streets, the site of the old Baltimore and Ohio-Chicago Terminal Railroad station, which was demolished in 1970. CSX has a plan and permit approval for a 4½ million square foot mixed-use development on this 8-acre site. The framework plan includes Class A office space; residential developments; retail, hotel, and parking facilities; and open space. Close cooperation with the City of Chicago, Friends of the Chicago River, and other groups has resulted in a design that includes a riverwalk and terrace along the length of the site as well as several plazas linking the riverwalk with the buildings and perimeter streets and sidewalks. Actual building development is contingent on interested buyers, who will fit their space and building needs into the framework developed by CSX. Harris Bank has purchased one of the building sites, but development is on hold until the downtown development climate improves. Other CSX properties near the river downtown include 6 acres north of Roosevelt Road and 22 acres south of Roosevelt Road. Conceptual plans for these areas include various types of residential development, some commercial development, a publicly accessible riverwalk, and a marina.

TRIBUNE PROPERTIES, INC.

Tribune Properties owns and manages the Freedom Center, a Chicago Tribune paper printing plant located on the North Branch of the Chicago River between Chicago and Grand Avenues. The plant, built in 1981-82, occupies 29 acres of land. River frontage is landscaped on the north and south ends of the site, screening parking lots from the river view. River frontage alongside the plant building is concrete, and was designed as a docking facility for barges to drop off newsprint (currently all newsprint shipment arrives by rail). Public access to the site is very restricted because of security and safety concerns, and land and water access points are monitored with closed-circuit cameras and dock alarms. The landscaped park on the south end of the site is used by employees during lunch breaks.

COMMONWEALTH EDISON COMPANY

Commonwealth Edison provides electric power to the Chicago metropolitan area and owns many properties that

touch the Chicago River, including coal-fired generating stations, electrical substations, storage facilities, powerline rights-of-way, and office space. These properties are located along the Cal-Sag Channel in Palos Hills, on the Sanitary and Ship Canal in the Will County suburb of Romeoville, in the Cook County suburb of Forest View, and in Chicago near Pulaski Rd. and south of downtown near Cermak Rd.; along the South Branch downtown near Taylor Street; and along the North Branch near Division and at Addison. The generating stations use the waterway for receiving coal from barges and for cooling; shoreline treatments at these facilities are mostly functional, and historically little regard has been paid to landscaping or other aesthetic considerations. The electrical substations are fenced off for safety reasons, but as a general policy the company tries to accommodate recreational use of its properties when compatible with its operating requirements. Currently there is no public access to facility sites on waterway properties. On other properties (primarily powerline rights-of-way), recreational uses usually involve bike paths or walkways, which are leased by park and forest preserve districts or municipalities.

CHICAGO UNION STATION COMPANY

The Chicago Union Station Company owns and manages several railroad properties along the West Bank of the South Branch, from Wolf Point (junction with the Main Branch and North Branch) south to 18th Street The northernmost portion of these holdings (from Fulton to Randolf Streets) has active Amtrak rail lines, but is otherwise undeveloped. In the middle section (Randolf to Jackson Streets) the rail line goes underground, and the aboveground property has been redeveloped as Riverside Plaza, which has a street-level (and for one block, dock-level) riverwalk that includes landscaped plazas, outdoor seating, and summertime cafes. The southernmost part of the holdings (Taylor to 18th Street) is actively used as a railyard for Amtrak and other railroads, but has an undeveloped riverfront. The undeveloped sections of Union Station's property were identified for river edge landscaping and possible dock- or street-level walkways in the city's 1990 Chicago River Urban Design Guidelines. Property managers are open to landscape improvements, but have reservations about providing public access because of safety and security concerns.

ILLINOIS RIVER CARRIERS ASSOCIATION

The association is the major voice for barge owners who operate on the Chicago River waterway. The major use of the waterway for barges is along the Sanitary and Ship Canal and Cal-Sag Channel, though some barges operate on the North Branch up to Belmont Avenue and on the Main Channel. Group members are very concerned about maintaining the waterway as an efficient route for commerce and for their own livelihood; they are generally cautious and concerned about present and increased use and development of the waterway for recreational craft.

FARLEY CANDY COMPANY

The Farley Candy Company operates its main production facility on land bordering the Chicago Sanitary and Ship Canal near 31st Street and California Avenue It owns several parcels of land off the river and leases riverfront property from the Metropolitan Water Reclamation District. The candy company does not presently use the riverfront area, but is subleasing docking space near the railroad bridge that crosses the canal on company property to Garvey Marine for a railroad-to-barge coal distribution operation. Farley also uses the railroad for receiving shipments of sugar and corn syrup for candy production. Both sides of the canal along this stretch are used by industries, and the shore is rocky riprap with some weed trees. The company opposes public use of the riverfront because of safety, security, and liability reasons. Because the company leases the land, it is reluctant to improve the land aesthetically and does not want to encourage employee use of the water for fishing or picnicking during lunch hours because of safety and liability concerns.

BUSINESSES NOT FORMALLY INTERVIEWED

The **A. Finkl and Sons Company** runs a heavy forge shop located on the North Branch on Southport Avenue near Armitage Avenue (2000 North). The shop parallels the river for about 300 feet, and although the site is not publicly accessible, the company planted trees on the riverbank and installed attractive lighting and a picnic area for its employees.

MISCELLANEOUS GROUPS

CHICAGO POLICE DEPARTMENT–MARINE UNIT

The Marine Unit is a group within the Special Functions Division of the Bureau of Operations Services at the Chicago Police Department's (CPD) Central Headquarters. The Marine Unit is responsible for 1) law enforcement, 2) search and rescue, and 3) public service and safety for municipal waters of the Chicago River (Main, South, and North Branches, North Shore Channel, Sanitary and Ship Canal, Calumet River) and Lake Michigan (27 miles of frontage up to 3 miles out). The Marine Unit has 6 boats, but because of staff cutbacks, only 3 boats are usually out at one time. Because of the heavy recreational use of the lake, most of the Marine Unit's work is concentrated along the lakefront. On summer weekends one boat regularly patrols the downtown section of the river, but unless there are special problems that cannot be handled by land units, the Marine Unit rarely makes it into the upper stretches of the North Branch and North Shore Channel or the Calumet and Cal-Sag Channels. The CPD's Marine Unit is a municipal entity that coordinates with the state Department of Natural Resources' Marine Unit and the federal Coast Guard that also patrol the river and lake. Their functions overlap to some extent (e.g., the Coast Guard has search and rescue duties, but also gets into pollution and licensing which

the CPD does not), but most parties agree there is simply not enough staffing overall to adequately address increasing safety, regulation, and enforcement problems.

MISCELLANEOUS GROUPS NOT FORMALLY INTERVIEWED

John Husar, Outdoors Writer for the Chicago Tribune, has long championed efforts to improve the Chicago River corridor for fishing, hunting, and other recreational and open space opportunities in his three-times-weekly "On the Outdoors" feature column. In addition, weekly "Fishing" and "Woods and Waters" reports he and others write in the Tribune often describe current fishing action and other activities and issues regarding the Chicago River corridor.

PART III CURRENT AND POTENTIAL RECREATION OPPORTUNITIES

REACH 1 WEST FORK OF THE NORTH BRANCH

RESOURCE CHARACTER

Location: The West Fork of the North Branch begins in unincorporated Lake County, 1 mile south of West Deerfield Road (IL Hwy. 60) and just west of Interstate 94 (Figure 4.2). It continues south along the interstate through Lincolnshire, Bannockburn, and Riverwoods to the community of Deerfield. There the river heads southeast, crossing the Lake-Cook County Line near Pfingsten Road. From here, the river flows through Northbrook, Glenview, and Morton Grove, where it meets the Middle Fork in the Chick Evans Golf Course (Forest Preserve District of Cook County) to form the main stem of the North Branch. Total length of the reach is around 14 miles.

Land Use/Land Cover: The West Fork flows primarily through residential areas, though significant sections of it are undeveloped or in public or private open space. Vegetative cover includes a mix of open and forested areas.

Channel Character: The West Fork is narrow, straight, and channelized through most of its length, except for its lower course through Cook County forest preserve lands. Its upper section can be very shallow, but the lower part is navigable by canoes and kayaks during periods of adequate flow.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 1 are described in Table 4.4 from north to south and are keyed to Figures 4.2 and 4.3 with numbers in the first column of the table. Major activity types are discussed in the sections below.

Canoeing and Kayaking: During periods of adequate flow, the lower stretch of the West Fork can be canoed from downtown Glenview to its confluence with the North Branch at the Chick Evans Golf Course. There is a potential put-in near Waukegan Road. Navigability above downtown Glenview is uncertain.

TABLE 4.4
Current and potential recreation-open space opportunities, Reach 1
(See Figures 4.2 and 4.3 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
1	Old Mill Road property	Lincolnshire/private	40 acre potential forest/wetland restoration site
2	Bannockburn Basin	Bannockburn /Lake County FPD	40 acre flood control site—no public access
3	Deerfield Golf Course	Deerfield/Deerfield Park District	135 acre public golf course
4	Somme Woods FP	Skokie Div./Cook County FPD	735 acre picnic, restoration sites
5	Northbrook open space	Northbrook/private	Private land
6	Meadowhill Park	Northbrook/Northbrook Park District	60 acre public park
7	Anetsburger Golf Course	Northbrook/private	16 acre golf course
8	Techny Basin	Northbrook/Divine Word Missionary Fathers	Private, proposed public access
9	Techny Basin	Glenview/Marathon U.S. Realties	283 acre, private, planned public access park and trail
10	Glenview Naval Air Station	Glenview/U.S. Government	1,188 acre; proposed closing could provide public access
11	Tall Trees Park	Glenview/Glenview Park District	4.5 acre public park
12	Sleepy Hollow Park	Glenview/Glenview Park District	7.5 acre public park
13	Riverside Park	Glenview/Glenview Park District	3.9 acre public park
14	Glenview Country Club	Glenview/private	Golf course
15	Chick Evans Golf Course	Skokie Division/Cook County FPD	167 acre public golf course

Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

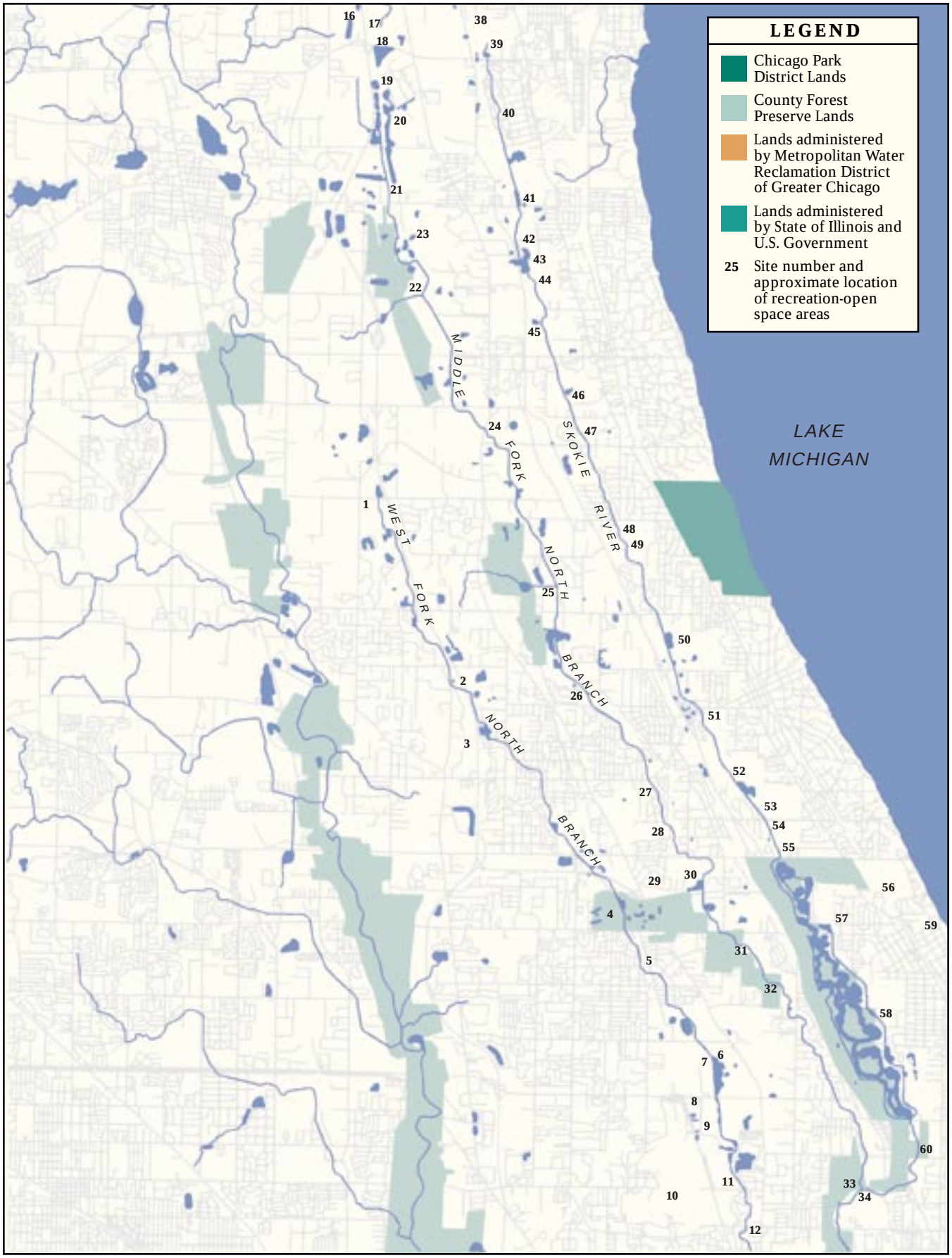

FIGURE 4.2
Current and potential recreation-open space opportunities, Reaches 1, 2 and 3

Fishing: Largemouth bass, bluegill, sunfish, and other species live in the river, but little fishing takes place. The sustainability of a recreational fishery under increased pressure is uncertain, especially in the upper stretches.

Trails: The Forest Preserve District of Cook County has bicycle, hiking, and horseback riding trails on its Somme Woods and Chick Evans sites, but no developed trails directly parallel the banks of the West Fork. Several trails outside the forest preserves were recently developed or are being planned along and near the river corridor. These projects all relate to the proposed 12-mile Techny Trail and Greenway system, and include a pathway through downtown Glenview; a bikeway along the river and Metra commuter rail right-of-way linking the North Branch Bicycle Trail with the communities of Morton Grove, Glenview, Golf, Northbrook, and Deerfield; and a trail following the river through the Techny Basin developments in Glenview and Northbrook.

Natural and Cultural Resource-Based Recreation and Education: The Somme Prairie Nature Preserve is a 70-acre dedicated Illinois Nature Preserve that includes the former floodplain of the now channelized West Fork. The site includes areas of very high quality prairie and Savanna, which are being managed and expanded by the forest preserve district with the help of volunteer stewards from the North Branch Prairie Project.

Other Recreation: Village parks in Northbrook and Glenview offer various active and passive recreation activities, and the river adds a natural element to the setting. A picnic grove at Somme Woods offers passive recreation, but is located one-half mile east of the West Fork. Two public and two private golf courses are also located along the West Fork.

REACH 2 MIDDLE FORK OF THE NORTH BRANCH

RESOURCE CHARACTER

Location: The Middle Fork of the North Branch begins in northern Lake County near Park City and flows south through Waukegan, North Chicago, Green Oaks, Lake Bluff, Lake Forest, Highland Park, Deerfield, Northbrook, and Northfield to its confluence with the Skokie River (East Fork), a length of about 21 miles (Figure 4.2). From this point, the river continues another 3 miles through Cook County forest preserve sites in Glenview and Morton Grove until it joins the West Fork to form the main stem of the North Branch.

Land Use/Vegetative Cover: The upper third of this reach (above Half Day Road, IL Highway 22) is a mix of low density residential, farm, and public open space, while the lower two-thirds is residential and public open space. The vegetative cover of public and private open space includes a diverse mix of forest, savanna, prairie, old field, wetland, mowed grass area, and agricultural fields. Some cultivated fields in Lake County are being leased out by the forest preserve district to farmers until they are ready to be restored and/or developed for recreation.

Channel Character: The Middle Fork begins as a series of wetlands in a meandering river channel. Much of the Middle Fork floodplain south of Buckley Road (IL Highway 137), however, was modified long ago for agriculture, with the river channel ditched and the land laid with drainage tile. This narrow, straight channel is usually quite shallow, and in some places buckthorn and box elder crowd the river and hinder access; other typical bank trees include willow, silver maple, and elm.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 2 are described in Table 4.5 from north to south and are keyed to Figure 4.2 with numbers in the first column of the table. Major activity types are discussed in the sections below.

Canoeing and Kayaking: The lower 3 miles of the Middle Fork from the Skokie River to the main stem of the North Branch is usually navigable by canoe or kayak. Above the Skokie River, the narrow channel is navigable to Winnetka Road, and perhaps further, during periods of adequate water.

Fishing: Species observed in this reach include northern pike, largemouth bass, carp, bluegill, and sunfish. Other than the Skokie Lagoons, the Middle Fork holds the highest potential for recreational fishing of the three forks of the North Branch, especially in its lower stretches. Currently, however, little fishing takes place.

Trails: The Forest Preserve District of Cook County has bicycle, hiking, and horseback riding trails on its sites along the lower stretch of the Middle Fork, and a developed trail circles the Somme Woods preserve. Lake County Forest Preserves has proposed developing a pedestrian nature trail on its Middle Fork Savanna site, providing access on the north and south ends. Future plans also include a northern extension of this trail to connect the district's other Middle Fork properties, and a western extension to connect with its Des Plaines River Trail. A trail may also be developed on the district's Lake Forest flood control site once the reservoir is constructed.

Natural and Cultural Resource-Based Recreation and Education: Lake County Forest Preserves' Middle Fork sites contain areas of exceptional plant and animal diversity, and are used for a variety of nature recreation and environmental education activities. The district is working with the nonprofit Lake Forest Open Lands in the ecological restoration of the Middle Fork Savanna property, which may include the efforts of volunteer restorationists. The district has also worked with ChicagoRivers partners to identify areas within its holdings that would be likely candidates for wetland restoration. A site on its Lake Forest property has since been

TABLE 4.5
Current and potential recreation-open space opportunities, Reach 2
(See Figure 4.2 and 4.3 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
16	Headwaters marsh	Park City/private	10 acre, private, potential wetland restoration site
17	Pritzker property	Waukegan/private	160 acre, private, potential wetland restoration site
18	Baxter land	Waukegan/Baxter Healthcare	76 acre, private, potential wetland restoration site
19	Wrigley tract	Waukegan/Abbot Labs	118 acre, private, potential wetland restoration site
20	Unnamed site	Green Oaks/Lake County FPD	14 acre, undeveloped natural area
21	Green Oaks	Green Oaks/Lake County FPD	69 acre flood control site
22	Middle Fork Savanna	Lake Forest/Lake County FPD	477 acre, undeveloped natural area
23	Knollwood Country Club	Lake Forest/private	260 acre private golf course
24	School District and recycling center	Lake Forest/public	34 acre potential wetland restoration site
25	Lake Forest/Prairie Wolf Slough	Lake Forest/Lake County FPD	431 acre, undev. flood control site; includes 28 acre URP/ ChicagoRivers demonstration project
26	Berkeley Prairie	Highland Park/Lake County FPD	18 acre natural area
27	Trail Tree Park	Deerfield/Deerfield Park District	5 acre public park
28	Green Briar Park	Deerfield/Deerfield Park District	19.5 acre public park
29	Middle Fork Reservoir	Northbrook/MWRD	320 acre flood control site
30	Green Acres Country Club	Northbrook/Northbrook Park District	60 acre public golf course
31	Chipilly Woods[1]	Skokie Division/Cook County FPD	Developed trail
32	Sunset Ridge Woods[1]	Skokie Division/Cook County FPD	Developed trail
33	Watersmeet[1]	Skokie Division/Cook County FPD	Potential wetland restoration site
34	Wilmette Golf Course	Wilmette/Wilmette Park District	105 acre public golf course and driving range
35	Blue Star Mem. Woods[1]	Skokie Division/Cook County FPD	Bike, developed trails
36	Glenview Woods[1]	Skokie Division/Cook County. FPD	Bike, developed trails, restoration site
37	Harms Woods[1]	Skokie Division/Cook County FPD	Bike/developed/foot trails, 100 acre restoration site

[1]Note: Forest Preserve District of Cook County does not break down acreage of holdings by site; approximate total acreage for its Middle Fork holdings is 1,626 acres.
Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

designated a ChicagoRivers demonstration project, and partial funding to carry out the project has been received through a grant from the Urban Resources Partnership (URP). In Cook County's Glenview Woods Forest Preserve, North Branch Restoration Project volunteers manage woodland, savanna, and wetland areas near the west bank of the Middle Fork. They are also working on a 100-acre woodland site at Harms Woods that includes mesic and wet communities.

Other Recreation: The Forest Preserve District of Cook County maintains picnic groves at its Somme Woods, Chipilly Woods, Blue Star Memorial Woods, Glenview Woods, and Harms Woods sites. Harms Woods, the largest of these recreation areas, offers picnic shelters and access to the North Branch Bicycle Trail. One private and three public golf courses are also located on or near the Middle Fork.

REACH 3 SKOKIE RIVER (EAST FORK OF THE NORTH BRANCH)

RESOURCE CHARACTER

Location: The Skokie River (East Fork of the North Branch) begins in northern Lake County near Park City, and flows south through the suburbs of Lake Bluff, Lake Forest, Highland Park, Northfield, Glencoe, Forest Preserve District of Cook County lands, Winnetka, and Wilmette, where it joins with the Middle Fork (Figure 4.2). Total length of this reach is about 17 miles.

Land Use/Vegetative Cover: The Skokie River is the most developed of the three forks of the North Branch and has the least amount of land in public open space. Land use is primarily residential, except for the large Greenbelt and Skokie

Lagoons forest preserve tracts at the northern and southern ends of the river. Significant acreage in private open space properties, however, helps maintain the natural integrity of the corridor as a greenway; these properties include conservancy lands in Lake County and several country club golf courses in Lake and Cook Counties. The vegetative cover of public and private open space includes woodland, wetland, and mowed grass.

Channel Character: The Skokie River was once an extensive system of wetlands from the headwaters down through what is now the Skokie Lagoons. Most of these wetlands disappeared after the floodplain was drained and filled, the river was channelized, and the Skokie Lagoons were constructed in a massive Civilian Conservation Corps project during the 1930s. Today, a small portion of the original headwaters wetlands exists in Lake County's Greenbelt Forest Preserve. Between there and the Skokie Lagoons, the river is narrow and channelized, and runs very shallow except after large rains. The Lagoons area itself includes 7 pools and more than 190 acres of water, with shoreland banks and islands that combine wild nature and groomed spaces to create a picturesque effect. Ongoing restoration projects include dredging the Lagoons and restocking them with fish, and restoring the natural character of the Skokie River channel through the Chicago Botanic Gardens. Both projects include ecological restoration of shoreline vegetation. Below the Lagoons, the river widens and deepens, and follows its natural stream course to its confluence with the Middle Fork.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 3 are described in Table 4.6 from north to south and are keyed to Figure 4.2 with numbers in the first column of the table. Major activity types are discussed in the following sections.

Boating: The river above the Skokie Lagoons is very narrow and is not navigable by even small craft during most of the year. The Skokie Lagoons, however, offers a variety of boating experiences, including canoeing, kayaking, sailing, and rowboating, and is perhaps the most popular area in the entire Chicago River corridor for non-motorized boating (electric trolling motors are also allowed). As part of the Skokie Lagoons restoration project, a new boat launch facility has been constructed, and portageways have been improved on two of the three low head dams. Not including the Botanic Garden, it is about a 7-mile trip around the Lagoons. There is no improved portageway at the main control dam between the Lagoons and the lower channel of the Skokie River (at Willow Rd.), but portaging between the two is possible. From the Lagoons to its confluence with the Middle Fork, the Skokie River is navigable by canoe and kayak, except during periods of low water. A dam near Winnetka Road is somewhat difficult to portage around.

Fishing: At the headwaters of the Skokie River, the Greenbelt Forest Preserve has two 6-acre fishing ponds that are stocked for shore fishing with largemouth bass, channel catfish, and bluegill. The river between Greenbelt and the Skokie Lagoons does not have a consistent, adequate flow to sustain a recreational fishery. However, the Skokie Lagoons offers some of the best and most popular fishing opportunities in the Chicago River corridor. Shoreline vegetation is managed in part to allow access for bank fishing, which is probably the most common fishing method on the Lagoons. Areas around the dams of the Lagoons are particularly attractive fishing spots. As part of the restoration, rough fish were removed and the Lagoons were restocked with largemouth bass, walleye, northern pike, channel catfish, bluegill, and sunfish. A 14-inch limit on bass will help improve the sustainability of the fishery, and catch-and-release fishing is being encouraged. Fishing below the Lagoons is rare, but children fish along the shore occasionally. Species include carp, bullhead, largemouth bass, and bluegill.

Trails: The Greenbelt Forest Preserve has 5 miles of looped gravel trails for hiking, bicycling, cross-county skiing, and other trail activities. The Lake Bluff flood control site currently has an informal trails network through it, and the Village of Lake Bluff, Lake Bluff Open Lands, and Lake Forest Open Lands are interested in linking this site with trails to properties to the north and south. The Forest Preserve District of Cook County's 20-mile-long North Branch Bicycle Trail begins at the north entrance to the Chicago Botanic Garden, where it shares a service drive for 1.2 miles to the south entrance. The Botanic Garden also has many paths that wind through its outdoor garden displays, including its Skokie River ecological restoration project. Below the Botanic Garden, the North Branch Bicycle Trail follows a dedicated off-road route, paralleling the Lagoons and the river below. The Lagoons area also has hiking and horse trails.

A proposed extension from the northern terminus of the North Branch Bicycle Trail eastward along Lake-Cook Road would connect it with the Green Bay Trail, a rail-trail that runs south to Wilmette and north, joining other trails all the way to the Wisconsin border.

Natural and Cultural Resource-Based Recreation and Education: The Greenbelt Forest Preserve has been the site of extensive restoration of wetland, savanna, and prairie ecosystems. At the site, Lake County Forest Preserves is developing an interpretive trail that will tell the story of the Skokie River: its historical nature, past human degradation, and current efforts to restore it. The Chicago Botanic Garden is one of the key environmental education centers of the Forest Preserve District of Cook County. Managed in cooperation with the Chicago Horticultural Society, the Botanic Garden has hosted several meetings focusing on the Chicago River. Its Skokie River Restoration Project is a recent endeavor to stabilize eroding streambanks and restore the ecological function of the river. The project will have a public education component and will be readily accessible to the hundreds of

thousands who visit the Botanic Garden annually. Restoration of the historic natural and designed landscape of the Skokie Lagoons area is another concern of the forest preserve district; professional, community, and public groups are participating in planning and design exercises for the area. The Lagoons have long been a popular site for birding, viewing wildlife and spring flora, and other nature-related recreation activities, and the restoration projects mentioned above should increase these opportunities. Below the Lagoons, volunteers from the North Branch Restoration Project recently began work to restore a sedge meadow community along the river.

Other Recreation: The Greenbelt Forest Preserve is the most developed of all of the Lake County Forest Preserves sites in the Chicago River corridor. Because of its proximity to Waukegan, Park City, and North Chicago, the site receives heavy use by a diverse clientele for a variety of active and passive activities. The Skokie Lagoons Forest Preserve contains a designated picnic area with shelters, and also is used for various other recreational activities. Finally, 12 golf courses, most of them private country clubs, are located near the river.

TABLE 4.6
Current and potential recreation-open space opportunities, Reach 3
(See Figure 4.2 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
38	Greenbelt Forest Preserve	Park City/Lake County FPD	536 acre full-service facility
39	Foss Park Golf Course	unincorporated/public	178 acre public golf course
40	Great Lakes Naval Center	Lake Bluff/U.S. Government	1,800 acre, government
41	Lake Bluff Country Club	Lake Bluff/Lake Bluff Pk. District	120 acre public golf course
42	Skokie River Nature Area	Lake Bluff/Village Lake Bluff, leased Lake Bluff Open Lands	125 acre proposed nature trails
43	Lake Bluff site	Lake Bluff/Lake County FPD	85 acre, undeveloped flood control site, informal trails
44	Lake Forest Open Lands site	Lake Forest/Lake Forest Open Lands Association	Nature trails
45	Deerpath Golf Course/Park	Lake Forest/public	134 acre golf course and park
46	Deerpath Play Field	Lake Forest/Village Lake Forest	26 acre, park facilities
47	Onwentsia Club	Lake Forest/private	203 acre private golf course
48	Centennial Park	Highland /Pk. District of Highland Park	65 acre, park facilities
49	Old Elm Golf Course	Highland Park/private	175 acre golf course
50	G.M. Kushing property	Highland Park/private	34 acre, private, potential wetland restoration site
51	Highland Park Country Club	Highland Park/private	109 acre golf course
52	Sunset Valley Golf Course	Highland Park/public	149 acre golf course
53	Bob-O-Link Golf Course	Highland Park/private	165 acre golf course
54	Larry Fink Park	Highland Park/Park District of Highland Park	71 acre park, potential wetland restoration site
55	Northmore Country Club	Highland Park/private	265 acre golf course
56	Glencoe Golf Course	Glencoe/private (public access)	126 acre golf course
57	Chicago Botanic Garden	Skokie Division/Cook County FPD	280 acre gardens, education center, restoration site
58	Skokie Lagoons	Skokie Division/Cook County FPD	400 acre, bike, horse, hiking trails; boat launch, picnic areas; 2 potential wetland restoration sites
59	Skokie Playfield Golf Course	Winnetka/private	165 acre golf course
60	Unnamed forest preserve, including the Skokie Sedge Meadow[1]	Skokie Division/Cook County FPD	Bike and horse trails; 20 acre sedge meadow restoration site

[1] Note: The Forest Preserve District of Cook County does not break down the acreage of its holdings by site; approximate total acreage for its Skokie River holdings is 1,489 acres.
Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

REACH 4
NORTH SHORE CHANNEL

RESOURCE CHARACTER

Location: The North Shore Channel flows south from the locks (closed to boat traffic) at Wilmette Harbor on Lake Michigan through the suburbs of Wilmette, Evanston, Skokie, and Lincolnwood to the City of Chicago, where it ends at its confluence with the North Branch of the Chicago River just south of Foster Avenue (Figure 4.3). The total length of this reach is 17.5 miles.

Land Use/Vegetative Cover: The corridor of the North Shore Channel is owned by the Metropolitan Water Reclamation District of Greater Chicago. Properties along the corridor are leased primarily to park districts, except for isolated parcels that are in institutional, industrial, and commercial use. Open space parcels are generally wooded along the banks, with mowed lawn and scattered trees on the level ground above the banks.

Channel Character: Although the banks of the river appear very natural, the dominating straightness of the channel and steepness of its banks leave little doubt that this is a human-created waterway. Average width of the channel is about 150 feet, and the depth is about 8 feet.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 4 are described in Table 4.7 from north to south, and are keyed to Figure 4.3 with numbers in the first column of the table. Major activity types are discussed in the following sections.

Boating: The North Shore Channel is navigable by both non-motorized and motorized recreational boats. Access by both types, however, is difficult; the steep, wooded slopes and frequent fencing block access by canoes and kayaks through much of the reach, and there are no launch facilities anywhere on the channel for motorboats. Those who paddle the channel will usually put in at the grounds of the Bahai

TABLE 4.7
Current and potential recreation-open space opportunities, Reach 4
(See Figure 4.3 for site locations)

SITE NUMBER AND NAME	MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
61 Gilson Park/Wilmette Harbor/Yacht Club	Wilmette/MWRD-Wilmette Park District	60 acre full service park; yacht club, no river access
62 Jans Community Golf Course	Evanston-Wilmette/MWRD Evanston-Wilmette Park District	90 acre public golf course
63 Chandler Park	Evanston/MWRD-Evanston	3.2 acre neighborhood park
64 Leahy Park	Evanston/MWRD-Evanston	4 acre neighborhood park
65 Ladd Arboretum	Evanston/MWRD-Evanston	18 acre arboretum
66 Evanston Ecology Center	Evanston/MWRD-Evanston	4 acre environmental education center
67 Canal Lands Park	Evanston/MWRD-Evanston	4 acre neighborhood park
68 Mc Cormick Park	Evanston/MWRD-Evanston	3 acre neighborhood park
69 Eggelston Park	Evanston/MWRD-Evanston	2 acre playground
70 Twiggs Park	Evanston/MWRD-Evanston	9 acre neighborhood park
71 Butler Park	Evanston/MWRD-Evanston	11 acre neighborhood park
72 Beck Park	Evanston/MWRD-Evanston	5.5 acre neighborhood park
73 Fel-Pro Park/Northshore Sculpture Park	Skokie/MWRD-Skokie Park District	29 acre bike and jogging trails; sculpture park
74 Canal Lands Park	Evanston/MWRD-Evanston	6.9 acre neighborhood park
75 Harbert Park	Evanston/MWRD-Evanston	6.6 acre neighborhood park
76 Canal park	Lincolnwood/MWRD-Lincolnwood	25 acres, passive use
77 U.S. Army Reserve	Lincolnwood/MWRD-U.S. Government	Vehicle parking
78 Thillens Field	Lincolnwood/MWRD-private	Baseball fields
79 U.S. Army Reserve	Chicago/MWRD	Training center
80 Devon Aeration Station	Chicago/MWRD	No access
81 Canal park	Chicago/MWRD	River path
82 Legion Park	Chicago/MWRD-Chicago Park District	48.35 acre bike trail, playlot, ballcourts and fields
83 U.S. Army/Marine Reserves	Chicago/MWRD	Training center
84 River Park (part)	Chicago/MWRD-Chicago Park District	30 acre full service park, trail

Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

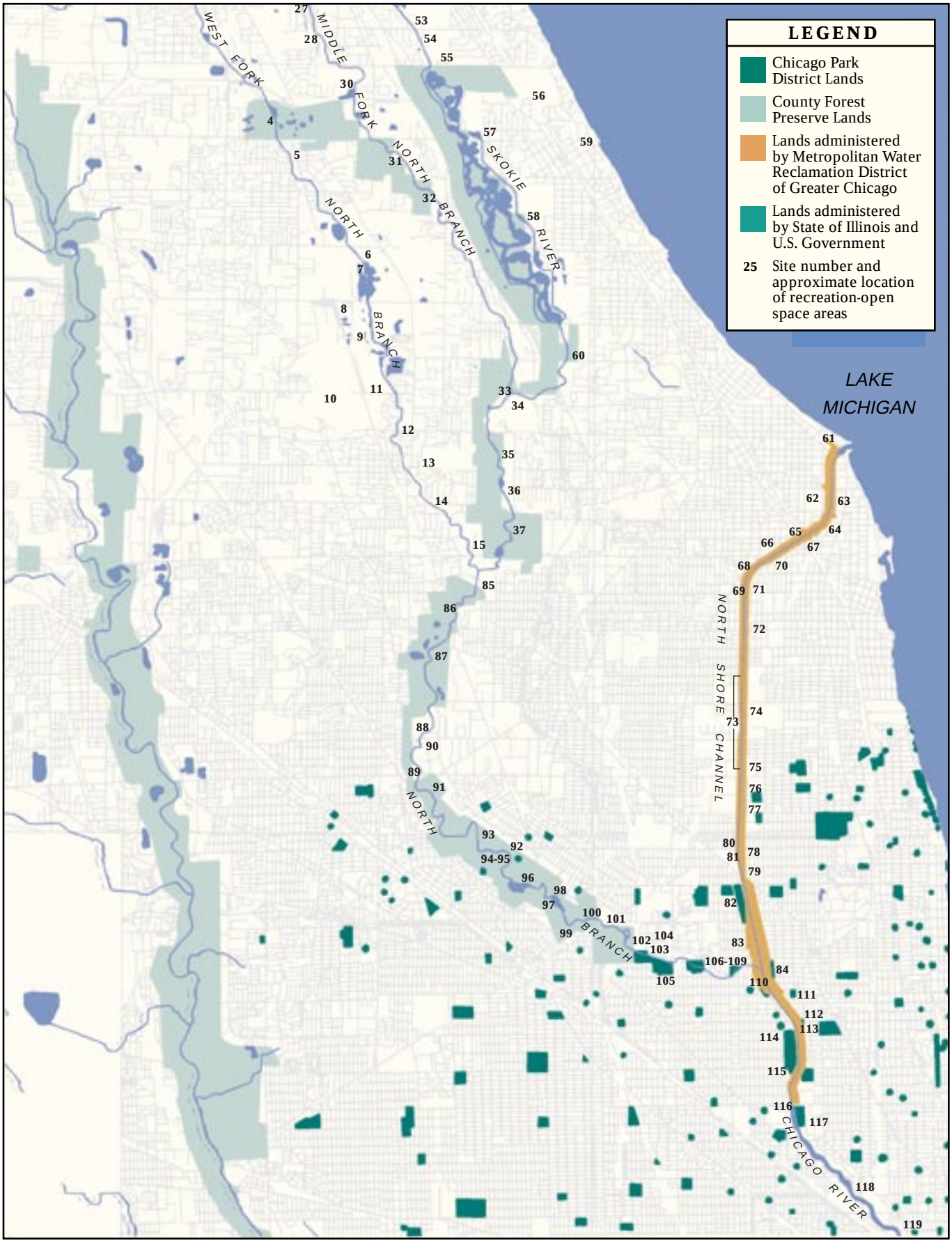

FIGURE 4.3
Current and potential recreation-open space opportunities, Reaches 4 and 5A

Temple in Wilmette or at Oakton Avenue in Skokie. A dock behind the Evanston Ecology Center was used in the past by a voyageur canoe club and has been used more recently by the Chicago River Aquatic Center for its Iron Oars Rowing Marathon, but the dock itself is not open to regular public use. Water turbulence caused by an aeration facility at Devon Avenue warrants some caution from paddlers; otherwise, the relatively flat water of the channel makes it easy to paddle in either direction. Motorboats using the North Shore Channel come up from the North Branch and must return that way.

Fishing: Bank fishing and fishing boats are occasionally spotted along the North Shore Channel, but such sightings are uncommon, except near the confluence of the channel with the North Branch. Overall, the recreational fishery is viewed as limited but improving.

Trails: Segments of a bike trail network exist in channel parks in Evanston, Skokie, and Chicago, but the system lacks continuity. Some sections of this 7-mile paved trail were routed in a serpentine design, making it tedious for bicyclists. In addition to the bike path in Skokie, there is a cinder jogging path.

The Chicago section of the trail was recently improved as a bicycle route, and there are plans to link all trail segments to form a continuous trail system along the North Shore Channel. This trail would link with the North Branch Riverwalk to the south (see Reach 5) and with the Green Bay Trail and Evanston lakefront bikeway to the north.

Natural and Cultural Resource-Based Recreation and Education: The Evanston Ecology Center and Ladd Arboretum provide a variety of indoor and outdoor environmental education opportunities for Evanston residents. Although the wooded part of the corridor is a very narrow band along the banks, it provides sufficient habitat for small mammals and birds to make it a popular area for wildlife observation.

Other Recreation: The parks along the North Shore Channel provide some facilities for active recreation, but the narrowness of the corridor precludes extensive development. Most use remains passive. The Jans Community Golf Course provides public golfing opportunities for residents of Evanston and Wilmette.

REACH 5 NORTH BRANCH OF THE CHICAGO RIVER

RESOURCE CHARACTER

Location: The main stem of the North Branch of the Chicago River begins just south of Golf Rd. in Morton Grove, where the Middle and West Forks come together in Cook County's Chick Evans Forest Preserve Golf Course (Figures 4.3 and 4.4. The North Branch continues south through the suburb of Niles, then turns east and flows through Chicago's northwest side neighborhoods to its confluence with the North Shore Channel just south of Foster Avenue. This upper section of the North Branch (Reach 5a) is about 10 miles long. From this junction, the lower section of the North Branch (Reach 5b) turns southeastward and flows another 7 miles until it meets the Main Branch and South Branch at Wolf Point in downtown Chicago.

Land Use/Vegetative Cover: The upper North Branch lies predominantly within an open space corridor of forest preserves, parks, and cemeteries, with some residential and school properties just above its confluence with the North Shore Channel. Open space land cover is predominantly wooded through the forest preserve sites and mowed grass with scattered trees where the river flows through parks and institutional grounds. Below the North Shore Channel, the river flows through a series of large and small parks and the Ravenswood and Albany Park neighborhoods; it then becomes largely commercial and industrial through the rest of its course. Open space land use is mostly mowed grass with scattered trees and hardscape.

Channel Character: The banks and channel of the North Branch remain natural in character through the forest preserves, although in places stormwater outfalls, runoff, and resulting periods of high and low water have scoured and denuded the banks. The river has adequate flow through much of the year except through LaBagh Woods, where it can get shallow during periods of low flow. Below LaBagh Woods, the riverbanks have been cut vertically and lined with stone, and the river is fenced off through most of the Chicago Park District parks. There is a 4-foot dam on the North Branch where it meets the North Shore Channel; it is known as Chicago's only "waterfall." Below the confluence, the river widens and deepens, the banks are somewhat higher, and the bank slope is steeply inclined in some places and a vertical cement or steel wall in other places, especially along the lower part of the subreach. At North Avenue the river widens to form a turning basin, and the channel splits to form Goose Island. The human-created North Branch Canal flows shallow around the east side of the island, then rejoins the main channel above Chicago Avenue

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 5 are described in Table 4.8 from north to south, and are keyed to Figures 4.3 and 4.4 with numbers in the first column of the table. Major activity types are discussed in the following sections.

Boating: The river is accessible by canoe and kayak for most of the year. Low water, especially through the LaBagh Woods Forest Preserve, may require paddlers to wade or portage some sections. Fallen logs or other vegetative obstructions might also require wading or portaging for short distances; major obstructions are usually cleared once a year. A low dam south of Howard Street can be hazardous to those who try to run it. A 4-foot dam located where the North Branch meets the North Shore Channel must be portaged. Below this point, the North Branch is wide and deep, and navigable by motor-

TABLE 4.8
Current and potential recreation-open space opportunities, Reach 5
(See Figures 4.3 and 4.4 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
85	Linne Woods[1]	North Branch Division/Cook County FPD	Picnic grove, bike and horse trails
86	Wayside Woods[1]	North Branch Division/Cook County FPD	Picnic grove, bike trail, restoration site
87	St. Paul Woods[1]	North Branch Division/Cook County FPD	Picnic groves
88	Miami Woods/Indigo Oak Openings[1]	North Branch Division/Cook County FPD	Picnic grove, bike trail, restoration sites
89	Unnamed forest preserve[1]	North Branch Division/Cook County FPD	Bike trail
90	Tam Golf Course	Niles/Niles Park District	9-hole public golf course
91	Bunker Hill/Yates Flatwoods[1]	North Branch Division/Cook County FPD	Picnic groves, bike trail, restoration sites
92	Caldwell Woods[1]	North Branch Division/Cook County FPD	Picnic grove, bike trail
93	Whealan Pool[1]	North Branch Division/Cook County FPD	Swimming pool
94	Edgebrook Golf Course[1]	North Branch Division/Cook County FPD	Golf course
95	Quinn Park	Chicago/Chicago Park District	.76 acre passive park
96	Edgebrook Woods[1]	North Branch Division/Cook County FPD	Picnic grove
97	Indian Road Woods[1]	North Branch Division/Cook County FPD	Picnic grove
98	Billy Caldwell Golf Course[1]	North Branch Division/Cook County FPD	Golf course
99	Forest Glen Woods[1]	North Branch Division/Cook County FPD	Picnic grove
100	Sauganash Prairie Grove[1]	North Branch Division/Cook County FPD	Restoration site
101	LaBagh Woods[1]	North Branch Division/Cook County FPD	Picnic grove
102	St. Lucas Cemetery	Chicago/private	Cemetery
103	Gompers Park	Chicago/Chicago Park District	39 acre full service park, river path, fishing pond, URP/ChicagoRivers wetland demonstration project
104	Bohemian National Cemetery	Chicago/private	Cemetery
105	Eugene Field Park	Chicago/Chicago Park District	12.78 acre full service park, river path
106	Von Steuben High School	Chicago/Chicago Public Schools	Playfields
107	Kiwanis Playground Park	Chicago/Chicago Park District	2.05 acre, playcourts
108	North Park College	Chicago/private	Campus riverwalk
109	North Park College	Chicago/private	Playfield
110	Ronan Park	Chicago/MWRD-Chicago Park District	11.01 acre park, bike path
111	Pumping Station	Chicago/MWRD	Passive recreation
112	Jacob Park	Chicago/Chicago Park District	.39 acre playlot
113	Sunken Gardens Park	Chicago/Chicago Park District	.16 acre passive recreation area
114	Horner Park	Chicago/Chicago Park District	58.84 acre full service park, bike path
115	California Park	Chicago/Chicago Park District	13.52 acre full service park and bike path
116	Gordon Tech. High School	Chicago/private	Private, undeveloped river bank
117	Clark Park	Chicago/MWRD-Chicago Park District	9.76 acre passive recreation area
118	Lathrop Homes	Chicago/Chicago Housing Authority education project	Potential river edge treatment and environmental
119	A. Finkl and Sons	Chicago/private	Employee passive recreation area
120	Turning basin overlook	Chicago/private	Public access; passive recreation area
121	Montgomery Ward	Chicago/private	Employee passive recreation area
122	Chicago Tribune Freedom Center	Chicago/private	Employee passive recreation area
123	East Bank Club	Chicago/private	Private dock-level walkway
124	Park #444	Chicago/Chicago Pk. Dist.-City of Chicago	.89 acre passive recreation area

[1]Note: Forest Preserve District of Cook County does not break down acreage of holding by site; approximate total acreage for its North Branch holdings is 1,823 acres.
Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

boats. An exception to this is the east channel around Goose Island, which is only about 2 feet deep. Some riparian residents in the Ravenswood neighborhood have appropriated MWRD riverfront property as their own and have constructed boat docks for private access to the river. Commercial boats and barges come north as far as Belmont Avenue, though traffic is not as heavy as on reaches to the south. Several private boat yards along the lower section of the North Branch cater to larger motor and sail boats as a place for winter storage.

Fishing: A stocked fishing pond at Gompers Park is popular with children and adults for panfish and catfish. A 1-day event developed by the Chicago Police Department called "Get Hooked on Fishing, Not on Drugs" introduced more than 200 children to fishing at the park during its second (1995) season of operation. The "waterfall" dam, where the North Branch meets the North Shore Channel, is a popular fishing spot on the North Branch. Some fish the area by boat, but most access it from River Park, where the waterfall is located. This access is not sanctioned by the park district, and anglers must climb under the fence and stand atop the dam or on the steep shoreline below the dam. Bullhead and carp are common species caught. The site is used mainly by an ethnically diverse group of local male youths.

Trails: The Forest Preserve District of Cook County's North Branch Bicycle Trail continues along the main stem of the North Branch from points northward and terminates at the Bunker Hill/Edgebrook Flatwoods natural areas near the intersection of Devon and Caldwell Aves. in Chicago. Road signs provide bicyclists with street connections between the North Branch Trail and the Chicago Lakefront Path. Paved pathways wind along the river through the Chicago Park District's larger river parks on the North Branch; at River Park the trail connects with a discontiguous trail system along the North Shore Channel. The forest preserve district has proposed extending the North Branch Trail south from its current terminus through LaBagh Woods to Gompers Park. Friends of the Chicago River, together with other groups and agencies, have developed a conceptual plan for developing a North Branch Riverwalk that would link the LaBagh Woods Forest Preserve, Chicago Park District river parks (Gompers, Eugene Field, River, Ronan) and other properties with a continuous trail. The Friends of the Chicago River has also produced a set of walking tour maps that cover a major portion of the Chicago River corridor within the city; for the North Branch, the route begins on the north at LaBagh and Clayton Smith Woods Forest Preserves, and follows dirt paths along the river, streets, sidewalks, park paths, and alleys to Wolf Point in downtown Chicago. The lowermost part of the North Branch has been incorporated within a plan for a downtown riverwalk (see description under Reach 6).

Natural and Cultural Resource-Based Recreation and Education: The forest preserves of the main stem of the North Branch have the greatest concentration of ecological restoration sites in the Chicago region. North Branch Restoration Project volunteers assist in managing seven sites along this reach, most of which touch the banks of the river. The forest preserves on this reach also offer great opportunities for birding and other wildlife observation, on both an organized and informal basis. The North Branch as it flows through the city of Chicago also offers opportunities for children to explore urban nature. Children are often seen along the banks of the river in the forest preserves and where the river is accessible from adjacent neighborhoods. A frequently flooded portion of Gompers Park has been identified as a ChicagoRivers demonstration project for wetland restoration, and ChicagoRivers partners are working with the Chicago Park District, the Department of Environment, and other groups to implement the project. The project has received funding under the Urban Resources Partnership (URP) grant program.

Other Recreation: The parks and forest preserves of this reach offer a full range of active and passive recreation opportunities, from golfing and swimming to toboggan slides and indoor sports. Several companies along the North Branch have developed private open space facilities for their employees to use in their free time; a few of these are accessible to the public.

REACH 6 CHICAGO RIVER (MAIN BRANCH)

RESOURCE CHARACTER

Location: The Chicago River (Main Branch) begins at Lake Michigan and flows west to Wolf Point, a distance of 1.4 miles (Figure 4.4). Here it joins the North and South Branches, which both flow south.

Land Use/Vegetative Cover: Flowing through the heart of downtown Chicago and the city's newly developing New East Side, the Chicago River has become a focal point for high-rise commercial office, hotel, and residential development. The concrete canyon formed by new and older development, however, is being planned around an open space river edge that is publicly accessible. This open space is mainly hardscape plazas and riverwalks, except for two areas: South Bank Park between Lake Shore Drive and Michigan Avenue, which has mowed grass and scattered trees, and Wolf Point, which has a wooded river edge backed by a mowed lawn. A large undeveloped parcel just south of the river and west of Lake Shore Drive has been converted to a golf course as an interim use.

Channel Character: The Chicago River has been widened and deepened to serve the commercial functions of the large metropolitan city and can receive large ships and barges as well as tour boats and smaller recreational craft. The channel is straight except for a slight s-curve at Michigan Avenue, where the canyon of high-rises opens up to afford a dramatic view of the river embraced by the historic Wrigley and Tribune Tower buildings—an urban space that has been called one of the most spectacular of any American city. The eight bascule bridges between Michigan Avenue and Wolf Point have become symbols of the river downtown. The river

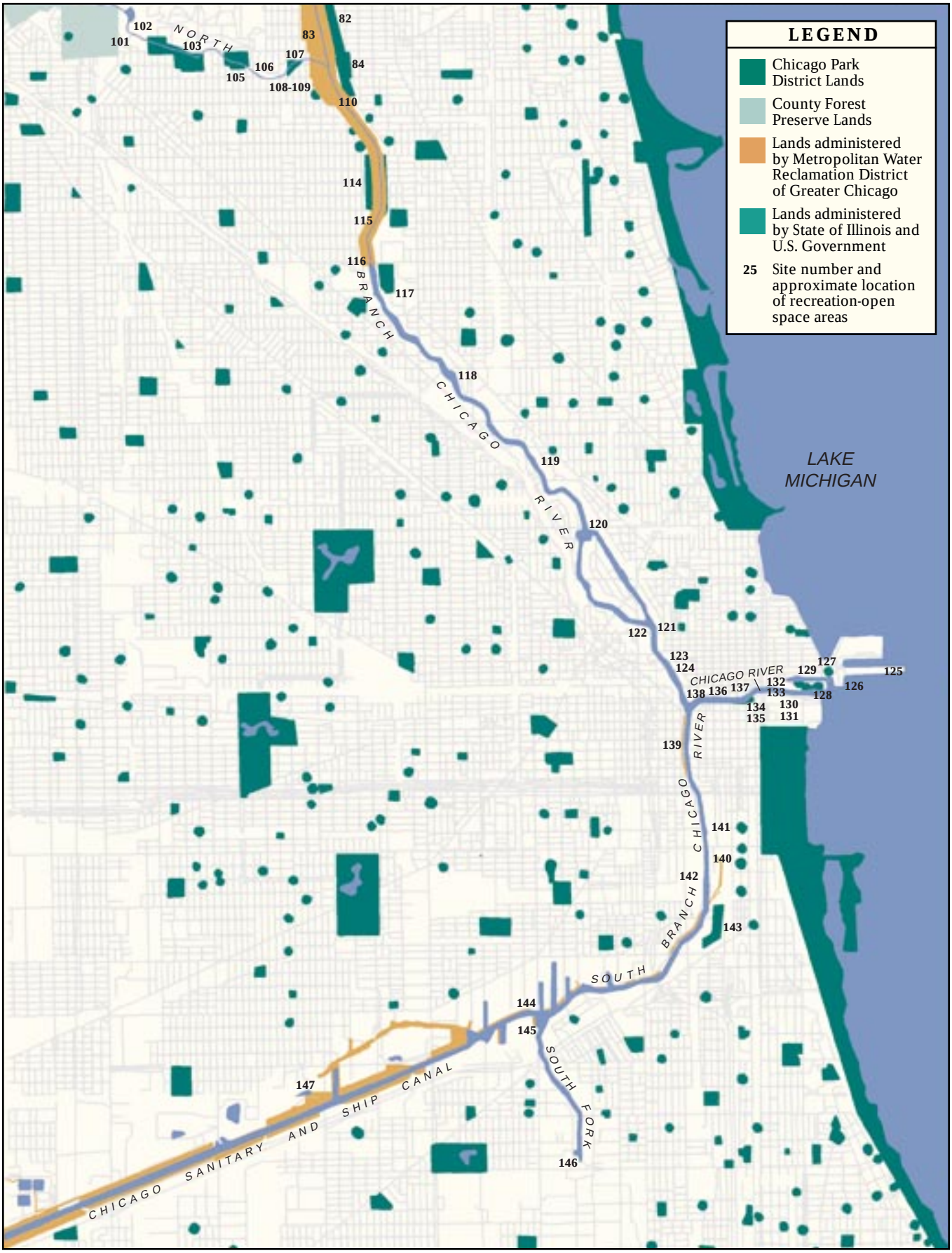

FIGURE 4.4
Current and potential recreation-open space opportunities, Reaches 5B, 6 and 7

edge is for the most part a vertical wall of concrete or steel sheet piling, except for Wolf Point, which has a gradually sloped, vegetated edge. At the mouth of the river, a lock provides access to Lake Michigan and the river widens on its south bank to form a turning basin known as the Inner Harbor. On the north bank is Ogden Slip, which once served commercial ships but is now used primarily by recreational boats.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 6 are described in Table 4.9 from east to west, and are keyed to Figure 4.4 with numbers in the first column of the table. Major activity types are discussed in the sections below.

Boating: The Chicago River is a center of activity for a variety of recreational boating opportunities. Several excursion boat companies are based along the river, primarily near Michigan Avenue and at Ogden Slip, and offer tours of the river and lake on a regular basis during the summer. The Chicago River Aquatic Center is housed in the old Coast Guard Station, and its members use their rowing shells on the river on a daily basis in the early morning hours. Motorboats ply the waters of the Main Branch in large numbers on summer weekends, touring the river, moving through the locks out to the lake, or docking in the Inner Harbor and at Ogden Slip. Canoes and kayaks are rarely seen on this reach, but North Pier and Wolf Point have been used as access points for small paddle boats. All these recreational uses overlay commercial shipping, which has declined in its use of the Main Branch but remains an important function of the river.

Fishing: Fishing is becoming increasingly popular on the Chicago River, both by boat and from shore. Twenty different species have been caught here, including small and largemouth bass, white and yellow perch, white crappie, channel and blue catfish, rock and white bass, trout, salmon, and smelt. In the winter of 1992-1993, North Pier Chicago installed water aerators in Ogden Slip to keep the water from freezing to protect their floating restaurant docks; this open water attracted both fish and anglers in large numbers. Very good fishing has also been reported along the south bank between the Michigan Avenue bridge and Columbus Dr. In this popular fishing spot, anglers have devised special bank fishing techniques to avoid having their lines snapped by the busy barge and pleasure boat traffic. In addition to these activities, fishing derbies are also being held on the Chicago River. In 1988 and 1993, a part of the river was netted off and stocked with tagged fish (rainbow trout in the first derby, catfish and largemouth bass in the second), and for a fee contestants could fish off floating barges for prizes. The 1993 derby was sponsored by the Mayor's Office in cooperation with the Chicago Riverwalk Corporation and member hotels and businesses along the river. A more recent tournament, "The Chicago Carp Classic," had its first year in 1994 with 21 contestants. This tournament aims to showcase the Chicago River downtown and the premiere carp fishery there, and hopes to draw attention from those in countries like England where the carp is a revered gamefish species.

TABLE 4.9
Current and potential recreation-open space opportunities, Reach 6
(See Figure 4.4 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
125	Navy Pier	Chicago/Metropolitan Pier and Exposition Authority	Waterfront park, festival, event, and market place
126	Old Coast Guard Station	Chicago/City of Chicago	Access for police marine unit and Chicago River Aquatic Center
127	Du Sable Park	Chicago/Chicago Park District	3.24 acre park under development
128	Turning Basin Marina and Gateway Park	Chicago/Chicago Park District	Proposed marina and park around turning basin
129	North Pier Terminal	Chicago/North Pier Chicago	Retail/entertainment; river promenade & restaurants
130	South Bank Park (Chicago Riverwalk Shore Dr. to Michigan Avenue)	Chicago/MWRD-Illinois Center	Dock-level walkway and landscaping; street-level walkway; good bank fishing
131	Illinois Center Golf Course	Chicago/Illinois Center	9-hole par golf course (interim use)
132	River Esplanade Park (North bank Lake Shore Drive to Columbus Drive	Chicago/Chicago Park District	1.13 acre landscaped riverwalk
133	Centennial Fountain	Chicago/MWRD	Park and water fountain/arc
134	Du Sable cabin site	Chicago/City of Chicago	Recorded archaeological site
135	Ft. Dearborn historical marker	Chicago/City of Chicago	Brass sidewalk markers show original location
136	Chicago Riverwalk (Michigan Avenue to Wolf Point)	Chicago/private	Discontiguous dock- and street-level walkways/plaza
137	Marina City	Chicago/Marina City	Marina
138	Wolf Point	Chicago/Apparel Mart	Natural edge, passive use

Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

Trails: The Chicago Riverwalk Corporation is spearheading the effort to develop a continuous river edge walkway from the river mouth to Wolf Point, and on the North and South Branches in the downtown area. The Chicago Riverwalk would connect with the Chicago Lakefront Path, which runs north and south along the lakefront parks for 20 miles. The riverwalk would be at dock level where feasible, and dock- and street-level walkways, landscaping, and amenities are all components of the plan. Much of the riverwalk is in place along the Chicago River, but a lack of continuity inhibits the riverwalk from being used to its full potential. The Friends of the Chicago River's walking tour map of the downtown area highlights and interprets the historical and contemporary aspects of the river.

Natural and Cultural Resource-Based Recreation and Education: Natural river features are at a premium along the Chicago River, and future development could help or hurt what is already there. The river mouth and turning basin attract birds migrating along the lake shore, and are popular birding areas. Wolf Point has the only natural river edge in the downtown area, providing a welcome contrast in this highly urban setting. Planning documents suggest that when this privately owned parcel is developed, the natural condition should be retained to the extent practical. The real asset of the river downtown is its rich cultural history, including two sites—the cabin of Jean Baptiste Point du Sable and Fort Dearborn—that mark the founding of present-day Chicago. Although these structures are long gone, the buildings and bridges that now define the river are some of the most interesting in the city and represent a range of architectural styles. Boat tours by the Chicago Architectural Foundation interpret the history of these structures, as do guided and self-guided downtown walking tours.

Other Recreation: Just outside the locks on Lake Michigan lies historic Navy Pier, built in 1916 for ship and recreational purposes and it has been redeveloped as a premiere entertainment facility for the city. Opened in summer 1995, the completely renovated pier includes a 19-acre park to serve as the gateway to the I&M National Heritage Corridor, a 1-acre indoor winter garden/park, a 1,500-seat theatre, an exhibition hall and conference facility, an amusement park with ferris wheel and carousel, a bike path, a children's museum, stores, restaurants, and more. Inside the locks on the river proper, riverside restaurants, bars, and cafes along the Main Branch are few in number but very popular during the summer. The largest concentration of establishments is at North Pier, where three restaurants have floating docks that can be accessed by shore or boat. The riverwalk and adjacent plazas attract many downtown workers during lunch, and are popular locations to sit and watch people and boats go by. Rowing competitions sponsored by the Chicago River Aquatic Center draw thousands to the riverbanks, as have occasional visits by historic tall ships and events such as the City's annual Venetian Nights. A 9-hole par course at Illinois Center provides a unique golfing experience in the heart of downtown, but will be built upon when the full development plan for the site is implemented.

REACH 7 SOUTH BRANCH OF THE CHICAGO RIVER AND SOUTH FORK (BUBBLY CREEK)

RESOURCE CHARACTER

Location: The South Branch of the Chicago River begins where the North and Main Branch meet at Wolf Point. It flows south for 4 miles to Damen Avenue and its confluence with the Chicago Sanitary and Ship Canal and the now filled-in West Fork (Figure 4.4). The South Fork of the South Branch of the Chicago River, known as Bubbly Creek, flows into the South Branch at the South Turning Basin at Ashland Avenue. Once including both West and East Arms, the South Fork was gradually filled in as this important industrial area of Chicago grew, so that today only 1 mile of the South Fork remains.

Land Use/Vegetative Cover: The land use of the South Branch in downtown Chicago is much like that of the Main Branch, a canyon of high-rise office buildings with a discontinuous walkway along the river edge. South of Van Buren Street, the river is a mix of industrial and vacant land. The open space along this corridor includes hardscape plazas, grass, and formal tree plantings around the riverwalk, and pioneer brush and tree vegetation on the vacant land parcels. Areas of dense pioneer tree cover on vacant land along Bubbly Creek are fittingly called "the Amazons" by area residents. At the southern end of Bubbly Creek lies the Water Reclamation District's Racine Avenue Pumping Station and the site of the former Chicago Stockyards.

Channel Character: The river is straight and crossed by bridges nearly every block in the downtown area. Its average width is about 150 feet, and its depth is sufficient for large commercial vessels. South of downtown, the river from Polk Street to 18th Street was straightened in the 1920s in a plan to consolidate rail facilities. Below 18th Street, the river turns to the southwest, and short canals or slips along the north bank provide water access to industrial areas off the main river. The shore of the South Branch is a vertical wall of concrete or steel sheet piling for the most part, with sections of concrete riprap south of downtown. A part of the bank along the South Turning Basin has a natural slope and vegetated edge, and is the original site of the start of the historic Illinois & Michigan Canal, now known as the "Chicago Origins" site. The I&M Canal, however, is filled in at this point.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 7 are described in Table 4.10 from north to south, and are keyed to Figure 4.4 with numbers in the first column of the table. Major activity types are discussed in the following sections.

Boating: Recreational boating activities centered on the Chicago River tend to spill down the South Branch in the downtown area. Motorboats launched on the lake often cruise the river down to River City and back; River City is also a common end point in the regular run for rowing shells

TABLE 4.10
Current and potential recreation-open space opportunities, Reach 7
(See Figure 4.4 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
139	Chicago Riverwalk Wolf Pt.-Van Buren Street	Chicago/private	Discontiguous walkway, mostly at street level; cafes
140	River City	Chicago/private	Marina
141	CSX properties	Chicago/private	Undeveloped parcels with proposed riverwalk development
142	Chicago Riverwalk Van Buren-Cermak Road	Chicago/private	Proposed riverwalk on undeveloped/industrial land
143	Chinatown Park	Chicago/Chicago Park District	12 acre planned park development
144	Wholesale Food Market	Chicago/private	Proposed public river edge
145	Chicago Origins Park	Chicago/Illinois Department of Natural Resources	1.5 acre future park and interpretive site
146	Bubbly Creek Wetland and Union Stockyard Gate	Chicago/state and city property to be managed by the Chicago Park District	Proposed environmental and historic park
147	Job Corps site (31st & Kedzie)	Chicago/U.S. Dept. Labor	Proposed public river edge

Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

launched from the Chicago River Aquatic Center and for excursion boats that tour the river. An increasing number of boaters from the southern reaches of the corridor are motoring up the South Branch to see the sights downtown. Canoes and kayaks are uncommon on the South Branch, but the lower volume of commercial and recreational traffic makes Bubbly Creek an appealing alternative for some local paddlers. Several boat yards located along the South Branch provide off-season dry docking for area boaters and sailors. River City contains a small marina but offers few services to nonmembers. Future development of properties along the South Branch may provide new marina space and facilities, but until the real estate market improves, there are no definite plans for these properties.

Fishing: Fishing is marginal on the South Branch. Shore anglers are infrequently spotted near the South Turning Basin and along Bubbly Creek, and have reported catching bass and large carp.

Trails: The Chicago Riverwalk continues along the South Branch from the Chicago River, and is proposed by the Chicago Riverwalk Corporation to go as far south as Chinatown (Cermak Road). The northern end (Wolf Point to Van Buren Streets) is currently the most developed; here the riverwalk is a series of street-level hardscape walkways and plazas with some formal tree and flower plantings. The walkway necessarily breaks every block for a street crossing, and runs principally along the west bank of the river. On the west bank between Randolf and Washington Streets (the Morton International Building), stairs lead down to an attractive dock-level walkway and green area. Future development plans for the riverwalk in this section call for extending the current street-level walkway north and south and for constructing a cantilevered walkway at the dock level. Below Van Buren Street, the plan proposes dock-level walkways on both sides of the river, terminating near the new Chinatown Park. CSX Real Property, Inc., owns large land parcels in this section, and proposals for their development include the riverwalk as an integral part in the plan. Development plans for the new Wholesale Food Market and the Job Corps Center also call for a public walkway and landscaping along the river edge. Other large property owners like the Chicago Union Station Company (Amtrak rail yard) and Commonwealth Edison (generating station) are less enthusiastic about the prospects of a public walkway on their property because of safety and liability concerns. This end of the riverwalk could be linked with the Forest Preserve District of Cook County's Centennial Trail to the south and the proposed Street Charles Airline rail-trail, which crosses the river north of 18th Street. A trail or walking route could also be developed along Bubbly Creek in conjunction with a proposed wetland park development (see next paragraph).

Natural and Cultural Resource-Based Recreation and Education: Proposed development of the Chicago Origins site by the Chicago Park District and other entities would offer a unique opportunity to enhance the natural environment of the South Turning Basin and interpret the natural and cultural history of the Chicago Region. The park would also provide a focal point within the City of Chicago for interpretation of the 120-mile-long I&M Canal National Heritage Corridor. This National Park Service-designated corridor encompasses much of the ChicagoRivers study area south of the South Branch. There is also a proposal to transform the former Chicago Stockyards on Bubbly Creek into a wetland park and historical site, using the highly degraded area as a laboratory and demonstration project for environmental restoration, providing a link to an important part of Chicago's past, and adding needed recreation space to an underserved area of Chicago.

Other Recreation: A few cafes along the northern section of the riverwalk offer outdoor seating, and the riverwalk as a whole is a popular area for downtown employees to eat lunch or just relax and watch the urban scene. The proposed Chinatown Park would offer a full range of active and passive activities, including facilities and amenities that reflect the culture of the Chinese American community located adjacent to the park.

REACHES 8 AND 9
CHICAGO SANITARY AND SHIP CANAL

RESOURCE CHARACTER

Location: The Chicago Sanitary and Ship Canal begins at Damen Avenue and the Stevenson Expressway (Interstate 55) in Chicago, and runs for nearly 30 miles in a southwesterly direction through the City of Chicago and suburbs of Stickney, Forest View, Lyons, Summit, Bedford Park, Justice, Willow Springs, Lemont, and Romeoville (Figure 4.5) The canal terminates in Lockport, where it joins the Des Plaines River. Construction of the canal began in 1892 and was completed in 1907. The northern end of the canal joins the South Branch of the Chicago River, where a portion of the original channel of the South Branch was filled in and its flow was reversed to carry wastewater and barge traffic.

Land Use/Vegetative Cover: Nearly all of the shoreline property along the canal is owned by the Metropolitan Water Reclamation District of Greater Chicago. Much of this property is leased out for industrial uses, especially in the upper part of the reach above suburban Summit. In this stretch, the canal is also paralleled by the Stevenson Expressway (Interstate 55). Below Summit, nearby land use includes significant natural areas such as the Palos (Cook Co.) and Waterfall Glen (DuPage Co.) Forest Preserves. In some areas, residential neighborhoods occur just outside the corridor. Land not leased is usually forested along the shore, which effectively screens whatever may occur just beyond the banks. Together with dedicated natural areas, these vegetated strips of land give much of the shoreline below Summit a very natural character.

Channel Character: Although the shoreline of the lower Chicago Sanitary and Ship Canal appears natural, the straightness of the channel tells users that this is a highly engineered waterway. The average width of the channel is around 300 feet, and its 24-foot depth accommodates barge and other commercial boat traffic. Bank character ranges from vertical concrete and steel sheet piling along many of the industrial properties, to steeply sloped rocky rubble or vertical cut stone walls along undeveloped sections. Below Summit, the corridor of the Sanitary and Ship Canal bends slightly southward and is paralleled by the I&M Canal and the Des Plaines River. Openings in the foliage reveal the nearness of these waterways and associated slough areas.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reaches 8 and 9 are described in Table 4.11 from north to south, and are keyed to Figure 4.5 with numbers in the first column of the table. Major activity types are discussed in the sections below.

Boating: Barge traffic, a straight channel, and limitations on access constrain use of the Chicago Sanitary and Ship Canal for small paddlecraft. Wakes generated by large commercial and recreational craft can make paddling difficult, and the vertical shoreline along much of the canal makes it difficult to get out of the water if there is a problem. The Forest Preserve District of Cook County does not provide any developed access to the canal, and if it did, that access would most likely be oriented to powerboats. However, the district has developed a 14.4-mile water trail on the adjacent Des Plaines River from its Stony Ford Preserve, just north of the Chicago Portage, to Lemont, which provides an attractive alternative for canoeists and kayakers. The water trail is part of the I&M Canal National Heritage Corridor, and the district has three launching sites along the route. Paddlers can continue down the Des Plaines to visit historic sites at Isle a la Cache and Lockport.

The Sanitary and Ship Canal has become more popular in recent years with motorboaters, and it is usually taken by boaters coming up from Lockport or from the Cal-Sag Channel (Reach 10) to visit downtown Chicago. Despite the straightness of the channel, the shore provides attractive natural scenery and has been described as a good route to view fall colors. A private marina has been proposed for development in Lemont; this would require blasting a hole through bedrock separating an abandoned, flooded quarry from the canal.

Fishing: Not much fishing has been observed on the Sanitary and Ship Canal, either by boat or from the shore. Access to the channel for shore fishing is constrained by the nature of the banks, which in the forest preserves are steep, littered with rocky rubble from construction of the canal, and dense with vegetation. The MWRD's new Sidestream Elevated Pool Aeration (SEPA) stations are becoming increasingly popular places for fishing, and one of these is located at the junction of the canal and the Cal-Sag Channel. Shore access is available, but most fishing is done from boats below the "waterfall." The lakes and sloughs of the Palos Preserves are close to the canal, and are popular fishing spots in this area of the corridor. According to fishing interests, the spring-fed Lemont quarries area has the potential to become a premiere managed recreational fishery, though most of the land is now privately owned.

Trails: Trails in and near the corridor of the Sanitary and Ship Canal are numerous, and projects in the works promise a greatly increased network. In Cook County, the forest preserve district has the I&M Canal Bicycle Trail, a 9-mile paved trail straddling the I&M and Sanitary & Ship Canals. Just to the south of this trail is the district's 13,000-acre Palos Division. Although the table above lists only those forest preserve sites in Palos that are near the canal, the division has an extensive network of developed trails for biking, hiking, and horseback riding. Palos is also a top spot in the metropolitan region for mountain biking, and trail use policies are being established. In DuPage County, the 2,470-acre Waterfall Glen Forest Preserve has an 8.5-mile gravel loop trail for biking, hiking, and horseback riding. And in Will County, most of the forest preserve land designated as Recreational Areas and Nature Preserves has hiking trails.

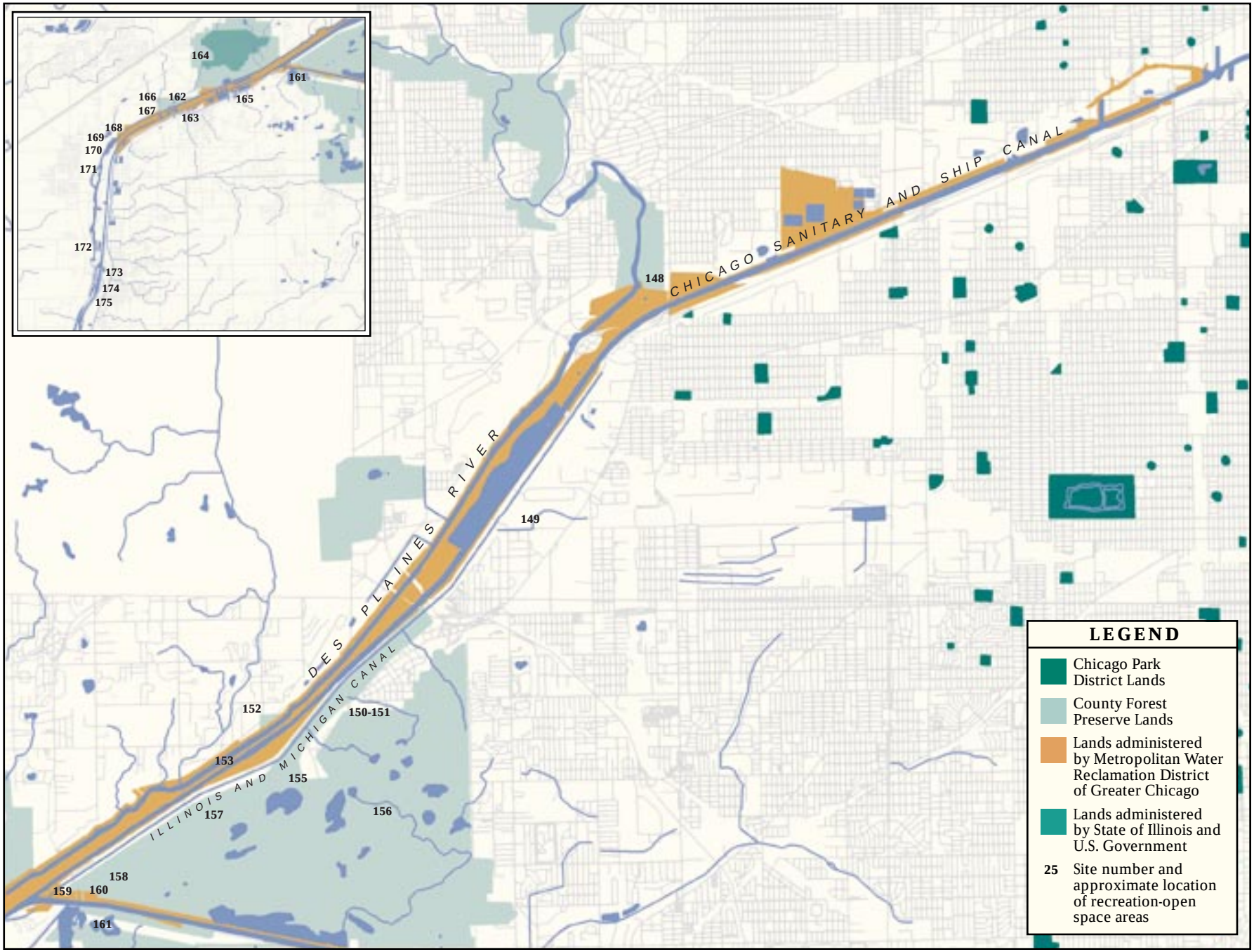

FIGURE 4.5
Current and potential recreation-open space opportunities, Reaches 8, 9B and 9B)

TABLE 4.11
Current and potential recreation-open space opportunities, Reaches 8 and 9
(See Figure 4.5 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
148	Chicago Portage Woods Ottawa Trail Woods	Salt Creek Division/ Cook County FPD	300 acre, picnic areas, historic site near the canal
149	Centennial Trail	Lyons-Lockport/Cook, DuPage, and Will County FPDs	20 mile bike trail under construction
150	Willow Springs Woods[1]	Palos Division/Cook County FPD	Picnic area, foot trail
151	Willow Hills Memorial Park	Unincorporated/private	Cemetery
152	Columbia Woods[1]	Palos/Cook County FPD	Picnic area, Des Plaines River canoe launch
153	I&M Canal Bike Trail	Palos Division/Cook County FPD	9 mile paved bike trail
154	Chicago Portage Canoe Trail	Palos Division/Cook County FPD	14 mile canoe trail on the Des Plaines River
155	Paw Paw Woods[1]	Palos Division/Cook County FPD	Picnic and natural area
156	Little Red Schoolhouse	Palos Division/Cook County FPD	Nature center; nature trail
157	Henry DeTonty Woods[1]	Palos Division/Cook County FPD	Picnic area, developed trail
158	Red Gate Woods[1]	Palos Division/Cook County FPD	Picnic area, developed trail
159	Canal Junction Station	Unincorporated Cook County/MWRD	Aeration station and public park
160	St. James Sag Church	Palos Division/Cook County FPD	Historic site
161	Camp Sagawau	Palos Division/Cook County FPD	Environmental education center, natural area, x-c ski program
162	Lemont quarries	Lemont/private	Proposed fishing, marina sites
163	Lemont Bike Path	Lemont/Village of Lemont	Proposed 6 mile bike path along I&M Canal
164	Waterfall Glen	Unincorporated/DuPage County FPD	2,470 acre, 8.5 mile multi-use trail, picnic area
165	Cog Hill Golf and Country Club	Lemont/private open to public	Four 18-hole public fee golf courses
166	Wood Ridge	Unincorporated/DuPage County FPD	234 acre open land
167	Black Partridge Woods[1]	Palos Div./Cook County FPD	Picnic and natural areas
168	Keepataw	Unincorporated/Will County FPD	216 acre, hiking
169	Veterans Woods	Unincorporated/Will County FPD	77 acre picnic area, hiking
170	Romeoville Prairie	Romeoville/Will County FPD	251 acre natural area/no public access
171	Isle al a Cache	Romeoville/Will County FPD	87 acre historical/interpretive center, picnic area, hiking and canoeing on Des Plaines River
172	Lockport Prairie	Lockport/Will County FPD	254 acre natural area and nature trail
173	I&M Canal Visitor Center	Lockport/National Park Service	Historic site and information center
174	Gaylord Donnelly Canal Trail	Lockport/Lockport	Historic/interpretive trail
175	Heritage Park and Trail	Lockport/public and private	260 acre park and 2.7 mile trail from Lockport to Joliet

[1] Note: The Forest Preserve District of Cook County does not break down acreage of holdings by site; approximate size of the entire Palos Division is 6,338 acres.
Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

Currently in the works is a trail that will tie these and other trails together into a massive southern metropolitan network. Funds are in place for building much of the Centennial Trail, a 20-mile trail following MWRD land along the canal from the Chicago Portage to Lockport. The trail is being developed by forest preserve districts in Cook (11 mi.), DuPage (2.5 mi.), and Will (6.5 mi.) Counties; a 3-mile gravel stretch from the Will County line south to Isle a la Cache has been completed. The Centennial Trail would connect on the south end to the Gaylord Donnelly Canal Trail in Lockport, the planned 2.7-mile Heritage Park Trail from Lockport to Joliet, and from there to the 40-mile-long I&M Canal State Trail to La Salle-Peru, IL, the terminus of the 120-mile I&M Canal National Heritage Corridor. The Centennial Trail would also parallel and possibly connect with the Forest Preserve District of Cook County's I&M Canal Bicycle Trail and the proposed 6-mile Lemont Bike Path, also along the I&M Canal. A proposed trail along the Cal-Sag Channel would give Centennial Trail users the option to go east through Palos to Lake Michigan and south to Cook County forest preserve trails on Tinley Creek and Thorn Creek. On the north end, the trail could eventually connect with existing and proposed trails along Salt Creek and the Des Plaines River, and follow the canal north into the city to connect with the Chicago Riverwalk. The Centennial Trail is an outgrowth of the MWRD's Riveredge Renaissance public access policy.

Natural and Cultural Resource-Based Recreation and Education: The Sanitary and Ship Canal is rich in natural and cultural history. The Palos and Waterfall Glen Forest

Preserves are key natural areas for the Chicago metropolitan region, and are popular for birding, wildlife observation, and nature exploration. The preserves are also the sites of significant ecological restoration programs, which rely on volunteers for much of the work that is being accomplished. The canal itself is a good place to birdwatch, and many shorebirds and waterfowl can be observed there. The Forest Preserve District of Cook County has two environmental education facilities in Palos: The Little Red Shoolhouse Nature Center, which has indoor displays, outdoor demonstration areas, and a nature trail; and Camp Sagawau, an educational facility that has special scheduled programs and workshops, an education field camp, and the unique Sagawau Canyon Nature Preserve. Further south, Lockport and Romeoville Prairies are two of the best examples of native tallgrass prairies in the metropolitan area; both sites are designated Illinois Nature Preserves. The canal corridor itself has a rich cultural history, and the I&M Canal National Heritage Corridor has some of its most significant cultural sites in this reach. Historic sites include St. James of the Sag Church and Cemetery in the canal town of Lemont; the Isle a la Cache living history museum in Romeoville; and the town of Lockport, which has more than 37 historic sites and structures, and is considered one of the best preserved canal towns in the U.S. A museum, visitor center, and historic trail are three key interpretive sites that make Lockport an important terminus of the Chicago River corridor. At the northern end of the canal, the Forest Preserve District of Cook County has proposed building a Chicago Portage Interpretive Facility and Visitor Center, to inform people of the historic portage between the Chicago River (Great Lakes) and Des Plaines River (Mississippi) watersheds made famous by Marquette and Jolliet in 1673, as well as to interpret the diverse natural and cultural history of the region.

Other Recreation: Many of the forest preserve sites near the canal offer picnicking and a range of passive and active recreational activities. In addition to educational sites, many of the canal towns in the lower part of the reach have antique stores, bed and breakfasts, and other attractions geared to tourism. Unlike the northern reaches of the study area, few golf courses are on or directly adjacent to the canal. However, several private country clubs and public courses are nearby, including the giant Cog Hill Golf and Country Club near Lemont, which has four 18-hole golf courses and is home of the Western Open Professional Golfers' Association (PGA) Tour.

REACH 10 CALUMET RIVER, LITTLE CALUMET RIVER, AND CALUMET-SAG CHANNEL

RESOURCE CHARACTER

Location: Reach 10 begins at Calumet Harbor on Lake Michigan. Here, the reversed Calumet River runs south through Chicago's southeast side neighborhoods until it meets the Grand Calumet River in suburban Burnham. The channel, from this point called the Little Calumet River, takes a turn to the east, flowing through Calumet City, Dolton, Chicago, Riverdale, and Calumet Park. At Calumet Park, this reversed channel meets the original flow of the Little Calumet River coming in from the south. From here west, the waterway is called the Calumet-Sag Channel. This channel flows west through Blue Island, Robbins, Alsip, Crestwood, Palos Heights, Worth, Palos Park, Palos Hills, and the Palos-Sag Valley Divisions of the Forest Preserve District of Cook County. The channel terminates at its confluence with the Chicago Sanitary and Ship Canal. The total length of Reach 10 is 30 miles (Figures 4.6 and 4.7).

Land Use/Vegetative Cover: The eastern end of Reach 10 is perhaps the most industrial part of the entire Chicago River corridor. Rail and ship yards transfer raw materials to factories, mills, and power stations; the region's residents and nearby mills dump their waste and slag in numerous landfills; and major highways weave through as they make their way around the southern end of Lake Michigan. In the midst of this engineered landscape lie some of the largest and most diverse wetland areas in the region. Although not technically part of the study area, the wetlands of the Lake Calumet and Wolf Lake area provide a critical context surrounding the corridor of this reach, and the corridor in turn provides an important linkage between these sites, forest preserves to the west, and Lake Michigan to the east. West of the junction with the Grand Calumet, the Little Calumet becomes less industrial, and forest preserves and marinas line the shore. This part of the reach is also one of the few areas in the entire Chicago River corridor where single family residences line the shore. The final 6 miles of the Calumet-Sag Channel flow through the Palos Forest Preserve, where the shores are wooded and appear undisturbed. The Metropolitan Water Reclamation District owns most of the land along the Calumet-Sag Channel: more than 1,200 acres on 16 miles of water frontage, 258 acres of which are leased.

Channel Character: The different waterways that make up this reach have very different characters. The Calumet River is wide (avg. 450 feet), deep (27 feet), and has several slips and turning basins along its shore to accommodate ship and barge docking and maneuvering. Although the river has some bends, the channel looks anything but natural. The O'Brien Locks are located on the Calumet River just above its junction with the Grand Calumet. Below this point, the river maintains its width, but the bank vegetation gives the channel a more natural character. The shore along the Little Calumet is part natural bank, part rocky riprap, and part vertical concrete or steel sheet piling. Where the banks are not fully developed, the land slopes down to the river. The original channel of the Little Calumet is much more narrow and natural looking, and not navigable by commercial boats. The Calumet-Sag Channel is relatively straight except for a few broad bends, and the width of the channel is around 300 feet. The banks of the channel vary like the Little Calumet, except on the western end, where tall cut stone walls give the waterway a very distinctive look.

CURRENT AND POTENTIAL RECREATION AND OPEN SPACE OPPORTUNITIES

Current and potential recreation and open space opportunities in Reach 10 are described in Table 4.12 from east to west, and are keyed to Figures 4.6 and 4.7 with numbers in the first column of the table. More than a half dozen large landfills in the Lake Calumet area are not included in this description, though some may hold potential as future recreation areas. Together, these landfills account for more than 1,000 acres in "open space." One former landfill that is included in the table is the 428-acre old municipal dump at the northern end of Lake Calumet, which recently opened as the Harborside International Golf Course.

Boating: Barge and ship traffic on this reach poses safety problems for canoes and paddlers. The Calumet River section of the reach is very industrial, and land use and commercial traffic could interfere with recreational and aesthetic enjoyment for paddlers. The original channel of the Little Calumet is not used commercially, and its more natural channel and banks would give this tributary the highest potential in the reach for recreational paddling. The Calumet-Sag Channel through Palos Preserves is narrow (around 300 feet), and the vertical stone walls along the shore create a "bathtub effect," echoing wakes from large craft.

In contrast, recreational motorboating is much more feasible in the reach, and the profusion of marinas in the eastern half of the corridor are an indicator of the recreational boat traffic there. Proposals and signs posted along the shore promise development of additional marinas. A few public boat launches are also along the reach, including the Beaubien Forest Preserve Boating Center, the Calumet Forest Preserve Boating Center, and the Village of Alsip Marina. Although most of these centers serve lakebound boaters, improvements in water quality in the waterways are attracting more boaters to head west, down the Calumet-Sag Channel and Sanitary and Ship Canal to Lockport or north to downtown Chicago. One increasingly popular activity for boaters from these marinas is to do "the triangle," taking the Calumet-Sag west to the Chicago Sanitary and Ship Canal, the canal and South Branch north to Wolf Point, the Chicago River to Lake Michigan, then down the lakeshore and back to the marina. The average boater takes 6-7 hours. These trips are popular in the summer to see the sights downtown, and in the fall to see the fall colors along the waterways.

As in the downtown area but to a much lesser extent, excursion boats in this reach offer tours of the canal and lake.

Finally, commercial traffic in this reach has a recreational component, offering viewers from land a look at the current activity of a working river and a window to this region's historical importance as a hub of water-dependent commerce.

Fishing: With increases in water quality, recreational fishing on the reach is becoming more popular, but remains uncommon. Some recreational boaters fish the eastern end of the reach on their way out to Lake Michigan. Other boaters and bank anglers fish the original channel of the Little Calumet; one popular bank fishing area is at the Calumet Forest Preserve Boating Center. On the main channel of the Little Calumet, the Beaubien Forest Preserve Boating Center has a concrete dock along the river that is also used for fishing. Other informal sites along the Little Calumet and Calumet-Sag are also used for bank fishing, and as mentioned previously, the MWRD's new SEPA Stations are becoming popular for boat and shore fishing. Commonly caught species include carp, bullhead, and bluegill. Seasonal runs of salmon and trout also occur in the Cal-Sag.

Although fishing in the channel proper is currently marginal, the major lakes and sloughs in the Palos Forest Preserves such as Saganashkee Slough are heavily fished. Restoration of Flatfoot Lake in the Beaubien Forest Preserve includes improvements for recreational fishing. The restoration program is one of the ChicagoRivers demonstration projects now being conducted with funding from the Urban Resources Partnership (URP). Partners include the Forest Preserve District of Cook County, The Nature Conservancy, and Fishin' Buddies. There is also talk of opening Lake Katherine to fishing on a limited basis, to control the gamefish population and provide more bluegills for heron feeding.

Trails: The extensive system of developed trails throughout the Palos Preserves provide the bulk of existing hiking, bicycling, and equestrian opportunities along this reach. Spoil stone left from construction of the canal provides a challenging trail along the banks of the Calumet-Sag Channel, and is used by mountain bikers, as well as illegally by motorcycles and 4-wheel all-terrain vehicles. Nature trails run throughout the Lake Katherine Nature Center in Palos Heights.

In terms of future opportunities, the entire reach from the junction of the Grand Calumet to the junction of the Sanitary and Ship Canal has been proposed as a trail corridor. Along one small section of this reach in the Palos Preserves, the Forest Preserve District of Cook County is currently working with a private contractor to remove the rock spoil deposited along the bank during the original construction of the canal. The value of the stone will offset its removal costs and the grading of the bank for use as a bicycle trail. If successful, the process will be used to develop a trail along the Calumet-Sag Channel from the junction of the Sanitary and Ship Canal west to the Lake Katherine Nature Center just east of Harlem Avenue (IL 43). At this point, the trail would connect with an existing trail that follows a Commonwealth Edison powerline right-of-way south to the Tinley Creek Forest Preserve, where the Forest Preserve District of Cook County has another 13 miles of bicycle trail. From Lake Katherine east, there is a conceptual plan for a Calumet Area Prairie Greenway that would tie the Palos Preserves with the lakefront, along with other forest preserve district sites and the State's William Powers Conservation Area. Near the Whistler Woods Forest Preserve, the abandoned Conrail right-of-way is slated for rail-trail conversion, and will link the waterway with a 6.5-mile trail to the Dan Ryan Woods Forest Preserve; this would eventually tie north into the city's historic boulevard system. Finally, on the east end of the reach, there are proposals for developing at least part of the closed USX South Works Steel

TABLE 4.12
Current and potential recreation-open space opportunities, Reach 10
(See Figures 4.6 and 4.7 for site locations)

SITE NUMBER AND NAME		MUNICIPALITY/OWNERSHIP	ACCESS, FACILITIES/NOTES
176	USX site/Iroquois Landing	Chicago/private	Potential park site
177	Eggers Woods, including Eggers Grove and Wolf Lake Overlook	Chicago/FPDCC & private	250 acre picnic area, model airplane flying area, marsh
178	Wolf Lake/William Powers Conservation Area	Chicago/IL Dept. of Conservation	613 acre nature, fishing, recreational area
179	Burnham Woods, Powderhorn Lake, and Burnham Woods Golf Course	Chicago-Burnham/FPDCC	175 acre nature preserve, fishing lake, golf course
180	Hyde Lake & Wetlands	Chicago/private	40 acre proposed natural area
181	Turning Basin Wetland	Chicago/private	Proposed natural area
182	Torrence Avenue Station	Chicago/MWRD	Aeration station and public park
183	Indian Ridge Marsh	Chicago/private	165 acre proposed natural area
184	Heron Pond	Chicago/MWRD & private	50 acre proposed natural area
185	Deadstick Pond	Chicago/MWRD	80 acre proposed natural area
186	Lake Calumet	Chicago/Illinois International Port District	540 acre proposed natural and recreational area
187	Big Marsh	Chicago/Waste Management	290 acre proposed natural area
188	Railroad Prairie	Chicago/Norfolk and Western	190 acre natural area
189	Harborside International Golf Course	Chicago/Illinois International Port District	428 acre 36-hole golf course and driving range
190	Lake Calumet Beach	Chicago/Illinois International Port District	120 acre proposed natural area
191	Hegewisch Marsh	Chicago/Waste Management	140 acre proposed natural area
192	O'Brien Lock Marsh and Whitford Pond	Chicago/MWRD	120 acre proposed natural area
193	Windjammer Marina	Chicago/private	Marina
194	Sunset Harbor Marina	Chicago/private	Marina
195	Riverside Marina	Chicago/private	Marina
196	Pier 11 Marina	Chicago/private	Marina
197	Riley's Marina	Burnham/private	Marina
198	Beaubien Woods, Flatfoot Lake, and Beaubien Boating Center	Chicago/Cook County FPD	289 acre, boat access to river, picnic area, fishing lake is URP/ Chicago Rivers demonstration project
199	Altgeld Gardens Marsh	Chicago/MWRD	16 acre wetland
200	Lake Calumet Boat & Gun Club	Chicago/private	Marina
201	Maryland Boat Club	Chicago/private	Marina
202	Skipper's Marina	Chicago/private	Marina
203	Rentner Marine	Chicago/private	Marina
204	Dolton Yacht Club	Dolton/private	Marina
205	127th Street Station	Chicago/MWRD	Aeration station and public park
206	Whistler Woods Forest Preserve[1]	Chicago/Cook County FPD	Picnic area
207	Pipe O'Peace Golf Range[1]	Chicago/Cook County FPD	Golf driving range
208	Joe Louis Golf Course[1]	Chicago/Cook County FPD	Golf course
209	Calumet Boating Center[1]	Chicago/Cook County FPD	Boat access to river
210	Calumet Woods[1]	Chicago/Cook County FPD	Picnic area on Little Calumet
211	Kickapoo Woods[1]	Chicago/Cook County FPD	3 picnic groves on Little Calumet, model airplane flying area
212	Blue Island Station	Blue Island/MWRD	Aeration station and public park
213	Alsip Boat Landing	Alsip/Village of Alsip	Boat launch and park
214	Worth Station	Worth/MWRD	Aeration station and public park
215	Lake Katherine Nature Center	Palos Heights/Palos Heights Park District	113.1 acre site includes a 20 acre lake, nature center, and trails
216	Paddock Woods[1]	Sag Valley Division/Cook County FPD	Parking, trail
217	Palos Park Woods[1]	Sag Valley Division/Cook County FPD	Picnic areas, trail
218	Swallow Cliff Woods	Sag Valley Division/Cook County FPD	800 acre ecological restoration site
219	Saganashkee Slough[1]	Palos Division/Cook County FPD	Natural area, fishing
220	Teasons Woods[1]	Sag Valley Division/Cook County FPD	Picnic area, trail
221	Cap Sauers Holdings[1]	Sag Valley Division/Cook County FPD	Natural area, trail
222	Sag Quarries[1]	Sag Valley Division/Cook County FPD	Fishing

[1] Note: The Forest Preserve District of Cook County does not break down acreage of holdings by site; approximate total area of sites 206-211 is 900 acres; the entire Sag Valley Division, encompassing sites 216-218 and 220-222 is 7,629 acres; the entire Palos Division, encompassing site 219 is 6,338 acres.

Abbreviations: FPD—Forest Preserve District; URP—Urban Resources Partnership of Chicago; MWRD—Metropolitan Water Reclamation District of Greater Chicago.

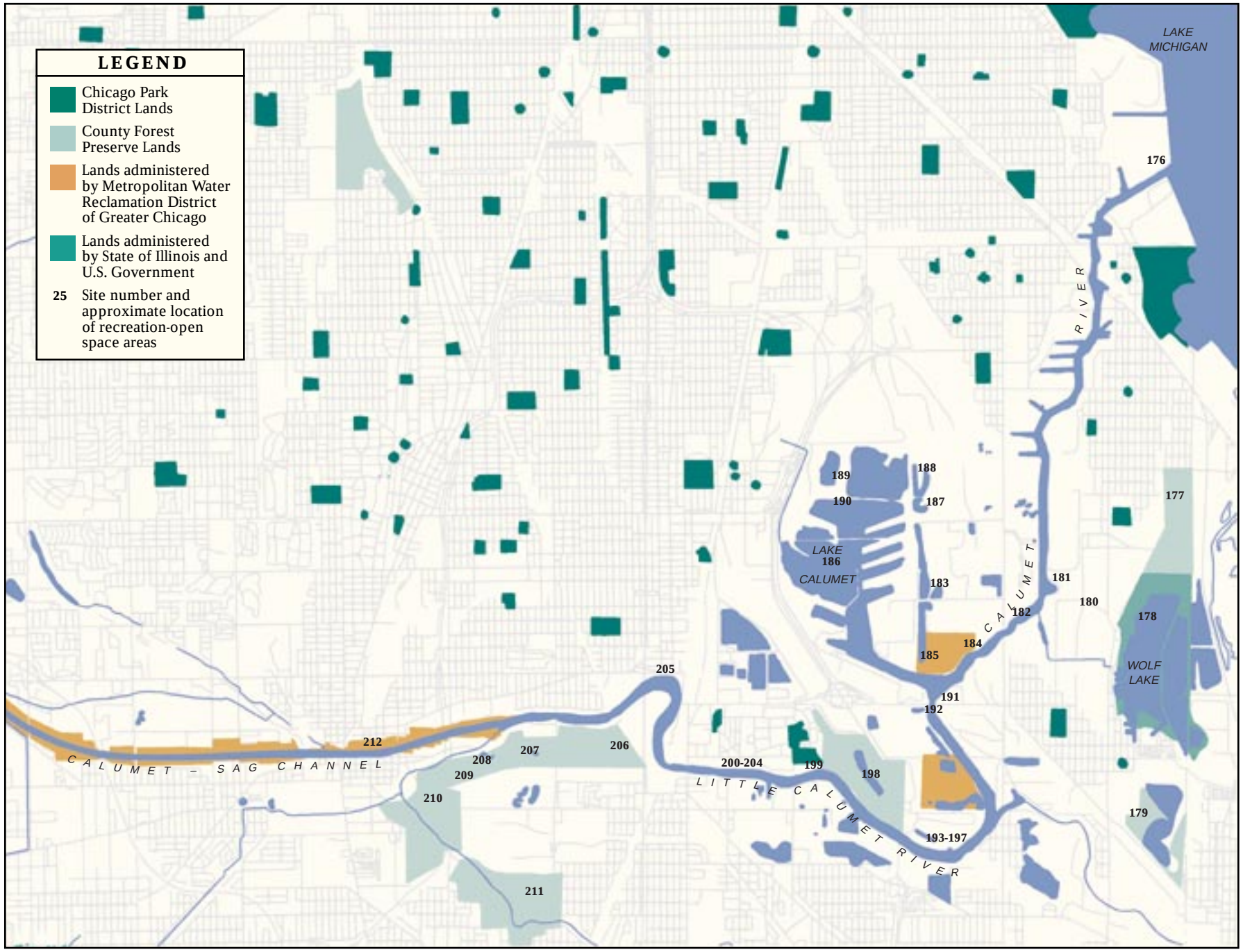

FIGURE 4.6
Current and potential recreation-open space opportunities, Reaches 10B and 10C

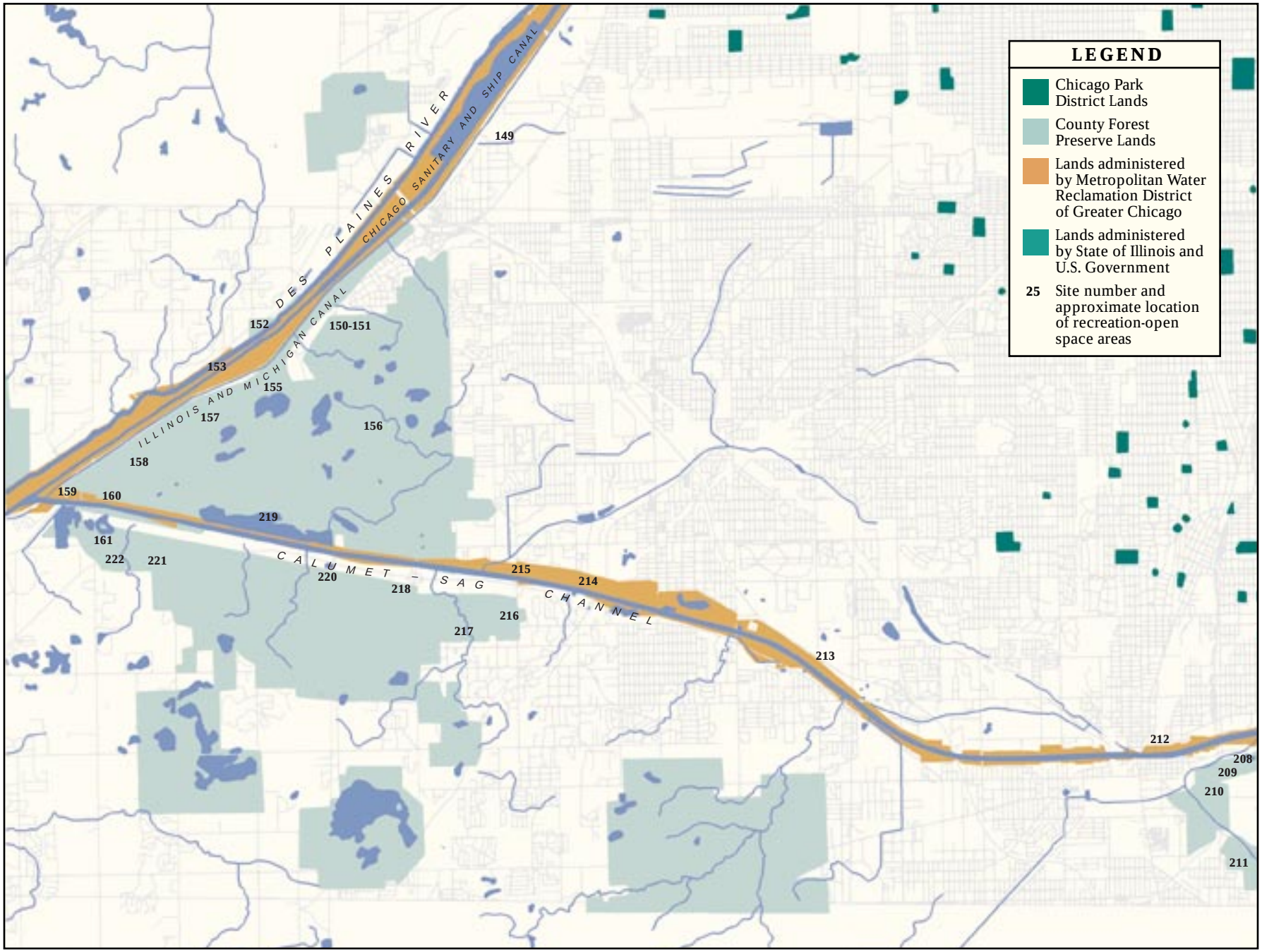

FIGURE 4.7
Current and potential recreation-open space opportunities, Reach 10A

Mill and Iroquois Landing at Calumet Harbor as a public park. This could provide an eventual tie to the existing 20-mile Chicago Lakefront Path to the north and to proposed trails linking Cook County forest preserves to the south.

Natural and Cultural Resource-Based Recreation and Education: The Lake Calumet area holds some of the greatest opportunities for increasing nature recreation and education in the corridor. The many marshes in the area provide good habitat for birds and other wildlife, and are frequented by birders, especially during spring and fall migrations. The Calumet Ecological Park Association, Audubon, and other local environmental groups host regular outings to the Lake Calumet area.

Many nature recreation and education opportunities in the Palos Preserves have already been mentioned in the description for Reaches 8 and 9. It should be stressed that the marshes and sloughs alongside the Cal-Sag Channel in Palos are some of the most important in the metropolitan area. Boaters on the Calumet-Sag can observe birds and other wildlife, especially near the Saganashkee Slough. In 1994, the Forest Preserve District of Cook County, The Nature Conservancy, and other public and private organizations began a major ecological restoration demonstration project at the 800-acre Swallow Cliff Woods Forest Preserve just south of the Calumet-Sag Channel. This project is being used as a model for ecosystem management of some 68,000 acres of district lands, and has received national attention. In addition to Camp Sagawau and Little Red Schoolhouse Nature Centers, the Forest Preserve District of Cook County also operates the Sand Ridge Nature Center just south of the corridor in the suburb of South Holland. The Lake Katherine Nature Center is well used by residents and school groups from the Palos area. The center hosts seasonal nature appreciation festivals, school tours, and other programs, and has more than 100 volunteers who, among other things, engage in tree planting, prairie restoration, and bird habitat improvement.

Finally, the Metropolitan Water Reclamation District's five SEPA Stations located along the reach offer opportunities for visitors to learn about water quality improvement. The design of the Torrence Avenue Station incorporates a 6-acre heron rookery into the site.

Other Recreation: Forest Preserve District of Cook County sites near this reach offer picnicking and a range of passive and active recreational activities, including the Joe Louis "The Champ" Golf Course and the Pipe-O-Peace Driving Range. The new Harborside International Golf Course on the north end of Lake Calumet exemplifies the potential for reclaiming old industrial sites in the Chicago River corridor for recreation. Completed in 1997, this hilly, treeless, former municipal landfill provides 36 of the most unique and challenging holes in the country. Several other golf courses and country clubs are located near the corridor, although none are directly on the waterway. The Water Reclamation District's five SEPA facilities each have public parks associated with them, designed mainly for passive use.

PART IV ISSUES RELATED TO KEY RECREATION OPPORTUNITIES

RECREATIONAL BOATING

HISTORICAL BACKGROUND

In its key location as a bridge between the Great Lakes and Mississippi River drainage basins, Chicago has long had important ties to waterways. American Indians used the Chicago Portage as a major trading route for many generations, and in the years following its 1673 exploration by Marquette and Jolliet, the route became central to the development of the western frontier. The building of the Illinois & Michigan Canal, development of the Chicago and Calumet River Harbors, and subsequent additions and improvements to waterways in the Chicago River corridor secured Chicago's place as the link between markets in the east and resources to the north and west.

With water a focus of the city's livelihood, it is no wonder that many Chicagoans also look to water as a recreational resource. As early as the 1850s, boating became a way for the city's elite to enjoy Lake Michigan. Yacht and canoe clubs were popular along the lakeshore by the turn of the century, and a rowing club used their shells on Lake Calumet as early as the 1880s. For the working class, recreational boating during this time was confined primarily to excursion boats on Lake Michigan and to canoe and rowboat rentals on ponds in the city's larger parks. Beginning in the 1920s and increasing after World War II, private boats came within financial reach of a larger group of people. Marinas sprung up along the Calumet River, and motorboats and sailboats used the protected cover of the river for mooring and the lake for leisure. The North and South Branches also became the sites for several boat yards, where boat owners who moored at lake marinas docked their boats for winter storage. Further north on the Skokie River, the massive public works project in the 1930s that developed the Skokie Lagoons also expanded boating opportunities, and the Forest Preserve District of Cook County established a canoe livery for rentals. Thus, with a few exceptions, recreational boating in Chicago focused on Lake Michigan and area lakes and ponds. Like the industry surrounding it, the Chicago River waterways served the utilitarian needs of recreational boaters.

The 1950s and '60s saw the first real birth of interest in the use of area rivers for recreation. As a scout leader in the early '50s, Ralph Frese began building canvas canoes to introduce his troop to nature exploration. Interest grew among area scouts, and when fiberglass became commercially accessible, Frese's Chicagoland Canoe Base began selling canoes and canoe kits. His annual sponsored trips introduced scout leaders to area rivers, including the North Branch, which in turn became nearby destinations for troop outings. Area canoeists were attracted to the Des Plaines River, leading to the estab-

lishment of an annual canoe marathon there, which today draws more than a thousand participants.

Around this same time, the Chicago River downtown was beginning to draw interest as a recreational resource. Riccardo's restaurant sponsored a regatta on the river for small "penguin" sailboats after the larger sailboats had been brought in off the lake in the fall. When Marina City was being planned during the mid-'60s, architect Bertrand Goldberg was one of the first developers to address the river as a recreational amenity. Although it never came to fruition, Goldberg's original plan for the marina in his "city within a city" was for each resident to have space to store a small rowboat or motorboat in the marina. Drawings for the marina show 400 15-foot boats hanging up on racks for ready access. Today, the marina serves mostly large motorboats and has 12 slips in the water and dry storage where another 50-60 boats are kept and craned in.

CURRENT USE

So recreational boating in Chicago is not a new endeavor, but an outgrowth of activity that has taken place for more than a century. Such activity, which more and more includes the Chicago River, shows what clean water can bring to an urban waterway. Many of the groups, agencies, and commercial interests we interviewed for this study have helped realize this potential by increasing public awareness and interest in the river, which in turn have lead to increased recreational use of the corridor. For boating, this use covers the full range of activities and their locations. This section summarizes current use information from the interviews about four main boating activities: canoeing and kayaking, rowing, motorboating, and excursion boating.

Canoeing and kayaking: Although canoeing and kayaking have increased on the Chicago River corridor in recent years, seeing a paddler on the water is still a novel event in most places. Most of the people interviewed in our study could not estimate how many people use the corridor for canoeing and kayaking, but they agreed it is low. And although the experts interviewed knew little about who was using the river outside of organized trips, those who had led outings said their attendees were a diverse mix of first time and repeat users who came both from communities near the river and from the metropolitan region at large (see Chapter 8 for more information).

The standard, two-person canoe is the most common boat in this category used in the Chicago River corridor. Smaller and lighter solo canoes and kayaks that allow greater access to shallow reaches of the corridor are used by some enthusiasts. Large voyageur canoes are occasionally used on the deeper reaches; special events and trips by the Illinois Voyageurs Brigade make up the bulk of these excursions.

Each reach of the Chicago River corridor is navigable by canoe or kayak at least in part. The most popular areas are the Skokie Lagoons (Reach 3) and the North Branch and tributary forks from below the Skokie Lagoons at Willow Road south to Lawrence Avenue in Chicago (Reaches 3, 2A, and 5a). The North Shore Channel (Reach 4) and the original channel of the Little Calumet (a tributary of Reach 10) were also cited by our experts as having good potential as canoe routes. The West Fork (Reach 1) and Middle Fork (Reach 2) are navigable in their lower sections during periods of adequate water and might also be good routes. The North Branch between Lawrence Avenue and downtown (Reach 5b), the Main Branch (Reach 6), and the South Branch including Bubbly Creek (Reach 7) have various access, land use, and competing use problems that currently make them less desirable for popular use. These problems are heightened on the Sanitary and Ship Canal (Reaches 8 and 9) and on the Calumet River, Little Calumet, and Cal-Sag Channels (Reach 10), making these reaches the least desirable for canoeing and kayaking.

The flat water that characterizes most reaches in this corridor enables canoeists and kayakers to easily paddle upstream as well as downstream. This increases the accessibility of the resource by expanding the number of put-in/take-out and trip length options, reducing the need for car-boat shuttling, and making the activity more appealing to those without extensive whitewater experience. In some cases, canoe clubs and unaffiliated paddlers use the Chicago River corridor to gain experience close to home before venturing out to more distant and challenging waters.

Rowing: Rowing has a small but dedicated following in the Chicago area, and the Chicago River has become an important location for rowing enthusiasts. Although single-person shells are often owned by individuals, the bigger 4- and 8-person shells often belong to clubs or teams. Rowers tend to use the river regularly for pleasure, exercise, or training for competition. These reasons, along with the difficulty in transporting the long shells (up to 65 feet in length), require that rowers have a central river location for boat storage and use. The Chicago River Aquatic Center has become the focus for rowing activity on the Chicago River, operating out of the old Coast Guard Station near the mouth of the river downtown. The center offers members lessons, access to equipment, and storage for private boats. The size of the facility, which is shared with the Northwestern University Rowing Team, limits membership to around 50, and there is currently a long waiting list to join.

The downtown area is the site for most of the rowing activity in the Chicago River corridor. Beginning from the Aquatic Center, rowers most often go down the Main Branch to Wolf Point, then turn south down the South Branch to River City and back. An alternate route is up the North Branch, but this direction is less favored because there is more debris in the water. Rowers use the river in the early morning to take advantage of the calm water and lack of competition by other boats. The Main Branch has also been the site of the Chicago River Regatta, an annual competition that draws collegiate rowing teams from all over to compete for Midwest, U.S., British, and International championship titles.

The North Shore Channel is occasionally used as a route for rowers, and has potential for greater use because of its

straight, sheltered channel and light use by commercial and power boats. The Chicago River Aquatic Center holds a unique annual regatta that begins on the North Shore Channel in Evanston and ends in downtown Chicago. "The Iron Oars Marathon," billed as the "world's longest smooth-water sculling race," draws competitors from around the country and Canada to row the 15-mile course. At the time we were doing the interviews for this report, the Metropolitan Water Reclamation District was working with Northwestern University and another school rowing team to identify a place for storing and using shells on the channel.

Use of the other reaches in the study area for rowing is constrained by their physical nature (too sinuous, too shallow), location, or competing uses. Reaches 8, 9, and 10, however, may have potential for special events, such as marathon competitions, that could be scheduled to minimize conflicts with competing uses.

Motorboating: Privately owned motorboats make up the largest proportion of recreational water craft in the Chicago River corridor. Craft used on the rivers range from "jet skis to fifty footers," but medium to large boats capable of running on Lake Michigan are most often seen. Smaller, faster runabouts suited more to inland lake and river use are becoming more common, and their operators tend to be younger and more sports oriented. Small fishing boats are rarely seen, but might be used in some sections, such as along the original channel of the Little Calumet River. Boats and canoes with electric trolling motors are allowed on Skokie Lagoons.

Motorboat use is centered near the locks on the Chicago and Calumet Rivers, because Lake Michigan remains the dominant focus of most boaters' outings. There are no data on motorboat use levels, though recreational providers and marine police report that the turning basin near the locks downtown is often crowded with boats on a good summer weekend, and boaters must often wait one or more cycles to go through the locks. The Ogden Slip at North Pier can get similarly crowded, and 60-70 boats are often "rafted" together for docking as their owners visit shoreside restaurants. Similar use levels have been reported on the Calumet River; marina owners see "several hundred" boats go by their docks on a good weekend, and locks can get so filled with commercial barges and recreational boats that recreationists have to wait a cycle to go through.

Beyond the lock areas use drops dramatically, although river use has increased noticeably in recent years. Clean water, knowledge of opportunities, better access, and more things to see and do were four important reasons interviewees gave for increased motorboating on the river proper. Reaches 4, 5b, and 6-10 are all navigable by motorboat. River trips originate from four major locations, each offering several options for recreational boating:

- ***Marinas on the lake and river downtown:*** Perhaps one of the most popular boating activities in the entire Chicago River corridor is to "cruise the river downtown." This area is roughly bounded by the locks on the east, River City on the south, and Chicago Avenue on the north. Many boaters anchor in the Inner Harbor near the locks, content to watch the spectacular urban scene unfold. Few boaters venture up the North Branch due to its industrial complexion, but those who explore the river beyond Irving Park Rd., including the North Shore Channel, are often surprised by the corridor's natural character. A few of those we interviewed mentioned the potential of this route for increased boating; one called it "a beautiful trip and one of the best kept secrets in Chicago."
- ***Marinas and boat landings along the Calumet River:*** There are a dozen or so marinas and boat landings along the Calumet River west of the O'Brien Locks, and most are oriented to lakebound travelers. Marina owners, however, report that more and more boaters are using the river as a destination. Popular trips are down the Cal-Sag and the Sanitary and Ship Canal to Lockport or up to downtown Chicago. An increasingly popular extension of this latter trip is to take the lakeshore back down to the marina, a trip boaters call "doing the triangle" (see the by-reach section under Reach 10 for a fuller description of this trip).
- ***Marinas and landings south of Lockport:*** The Upper Illinois River corridor has many boat launching areas that can be used to access reaches of the Chicago River system. Boats coming from Lockport and areas south head up the Sanitary and Ship Canal to downtown Chicago and back or up the Cal-Sag to the lake.
- ***The Alsip marina along the Calumet-Sag:*** This last area is small but significant in that it lies well inland in the Chicago River corridor. Plans for additional marinas in Crestwood and the Palos area reflect the rising popularity of boating in the corridor and would increase the status of the Calumet-Sag as a place for recreational boating.

In addition to these major areas, private docks along the North Branch and Calumet-Little Calumet Rivers provide access for a few homeowners and restaurant/bar establishments, and some boat yards on the North and South Branches may also offer launching opportunities.

Excursion boating: The last major category of recreational boating includes the fewest boats, but provides more river recreation engagements than all other types combined. About 50 excursion boats are listed in the Yellow Pages; most originate in the downtown area, although one person we interviewed mentioned that at least one tour boat company runs its operation on the Calumet River. Most excursion boats, such as dinner cruise ships and fishing charters, operate strictly on the lake, but more and more often tours are including the river in their routes. About a dozen regularly scheduled tour and charter boats operate at least in part on the river. Most regularly scheduled tour boats have a guide who notes points of interests to passengers, and some regular and special tours, such as those by the Chicago Architectural Foundation and Friends of the Chicago River, focus on topics of special interest such as architecture, history, and the environment. Regular excursions appeal to a variety of people, from local residents to tourists, while chartered tours range from weddings to conventions to a "haunted" cruise of the

river on Halloween night. No data were available on annual passenger levels, but considering the size of most boats (capacity around 200), frequency of scheduled tours (up to 20 per day for Wendella), and season length (Memorial Day-Labor Day, with some going from March through New Year's Day), use probably exceeds several hundred thousand people per year.

A typical excursion boat begins on the Main Branch, heads through the locks to the lake, south down the shore to Northerly Island (Meigs Field) and back, then down the Main and South Branches to River City and back. Special tours go almost anywhere that is navigable, including day-long tours that reveal some of the most natural and the most industrial areas in metropolitan Chicago.

OPPORTUNITIES AND CONSTRAINTS TO USE

Water Quality:

Of the major issues we discussed during our interviews, water quality seemed to pose the fewest constraints to use of the river corridor for boating. Topics related to water quality included:

- ***Effect of improvement on use:*** Those we interviewed were nearly unanimous in their feelings that water quality had improved significantly in recent years. This improvement was seen throughout the corridor, and those familiar with boating said this has translated into increased use. Although some boaters are still apprehensive about certain stretches, events like the following one at the Metropolitan Water Reclamation District's Centennial Fountain on the Main Branch would have been unheard of 10 years ago:

  The boat people that all stand around in the moor waiting for the [water] cannon to go off, to go through the water spray, well then that's its own teaching value. You used to think your kid would die if he fell in the water (David Bielenberg–Metropolitan Water Reclamation District).

  Although most of the improvements in water quality were attributed to the efforts of the MWRD, river monitoring programs by the Cook County Clean Streams Committee and the RiverWatch Program of the Friends of the Chicago River were also noted for benefiting boating interests.

- ***Acceptable levels of water quality:*** As reported in other chapters, many attributes of water quality affect people's perception and use. Odor, clarity, the quality of the fishery, and other indicators seem to be at levels acceptable for river use by many who currently do boat the corridor, although contaminants may make some cautious about direct body contact. As one paddling booster maintains, high-quality water may not be necessary for a high-quality boating experience:

  People often come to me and ask, "Gee, where can I go so the kids can paddle some clean water?" Well, there's clean water; some of the rivers in Illinois are fairly clean, there's a great fish population out near Decatur on the Little Wisconsin, and so on. But I ask them, "Why bother? You're going to be paddling it, not drinking it." I point out to them, the thing that makes a river trip or an activity like this of interest is not the quality of the water, it's what you discover on the banks. That's far more important (Ralph Frese, Chicagoland Canoe Base, Inc.).

- ***In-stream debris:*** One water quality problem that does affect use for some boaters is floating debris. Several people we interviewed mentioned that boaters have complained about hitting floating logs and other debris on their excursions. For slow-moving canoeists, debris in the upper North Branch and Little Calumet River can be annoying but seldom dangerous. For faster moving rowers and power boaters, however, debris can damage boats and props. According to several people we interviewed, the Water Reclamation District's "skimmer boats" have done an excellent job in keeping the Main Branch of the Chicago River free from debris. The quantity of debris coming down the lower North Branch, however, remains a major reason why many downtown rowers and motorboat users refrain from using that reach.

- ***Changing perceptions of water quality through boating activity:*** One final point about boating and water quality that emerged from our interviews is how boating can help change people's perceptions about the quality of the river. This seems to be especially true when the river is experienced from the perspective of a small boat:

  There's just such resistance to [the fact that the river is cleaner] because it's so ingrained, a historical thing that so many people take for granted. And I guess that's why I've always thought, it's only when you get someone down there that they begin to know the true nature of the river. And especially when you get them in some kind of a small craft…It isn't until then—when people start realizing this is a backyard playground—that their perceptions of water quality begin to change (Susan Urbas, Chicago River Aquatic Center).

Access and Facility Development:

Four different dimensions of access were discussed with respect to boating:

- ***Access to the water:*** In its most direct sense, access means the ability of boaters to launch their boats. For large motorboats and rowing shells, this type of access to the river requires special landings and other facilities. Small paddle boats, canoes, and kayaks often require no more than a low bank or gradually sloped shore from land that is publicly accessible.

  The locations of marinas and boat landings where current boating activity occurs have already been described. In discussions about access, interviewees representing boating interests generally felt the river corridor had poor access for most types of boating. The upper reaches of the North Branch and its forks are reasonably accessible for canoes and kayaks, but although substantial public lands provide a route to the water, few developed facilities exist for launching. The lower North Branch and North Shore Channel have few places to launch canoes; although several public parks abut the shore, their river banks are largely fenced off. These same stretches have no developed public or private boat landings, although some boat yards might function as launching facilities. The tall vertical walls of the Main and South Branches downtown preclude small boat launching from public lands, and Marina City launching fees are quite steep. Launching at the old Coast Guard

Station is limited to Chicago River Aquatic Center members, leaving private lands at North Pier and Wolf Point (which was closed to launching at the time of the interview) the only places for carry-in launching. The Sanitary and Ship Canal has no developed access above Lockport, and canoe access is limited by vertical channel walls. Except for the marina at Alsip, there are no launching facilities on the Cal-Sag Channel, and ad hoc canoe access is similarly limited by vertical channel walls. The only places where access might be described as "adequate" are along the Calumet and Little Calumet Rivers, where private marinas, public landings, and riverbanks on public lands offer access opportunities for different types of boats.

- ***Use of the water:*** A second aspect of access that surfaced in our interviews dealt with the ability of boaters to use the river once they get to it. Access to waters for all boat types is affected to some extent by the physical characteristics of the reaches in the corridor. Some of these characteristics, such as water depth, are taken as givens, and pose as a natural barrier to restrict or segregate use. In other cases, accessibility can be increased or decreased through design and management. In the case of canoeists and kayakers who use the upper North Branch and its forks, river accessibility is hindered by some dams that are difficult to go through and for which portage trails are poor or lacking. Fallen trees and shoreside vegetation can also at times obstruct paddlers, although major obstructions are removed every year or so on most waterways by public agencies such as the Army Corps of Engineers. However, the degree to which navigational impediments, especially natural ones, are removed to facilitate recreational travel is a philosophical management issue that some have raised:

  There's a school of canoeists that feels that essentially the river is a highway, and so you should keep it clear of trees on an extremely regular basis—not only trees that are down, but trees that are about to fall…and then you get into judgments. If you're going to have a riverscape that's natural, then that's part of the interest, and the obstacles just kind of go with it being a river. But to make something a safe highway for canoeists I think is kind of the wrong approach (Bill Koenig, Cook County Clean Streams and Friends of the Chicago River).

- ***"Equality" of access:*** The ability to boat on a waterway extends beyond the physical characteristics of the resource, for even if a river section is usable by a given type of boat, regulations might limit its accessibility. Few regulations in the corridor currently ban certain types of boating outright; one of these is that no motors except for electric trolling motors are allowed on the Skokie Lagoons. Some of our interviewees mentioned proposals for greater access restrictions on certain waters; for example, a ban on all motors in parts of the Skokie Lagoons, a powerboat ban on the North Shore Channel, and bans on the use of non-motorized boats on the Main Channel. Although these proposals may reduce perceived conflict and safety problems (see the next section for more detail on these topics), they in effect reduce "equal access" to the waterway for some interest groups:

  [When our rowing club began in 1979] everybody thought we were crazy or tried to get us off the water; sometimes the tour boats would try and run us over. I think they were a little scared of us, you see, fearing we were gentrifying the river. And our point has always been, "No, let's have all these uses." In fact…our vision has always been, that at different parts of the day there are different things happening on the river, and that's what makes it thrilling (Susan Urbas, Chicago River Aquatic Center).

- ***Access to the shore:*** Finally, the boating interests we interviewed felt access meant the ability not only to get to the water from the shore, but also to access the shore once you were in the water. In this respect, much of the Chicago River corridor is access poor for both motorized and non-motorized craft. For canoes, kayaks, and rowing shells, access to the shore from the river in downtown Chicago is hampered by tall vertical walls of concrete or steel sheet piling with few ladders. If a paddler or rower capsizes, there are few places to climb out of the river. Similar problems exist on the Sanitary and Ship Canal and the Cal-Sag Channels with the tall, vertical, cut stone banks. Downtown Chicago is also an attractive destination for motorboat recreationists coming in from the lake or up the Sanitary and Ship Canal from points south, but once there, boaters have few opportunities to dock and get out. Temporary docking is minimal and expensive, and overnight transient docking is very limited and difficult to find out about. Similar opportunities are lacking along the Sanitary and Ship Canal above Lockport and along the Cal-Sag Channel.

Safety and Use Conflicts

Because many of the problems related to boating safety arise from actual or perceived conflicts between uses of the waterway, safety and conflict issues are discussed together in this section. Other safety and conflict problems with boating the Chicago River corridor are independent of one another and are also discussed here.

Safety and conflict problems were the issues most often discussed by the boating interests we interviewed. Problems were both activity and location specific, including:

- ***Recreational powerboat traffic:*** Perhaps the most frequently expressed boating problem results from sheer numbers of powerboat users. Although the navigable portion of the Chicago River corridor stretches for miles and miles, powerboat use is concentrated around a few very small areas near the Chicago Locks downtown and the O'Brien Locks on the Calumet River. During peak summer weekends, traffic at these bottlenecks can be chaotic, and unwary or reckless boaters can create hazards.

- ***Boat wakes:*** Commercial barges and fast-moving recreational powerboats create hazardous wakes for small non-motorized craft. This problem can occur wherever motorized and non-motorized craft share the water; the most commonly referred to instances happen between rowing shells and recreational powerboats in the area of downtown between the Chicago Locks and River City. The wake problem is exacerbated along waterway stretches where

vertical riverwalls of steel sheet piling, concrete, or cut stone occur; these hard edges create a "bathtub effect" that multiplies the wake. Many people we spoke with mentioned this was a problem along the Cal-Sag Channel and the Sanitary and Ship Canal. Experienced small craft operators can negotiate most wakes if they are prepared for them, but for sudden occurrences or novice boaters, these wakes can capsize a boat. Speeding motorboats are occasionally seen along the North Shore Channel; such use is virtually unregulated here, threatening both the operator and other channel users, as well as creating wakes that damage the shoreline.

- ***Concerns of and about commercial carriers:*** For many years, commercial ships and barges were the sole users of the deeper reaches of the Chicago River corridor. As recreational traffic on the waterway increases, river carriers are seeing safety and conflict problems loom as larger issues in their day-to-day activities. These professionals are trained in operating safely on the waterway and are very concerned about some recreational boaters' lack of caution and responsibility on the water. At a meeting of the Illinois River Carriers Association, one member's comments captured the concerns and emotions of many of those present:

  Our basic problem is, we're out there working and they're out there playing. There's very little regulation, and there's no enforcement. People don't know, they don't understand, that a tow boat with a bunch of barges can't stop on a dime, can't turn around. We're working out there. There are too many pleasure craft, they have no idea. It's a safety issue. We don't want to kill anybody. They're out there risking their lives, and they don't even know it. It makes us all crazy because there's not a pilot out there that wants to kill somebody, and that's what we run into all the time. These people don't understand. Half of them are drunk. They're all out there boozing it and having a fun time just playing. There are no rules and regulations, and nobody's enforcing anything. It's dangerous. That's what we're upset about. There's too many of them, and it's dangerous.

  In addition to safety concerns, commercial river carriers have been hindered by the general lack of knowledge or respect some recreational boaters have for established rules of navigation. This is especially true at the locks, where commercial carriers have priority; smaller, faster powerboats cut in front of the barges, in some cases making the barge operators wait an extra cycle to get through the locks.

  Other than wake problems, recreational boating interests had few negative things to say about commercial carriers. Barges have decreased in use in recent years, move slowly enough for most powerboaters to easily avoid, and are generally wary of recreational users. At most, barges are an inconvenience because they have priority going through the locks and pleasure boats must wait for them. One marina operator on the Calumet River also mentioned that some barges run at night without lights, which makes them difficult to see.

- ***A lack of regulation and enforcement:*** The lack of regulation and enforcement mentioned by the river carriers was echoed by marina operators, marine police, and other boating interests we spoke with. No operator's license is needed to use a boat in Illinois, and although boating safety courses are widely available, boat operators are not required to take one. More and more novice powerboaters are being seen on the waters these days, and some of these novices lack knowledge of rules and ethics. In addition, the laws for operating a boat in the Chicago River corridor are weak or ambiguous. For example, the marine police we spoke with said the City of Chicago has no "no wake" ordinance on the books, and although the Army Corps has a posted "no wake" zone around the lock areas, most of the rest of the river is really not regulated. This is a definite problem and some marina owners have posted their own signs, but without enforcement authority outside officially designated zones, the marine police have to issue citations for "operating in a negligent manner." Although the Chicago Police Department, U.S. Coast Guard, and Illinois Department of Natural Resources all have some authority to enforce boating laws, their ability to do so is weakened by very low staffing levels, multiple duties and jurisdictions of enforcement officials, and priority focus on the lakeshore and river downtown at the expense of the rest of the waterway. Enforcement problems are especially acute near the marinas on the Calumet River.

  Finally, although waterways have long been highways of commerce, and more recently, recreation, the responsibility for safe operating procedures has historically been placed on the operator, not imposed by external rules and regulations. This idea holds both for how boaters interact with others on the water, as well as for how they ensure their own safety. In short:

  Safety is found between the eyes. (Ralph Frese, Chicagoland Canoe Base, Inc.)

- ***Drinking and boating:*** Boaters can drink in the boat and drink and drive; they just cannot drive while intoxicated. Because there is no licensing needed to operate a boat in Illinois and no implied consent law, boat operators do not have to submit to a breathalyzer test if they are suspected of driving under the influence of alcohol.

- ***"User unfriendly" waterway design:*** As mentioned in the section on access, much of the Chicago River corridor was not designed for small boat recreation. Dams, vertical, walls, and a lack of portage trails, ladders or other means of getting to shore create potentially unsafe conditions for boating.

- ***Safety/conflicts with land-based recreation activities:*** Related to the issue above, unsympathetic design of land-based recreation facilities adjacent to the waterway can also result in safety problems for recreational boaters. One controversy mentioned several times during our interviews relates to a proposal for the Forest Preserve District of Cook County to establish a canoe trail along the North Branch of the Chicago River. One of the concerns district officials have in designating such a trail is that the river flows through a number of public and private golf courses,

and the design of the courses, coupled with the sunken nature of the river, puts canoeists at risk of getting hit by golf balls. Proponents of the canoe trail say the risk is minimal, but both proponents and district officials feel that design improvements could make the water trail safer.

- ***Personal safety problems:*** In a few cases we heard about crime-related safety problems associated with boating at some sites. One of these sites was the Beaubien Woods Forest Preserve Boating Center along the Little Calumet River, where in past years those who parked their car and boat trailer in the parking lot risked vandalism. In recent years, however, the situation has improved, and use of the area has increased. In another case, a person we talked with mentioned that canoeists along the North Branch have had stones thrown at them and have been harassed by children from the bridges above.

- ***Environmental impacts of boating:*** One final conflict mentioned by some environmental interests we spoke with was the impact that boating has on plants and wildlife in the corridor. A representative from Audubon mentioned that motorboats could disturb shorebirds during critical nesting periods, but use levels are low enough that this probably doesn't happen much. The same feeling was expressed by agency and non-profit groups in referring to the trampling of shore vegetation by canoeists. But as one recreation provider put it:

  The Forest Preserve and the Park District, they go to a lot of effort to provide horseback trails, bicycle trails, and hiking trails, but they ignore the fact that the waterways through their grounds offer a natural trail, and the only one that leaves no trace of your passing, and that's very, very underused (Ralph Frese, Chicagoland Canoe Base, Inc.).

- ***Safety training:*** Although this section has dealt primarily with safety and conflict related problems, our interviews also uncovered some positive things being done to improve safety and reduce conflicts. An important one of these is safety training. Clubs and organizations can be an important way for new individuals to learn about safety precautions; canoe clubs, rowing clubs, and powerboat squadrons often feature safety as the centerpoint in training courses and social activities. Local marinas and the marine police unit have encouraged boaters to have a "designated driver" who does not drink while behind the wheel.

Aesthetics and Nature

Four issues were raised about the aesthetic characteristics of boating:

- ***Natural and cultural shoreline scenery:*** As mentioned previously, an important part of the boating experience is what's seen on the shore, and the cultural and natural environment of the Chicago River corridor offers boaters many opportunities to be in aesthetically pleasing surroundings. The upper forks of the North Branch, the upper North Branch, the North Shore Channel, the lower Sanitary and Ship Canal, and the western half of the Cal-Sag Channel offer boaters extensive stretches of naturally appearing shoreline vegetation and the chance to see wildlife, which both add to the aesthetics of the boating experience. The Main, South, and North Branches in the downtown area are renowned for their significant architecture and urban views, including many historic buildings and bridges. In addition to this contemporary cultural scenery, the downtown and southern reaches of the corridor are rich in cultural history, from pre-European archaeological sites, to artifacts from the early European settlement of Chicago, to more recent periods of industrial activity.

- ***Natural and designed waterways:*** In addition to shoreline views, the lay of the waterways themselves can offer aesthetically pleasing boating experiences. This is especially true for river stretches that have not been extensively channelized, such as the upper stretch of the North Branch and the original channel of the Little Calumet River. The winding nature of these streams, the riffles caused by rocks or a fallen log, and other water features contribute to the aesthetics of an outing. In other cases, designed waterways can offer similar aesthetic experiences and even heighten boater pleasure beyond what may have occurred naturally. Such is the case with the Skokie Lagoons, in which the original designers used many picturesque conventions such as curvilinear shores and islands to introduce pleasing view sequences and a sense of mystery into the boating experience. On the other hand, extensively channelized waterways such as the North Shore Channel, Cal-Sag Channel, and Sanitary and Ship Canals may offer good shoreline scenery, but the waterways themselves have been described as "boring" due to their straightness and lack of variation.

- ***The aesthetics of boating activity:*** All sports have their aesthetic aspects that cause people to appreciate them, and boating is no exception. Many boaters take pride in their craft and aesthetically appreciate the look and efficiency of its design. Motion is a significant aesthetic component of the boating experience, whether the boater is moving silently down a narrow stream in a canoe or speeding up a channel in a powerboat. Two types of boating are symbolic of the Chicago River corridor, and their activity has significant aesthetic features for participants and onlookers. One type is barge traffic along the Cal-Sag and Sanitary and Ship Canals, where the commercial function of the river is still very much alive:

  Also that's part of the enjoyment for people sitting on a canal and watching [the river and the barge traffic]. I've got a favorite rock here I sit on, down where the lake spills into the canal. And I can just write poetry all day long if I want. Sometimes I do. I can bring my work out there and work on it in the summertime. And I'll see black crown night herons flying by and great blue herons and I'll see towboats going by and you feel like Mark Twain on the Mississippi. And those towboats remind you of those paddlewheel boats of the days gone by. It's neat (Bill Banks, Lake Katherine Nature Center).

  The second type is the rowing shells on the Main Branch, which have special aesthetic qualities for those who row or watch:

  The aesthetics of [rowing] are so beautiful. To watch it and the way they glide through the water. That's part of what

people like about it. You get into the rhythm, it's very relaxing. Running gets like that at some point. Only I think there's more motion here, so it's a little more intoxicating. Rowers are always trying to get a perfect stroke that sends them very efficiently, and once in a while they get that. As they get better, they get that more often. Rowers chase that, I suppose. Like some people chase a golf ball, others chase this perfect stroke (Susan Urbas, Chicago River Aquatic Center).

- ***Detractions from waterway aesthetics:*** Inappropriate land uses (e.g., shopping malls), over-the-bank dumping (including old cars), poor land management practices (e.g., runoff resulting in erosion), and poorly designed shore structures and facilities (e.g., retaining walls, stormwater outfalls, some bridges) were among the shore-based features interviewees felt detracted from the aesthetics of the boating experience. Fewer comments were made about the aesthetics of the water itself, though smells, water turbidity, floating fish, and other floating debris were mentioned as aesthetic nuisances in some reaches.

PROSPECTS AND IMPLICATIONS OF INCREASED BOATING ACTIVITY

What are the prospects for increased recreational boating activity in the Chicago River corridor? Overall, most boating interviewees we spoke with felt the prospects for increased use were "very good," that increased use could easily be accommodated in most places, and for most parties concerned, would be a welcome thing for a river resource that many feel is underused recreationally. One major exception to this overall feeling came from the river carriers, who felt that increased recreational use would have a direct negative impact on their commercial livelihood in terms of safety and user conflict. In addition, other groups expressed reservations about increased use of given boating types in given locations. The prospects and implications of increased use are itemized in the following points:

Access and Facility Development

- ***Prospects for canoe trail development:*** Several people we spoke with mentioned the idea of a designated canoe trail as one way for increasing the awareness and use of the Chicago River corridor. Several trails or routes were mentioned, including:

  1) **North Branch canoe trail:** The most often mentioned canoe trail would be on the North Branch and its tributaries, beginning at Dundee Rd. on the northern end of the Skokie Lagoons and continuing down to the dam above Lawrence Avenue. Prospects for such a trail seem good, except for previously mentioned safety/liability problems near dams and golf courses along the route. These problems could be reduced through redesign, and information and signage could enhance the use of the route for safety, enjoyment, and education.

  2) **North Shore Channel trail:** This canoe trail would go the length of the North Shore Channel, from the Bahai Temple in Wilmette to the junction with the North Branch north of Lawrence Avenue in Chicago. Most of those who mentioned this route felt positive about it as an attractive and safe route, although some were concerned about its shared use by powerboats, which are occasionally seen speeding up the narrow channel.

  3) **Little Calumet River trail:** The original channel of the Little Calumet is technically not part of the ChicagoRivers study area, yet those who manage forest preserve lands along it noted that it has good potential for a canoe trail. With proper design and marketing, the Little Calumet could attract canoeists from the southern metropolitan region in the same way the North Branch and Des Plaines Rivers do or could do for those in the northern part of the region.

  4) **Other potential routes:** Most people we talked with about potential canoe routes were much less enthusiastic about other stretches in the corridor. The lower North Branch, the river downtown, the Sanitary and Ship Canal, and the Cal-Sag Channel all have problems with competing water uses and related access and safety problems. It is one thing for a group of experienced paddlers to use these routes, but an entirely different matter to designate and publicize them for wide use. One public official said that because of the potential safety problems, it would be "irresponsible" for them to encourage use of the Sanitary and Ship Canal along the shore of their property. Others felt that with the Des Plaines River Canoe Trail nearby, there was no reason to designate a canoe trail on the Sanitary and Ship Canal.

  In some cases, increased use of certain areas by some types of recreational boaters would not be a problem because potentially conflicting uses are not on the water at the same time. For example, rowers tend to use the river downtown in the early morning to take advantage of the calm waters and in doing so tend to avoid the heavier river traffic that occurs later in the day.

- ***Prospects for increasing accessibility of opportunities for small non-motorized boats:*** Park and forest preserve officials seem to at least moderately support developing access to likely stretches of the riverway for small non-motorized boats. Park officials in Glenview, Evanston, and Chicago were guardedly open to canoe landings in their parks, though the question of liability was raised by at least one. The Forest Preserve District of Cook County has reportedly entertained the idea of re-establishing the canoe livery that at one time was at the Skokie Lagoons; this would provide good access to a relatively safe and popular section of the corridor for novice boaters. As for other access along the proposed North Branch canoe trail, it would require little more than designating and developing "primitive" canoe launches and perhaps developing some small parking areas. Finally, one unique proposal for increasing access to the waterway for small boats is to create a central boating information/technical center and satellite neighborhood boating centers throughout the metropolitan region:

  One of my dreams is that somewhere along the river in this area, the downtown area, there would be a technical center

for these sports or this recreational activity. And then that could be the center for all the information. People could come to learn there and get information about other spots on the river. But that eventually, in all the neighborhoods along the river, you might have little smaller boat houses, either run by the municipality, the local park district, or some private, where people could store things reasonably. To really use a body of water like this is difficult, and people don't do it very much, or regularly, if they have to haul their boat to the water (Susan Urbas-Chicago River Aquatic Center).

- ***Prospects for marina/powerboat facilities:*** Powerboats require a bigger investment for facility development than do canoes and kayaks, but many we spoke with felt there was a demand for more launches and marinas in some areas of the corridor. Such new facilities could be expected to significantly increase use and, if not located too close, would not seem to threaten owners of existing marinas. Potential areas for facility development include the North and South Branches near downtown Chicago, the Sanitary and Ship Canal around Palos, and the Cal-Sag Channel. Indeed, there are current proposals for marina development in most of these areas already. If the Forest Preserve District of Cook County did develop access to the Sanitary and Ship Canal through its Palos Preserves, that access would most likely be for powerboats. However, funds for new public development of this type are hard to come by, especially for land such as at Palos, where the actual shoreline property is owned by the Water Reclamation District. Forest preserve officials did note, however, that improvement of existing boat launching facilities at the Beaubien Woods Forest Preserve has resulted in increased use.

- ***Prospects for development of other boating amenities:*** If recreational boating is to increase, there must be additional places for people to go and do things. This includes private waterfront restaurants and commercial establishments as well as public amenities like parks and riverwalks that are at least partly oriented to boating. Those we spoke with on this issue felt it was difficult to predict whether increased recreational boating would provide the incentive for increased boat-oriented development, or vice-versa, but most felt there was enough room in the current market for increased commercial establishments to break in. One exception might be development on the scale of North Pier (a dining, shopping, and entertainment complex) that requires a large, four-season clientele to support it. Even at smaller scales, most commercial establishments would have to attract non-boating clientele, who would be the majority of their business. The climate for such development dictates a location near existing residential or commercial centers that is easily accessible by land—this might disqualify some stretches of the southern reaches that are isolated by extensive open space or industrial development. In other areas like the lower North Branch, land use policies aimed at protecting traditional industrial/manufacturing zones from gentrification might also inhibit the growth of recreational interest and development. Finally, one person we spoke with felt that some sites with otherwise good development potential might have land and river sediment contamination that would inhibit commercial development.

Safety and Use Conflicts:

- ***Potential for increased safety problems and conflicts with industrial land uses:*** Several of the people we interviewed who represented industrial operations along the river corridor were concerned about safety and trespassing problems associated with recreational boating. Many of the industrial properties are not fenced off from the river, and access from the banks is feasible.

- ***Potential for increased congestion and conflict with commercial uses:*** The biggest potential impact on increased recreational use would be felt at the two locks on the waterway, which even now are congested during peak summer weekends. The route between the waterway and the lake is expected to remain popular for recreational boaters, and with increased use, both commercial (tour boats, barges) and recreational traffic would suffer. If present use and behavior patterns of current boaters are any indication, this increased use could also result in additional safety problems.

  Some marina and commercial property owners we spoke with felt that if recreational boating in the downtown area increased, the bottlenecks at the O'Brien and Chicago Locks would force more boaters to use the riverway for recreation instead of the lake. This could disperse the increased levels of use to more places within the system, whereas most use is currently concentrated in a few areas.

- ***Implications of limiting barge traffic:*** Although no one we talked with proposed it, some barge industry representatives speculated that significantly increased recreational use of the waterway could spur initiatives to limit barge traffic. For river carriers, such a move would harm their business directly. Other companies would be indirectly harmed, such as Commonwealth Edison, who receives large quantities of raw materials via barge for the operation of their facilities. In other cases, even businesses that did not currently receive raw materials by barge would not want to see their option to do so limited.

In summary, the overall potential for increased use of the Chicago River corridor for recreational boating seems good. Problems that may occur do not seem to be insurmountable, and with the right planning and marketing, it may be possible to encourage recreational boating of given types in locations and times where conflict is minimized. The following quote from a land-based interest summarizes what the average person, boater or non-boater, might say about the prospect of greater use of the Chicago River corridor by boats:

I think that [greater in-stream use of the river] can only be a plus. That's my visceral reaction. If the river were more heavily used for recreational purposes, even for commercial purposes, if there were more barge traffic, it's going to make it all the more interesting a space. To sit at one of the benches and look at the water is one thing, but to see a stream of river traffic is some-

thing else. I don't know what the prospects are for river traffic. We used to see a cement barge come in here every once in a while, and whenever it did the bridges always got stuck. But the boat doesn't come around any more. Maybe the City discouraged it. But I think that adds great interest and I would like to see more of it (Hal Jensen-Chicago Riverwalk Corp.).

RECOMMENDATIONS FOR IMPROVING BOATING OPPORTUNITIES

An important objective in our interviews was to solicit ideas for improving recreational boating opportunities in the Chicago River corridor. Some of these ideas follow directly from discussions mentioned in previous sections on current and potential issues and are restated here without elaboration. Others are direct recommendations, reported below for the first time. It should be emphasized that these recommendations are from the interviewees and not from the author of this chapter. Furthermore, although many of the recommendations were mentioned by several interviewees, they should not be interpreted as statements for which there is a consensus. In fact, some recommendations might even conflict with one another. Rather, all recommendations are presented here without respect to priority, but are organized under the dominant topic they address.

Access and Use:

- Develop canoe trails at appropriate locations along the waterway.
- Develop neighborhood storage and launching facilities for small non-motorized boats.
- Encourage development of additional private marinas and public boat landings where facilities are needed.
- Encourage development of boat-oriented commercial and amenity attractions along the waterway.
- Install ladders every 500 feet or so along the vertical river walls in the downtown section of the river for emergency use, to make the river more user-friendly to small recreational boats.
- Create activities and facilities to draw boaters to little-used stretches of the corridor. In some cases, sponsored activities might draw people to little-used parts of the corridor:

  If you had an activity along the Little Calumet River like you have with the Des Plaines River Canoe Race where a number of people are present, you would make people feel comfortable and safe…It would draw people back to the area. There isn't anything in that area now that would draw you to the river. Nothing other than our slips. Zero (William Granberry, Forest Preserve District of Cook County).

Safety and Conflict Resolution:

- Develop controlled access points for small non-motorized boats to ensure that those who enter are properly trained and outfitted before they venture out. Such points might be set up through boat liveries and neighborhood boating centers described previously. To rent or launch from the area, boaters would have to be registered at the center and either have gone through a training course there or have been checked out by qualified personnel.
- Expand and publicize safety training courses for powerboaters.
- License powerboat operators, and use all the fees from licensing for enforcement of boater regulations.
- Clarify responsibilities and authority for imposing boating regulations, especially in terms of "no wake" zones.
- Enforce a "no wake" zone in the downtown area and around marinas on the Calumet River. Such enforcement would alleviate many of the problems for small recreational craft.
- Expand the current staff of waterway enforcement officials. State enforcement through the Department of Natural Resources would be best, for the waterway goes through so many different jurisdictions that enforcement by local units of government is difficult. At the federal level, the U.S. Coast Guard has too many other duties to deal with boaters' moving violations.
- Expand dialogue between river stakeholders on safety issues. Some marinas on the Calumet River hold safety meetings with river carriers to let each other know about safety concerns and to suggest ways how they can be resolved.
- Zone the riverway for different boating types, or use design, incentives, or other means to segregate incompatible uses. Most we spoke with did not want to see an outright ban of recreational boats from certain waters, but many did see the need for dealing somehow with incompatible uses. Segregation by location or time of day tends to occur naturally for the most part, but as use increases, some types of intervention might be needed to maintain safe boating.
- Create opportunities and attractions at other areas along the riverway to disperse current concentrations of boaters, especially around the lock areas.

Aesthetics and Nature:

- Improve the aesthetics of the corridor throughout its length. There are many opportunities to enhance the natural and cultural scenery along the river, and doing so may also improve the river for other values such as wildlife and economic vitality.
- Replace dams along the North Branch with new dams of naturalistic design that are safe and exciting for canoeists:

  A one-foot drop can create 100 feet of fast water. All you do is design natural wingdams on the boulders that pool the water so it cascades down a little at a time. This way you have an exciting run, plus you get away from the dangerous hydraulics that you have with a vertical dam. It's just something I would like to see done on the North Branch. We have several messy dams where people have dumped and wrecked their boats. There's no reason why in a Forest Preserve setting we can't create what would appear to be natural ledges of rock, whether it's concrete or whether it's real rock trucked in, and create something aesthetically interesting like that rather than a vertical drop. Dams do not have to be a vertical drop (Ralph Frese, Chicagoland Canoe Base, Inc.).
- Improve wildlife habitat by leaving downed trees in place along the river.

Planning:

- Create a vision for recreational use of the river:

  What we lack is a vision of what should really happen along different portions of the river, different mixes of things, and so on. I think you need that, because someday there's going to be this floodgate of development along the river and it's going to be out of everyone's control and things are just going to happen, and again there'll be no reference…[For example, in a proposal for the 1992 Chicago World's Fair (that never materialized)] some people were talking about putting hydroplanes on the river. I don't think that would have ever worked…they had other ideas about submarines, and they wanted to make it a circus, and I thought that was so disrespectful…So I think if something's out there and articulated, that will help channel the process the right way (Susan Urbas, Chicago River Aquatic Center).

- Establish a river authority to coordinate planning and regulation of river use. One type of authority would bring together all agencies that have river management, enforcement, and decisionmaking powers. A different version might also include organizations and interest groups, who would act on an advisory basis. For example, in a recent proposal for marina development at the mouth of the Chicago River downtown, a task force was created to address issues and problems related to the design. Similar task forces could be created elsewhere to work toward finding common ground between diverse groups on conflict issues. Regional task forces could be created for different reaches of the river.

Promoting River Awareness, Providing Information and Education:

- Develop a technical information center downtown that is the source of information for boating opportunities in the Chicago River corridor.
- Expand boat tour programs. On stretches of the corridor that are little used for recreation, such as the Calumet, boat tours could show local residents what is happening with their river. This might help to revive interest and concern in the river as a recreational resource.
- Improve the system for finding out about transient overnight docking space at marinas on Lake Michigan. On any given day there are plenty of open spaces at the lake marinas, but little or no way to find out about them. Consequently, boaters coming up from the southern reaches have no way to stay overnight, so they turn around and head back. Such a system could increase boaters' options and enhance tourism in the downtown area.
- Develop a signage system to orient boaters and overland travelers to the waterway system:

  One thing the river needs desperately [is a signage system]. I mentioned people's lack of geographical knowledge. Years ago, one of our guys wrote to the Illinois Department of Transportation and got them to put signs on all the state highways announcing "North Branch Chicago River." You see it along the Edens Expressway, you see it on all the state highways. We need to do that on every county road and every community road. Every bridge should be marked for identification, and then I have something to go on those signposts. Little square signs like this, National Park Service signs, brown with white day-glo canoes on them. That should be mounted on every one of these identification signs on every bridge.

  Interviewer: To show that it's a water trail?

  You have to plant the seed of the idea. How many times have I gone down the river and somebody along the bank, cycling or just walking along, says: "Gee, can you canoe this river?" Well, my God, we're there in the water paddling fine (Ralph Frese, Chicagoland Canoe Base).

- Develop a comprehensive canoe trail guide:

  I have strong feelings that if you declare it a Canoe Trail and give it a name, it attracts people…Using that same logic, you dedicate a "River of the Onions Canoe Trail," and you put together a little guide book....something we can sell for a couple of dollars. And I want it to tell everything from the geological history of the Chicago River watershed, why it's separated from Lake Michigan by beach ridges, how this little hill across the street is our Continental Divide, and explain all this, and then the history of Skokie Lagoons, how it was dug and why, and on and on. And then give people a blow-by-blow description, and I even want to point out the outfalls in that. What a combined sewer is, what a storm sewer is. The one outfall up by Edens Expressway, that it drains 11 miles of Edens Expressway and all the rainwater, that storm water gets pumped up out of the ground and through this 30-inch diameter pipe and that's why you see all the silt on the river here blocking you. It's because of that drainage, and on and on like this. I want to tell about the wildlife, the unusual areas. There's a stretch in Harms Woods, a high bank on the right. You go past there in October and the trees are all in bloom. Well, most people never notice this; it has to be pointed out to them. These trees bloom around All Saints' Day, so the old-timers called it witchhazel. But it has to be pointed out to people. Otherwise they drift right by, and they never notice it. So that in my way of thinking, a guidebook like that gives them all kinds of stuff, anticipation, what to look for (Ralph Frese, Chicagoland Canoe Base, Inc.).

FISHING

HISTORICAL BACKGROUND

The Great Lakes and Mississippi River watersheds supply the Chicago River corridor with a recreational fishery of diverse indigenous and introduced species. The potential of this fishery is just beginning to be realized, for until recently most waters within the corridor were too polluted to sustain most species. Because of this, fishing in the Chicago region has long been dominated by opportunities on Lake Michigan, outlying lakes such as the Fox Chain-O-Lakes, and natural and human-created ponds in parks and forest preserves. Historically important recreational fishing areas within the Chicago River corridor include the Skokie Lagoons on the East Fork of the North Branch, as well as larger water bodies adjacent to the channel such as Saganashkee Slough off the Cal-Sag Channel.

CURRENT USE

Because a recreational fishery in the Chicago River corridor is still more of an idea than a reality, no creel census or other recreational fishing data have ever been systematically collected. In fact, the last biological stream survey by the Illinois Department of Natural Resources (the principal agency responsible for fish) to sample fish at sites within the corridor was conducted over a decade ago. Activities by the Metropolitan Water Reclamation District and the Fish and Wildlife Service reported in other volumes in this technical series provide new information that has positive implications for increased recreational fishing. Combined with that knowledge, our interviews with park and forest preserve site managers, planners, and other individuals give us a "first look" at current and potential fishing in the corridor.

Both shore fishing and boat fishing occur in the Chicago River corridor, although the former is probably more prevalent in terms of numbers of anglers. For some boaters, however, it is difficult to separate powerboating or canoeing from fishing; for them, boats are seen more as tools for fishing than activities in and of themselves. Those who fish the corridor are demographically diverse, including young children and older adults, working class and wealthy, and many different racial and ethnic groups. Because of the marginality of the resource in most locations, those who fish the corridor (especially shore anglers) tend to come from nearby areas. An exception to this is the Skokie Lagoons, which tends to drawn anglers from throughout the metropolitan region.

Fishing takes place throughout the corridor, but tends to concentrate around designated fishing lakes and ponds on or near the river. These sites include two fishing ponds at the Greenbelt Forest Preserve at the headwaters of the Skokie River; the Skokie Lagoons; a pond adjacent to the North Branch in Chicago's Gompers Park; Flatfoot Lake at the Beaubien Woods Forest Preserve near the Calumet River; and the larger ponds and sloughs of the Palos Preserves, including Saganashkee Slough and the Sag Quarries. Some fishing takes place on a system of spring-fed quarries adjacent to the Sanitary and Ship Canal in Lemont; these quarries have high-quality water but are on private land with restricted access.

On the river proper, two additional focal areas for fishing include the stretches of the Chicago and Calumet Rivers nearest Lake Michigan. There areas attract anglers for seasonal runs and increasingly for midsummer fishing. Some also fish these areas on their way out to fish the lake. The Main Branch of the Chicago River has been the focal point of several fishing derbies. In one type of derby, a part of the river is sectioned off with a net and stocked with fish, and anglers pay an admission fee to compete for prizes. The "Chicago Carp Classic" is another derby first held in 1994 to draw attention to the trophy-size carp that live in these waters.

Elsewhere in the corridor, use is spotty, and people fishing along the river are considered novel sights. Except for the ponds in the Greenbelt Forest Preserve and the Skokie Lagoons, the tributary forks of the North Branch are small and do not sustain a recreational fishery of any size. Below the Lagoons, anglers are occasionally seen in forest preserves along the banks of North Branch, especially below the dams. Further down the North Branch, the "waterfall" dam in River Park north of Lawrence Avenue in Chicago gets consistent use during the summer by neighborhood youth. To the south, anglers have been occasionally seen on the South Branch and Bubbly Creek, on the I&M Canal paralleling the Sanitary and Ship Canal, on the original channel of the Little Calumet (from shore and by boat) by the Calumet Forest Preserve Boating Center, on the main channel of the Little Calumet at the Beaubien Forest Preserve Boating Center, and below the "waterfalls" of the MWRD's Sidestream Elevated Pool Aeration (SEPA) stations on the Cal-Sag Channel.

Designated fishing ponds and lakes are regularly stocked with fish large enough to catch and keep. Species include largemouth bass, channel catfish, and bluegill; as some of these waters improve in quality, game fish like smallmouth bass and walleye may also be introduced. The spring-fed quarries in the Lemont area offer opportunities for cold water fishing; the Sag Quarries in the Palos Preserves are stocked with rainbow trout. In designated waters, other management activities like removing submerged vegetation and installing underwater structures for fish habitat also enhance recreational fishing. Non-stocked species fished for on these and other waters include crappie, sunfish, bullhead, and carp. The fishery of the Main Branch is becoming increasingly diverse, with recent reports of 20 different species present. These include large and smallmouth bass, perch, crappie, and bluegill. Seasonal runs of trout, salmon, and smelt are also found here and on the Calumet River, though locks impede fish movement into these rivers.

Because no formal fishing data have been collected, it was difficult for those we interviewed to estimate the fishing levels on the corridor. Fishing on the stocked ponds and river mouths can receive "heavy pressure" at times, while use of much of the rest of the corridor is "sparse-to-mild."

OPPORTUNITIES AND CONSTRAINTS TO USE

Water quality:
Two interrelated water quality issues that bear on recreational fishing were discussed by interviewees:

- ***Impact of cleanup activities:*** The fishing interests we spoke with credited increased recreational fishing opportunities directly to water quality improvements. The Metropolitan Water Reclamation District's water cleanup activities include reducing pollutants and increasing oxygen in the water. These activities have resulted in a greater diversity and quantity of recreational fish species throughout the Chicago River corridor.
- ***Recreational fisheries management:*** Most efforts at fish management are currently directed at the ponds and lagoons of the corridor. The premiere effort in this respect has been the Skokie Lagoons project, where dredging and restocking have dramatically improved the fishery and water clarity. Another water body that is being restored in part for fishing is Flatfoot Lake in the Beaubien Woods

Forest Preserve, just off the Calumet River. This effort, part of a ChicagoRivers demonstration project funded by the Urban Resources Partnership, involves youth and adults from the Fishin' Buddies program working with the Forest Preserve District of Cook County and other groups.

As water quality improves in the nearby Des Plaines River, which joins the Sanitary and Ship Canal near Lockport just below the study area boundary, that river is making a comeback as a recreational fishery with great potential. It has been suggested that fisheries in the Chicago River corridor could also be improved greatly as water quality on its reaches similarly improve.

Access, Safety, and Use Conflicts

Shore access and facility development for fishing was the major access topic discussed by interviewees. Shore access was strongly related to safety and use conflict problems, so these are discussed here together. For fishing, these concerns centered on the following topics:

- ***Levels of access/facility development on public land:*** Forest preserve sites provide examples of the range of shore access for fishing in the corridor. Designated fishing ponds and lagoons generally have good access; fishing ponds at the Lake County Forest Preserves' Greenbelt site have walk-in (one-third mile) trails and shore areas that are groomed in places to facilitate bank fishing. The Forest Preserve District of Cook County's designated fishing areas are more developed, usually with parking nearby. The Skokie Lagoons and Saganashkee Slough sites also have new fishing walls built for disabled access. The district's boating centers on the Calumet and Little Calumet Rivers area are also developed to facilitate shore fishing along with boat launching. Other forest preserve land along the North Branch and tributary forks in Lake and Cook County do not have formally developed access for fishing. However, many stretches of the river lie close to roads or paved trails, and dirt paths paralleling the river provide informal access in most places. Finally, shore fishing access to the Sanitary and Ship Canal and Cal-Sag Channel from the Forest Preserve District of Cook County's Palos Preserves is limited by the character of the channel. The tall, steep channel walls make it difficult to fish from shore, and access to the shore from land is also difficult. An exception to this is the section of the Sanitary and Ship Canal paralleled by the I&M Canal Bicycle Trail.

- ***Access to privately owned or leased land:*** Shore access for fishing some areas along the tributaries of the North Branch, and the lower North Branch, Main Branch, South Branch, and Calumet Rivers is restricted by private land ownership. In some cases, companies do not want people trespassing on their property because of potential theft or disruption; in other cases, safety/liability questions are at issue. These restrictions on access might even extend to company employees for fishing on official breaks.

  Access to private shore properties for fishing can also be restricted because of conflicts. For example, shore privileges for fishing off some industrial properties in the Calumet Harbor area have been revoked due to past abuses by some anglers. Past littering by those fishing Ogden Slip interfered with other people's recreational enjoyment of the shore along the North Pier Terminal commercial development and caused managers to reconsider their policy on fishing access:

  > *I don't know if you're familiar with what happened this spring, but I got somewhat castigated by the Outdoors Editor of the Tribune for being—my terms, not his—"the Ogre of Ogden slip," when I kicked the fishermen off the piers…They were leaving fishheads and bait and stuff all over the docks, and I had to get the docks cleaned up so we could have our restaurants occupy them. But God, they just went into a frenzy over this thing. It was really kind of interesting. So if there's a way in which I can accommodate the bank fishermen and keep it clean I probably will try to do that next winter. Otherwise, I'm just going to have to outlaw fishing off the piers. And to me that's sort of offensive because it is a recreational feature, but yes I can control the banks (Ron Haskell, North Pier Chicago).*

  Even under the best of conditions, however, some property owners might perceive shore fishing as conflicting with their programmed uses of the banks. This is especially true as the development of urban riverwalks draws more and more people to the water's edge. This conflict concerns some fishing interests we interviewed, who see fishing as a traditional use of the water potentially being displaced by new uses. The major concern for such displacement is in the downtown sections of the corridor.

- ***Access, safety, and the fencing issue:*** River access along the North Shore Channel and lower North Branch in the city of Chicago is restricted by chain link fences on park land. In some popular areas, such as by the "waterfall" in the Chicago Park District's River Park, this fencing does not prevent youths from ducking under it or through a hole to go fishing:

  > *The only active recreation use [of the river] is fishing, and they have to go through fences to get at it. It's not really accessible to fishing…[I don't mind them fishing there], but you know we've had many, maybe six drownings since I've been here [22 years]. On the other side of the river that's the only waterfall in Chicago, so it really attracts the kids, which is not really good either, because we've had a drowning here as a result of that. It's always been a battle between the Reclamation District and the Park District and the Police Department for who's responsible for that area (Bob Kushnir, Chicago Park District).*

  In some cases, fencing has prevented safety professionals from getting heavy equipment over it to rescue those in need. For this and other reasons, new Water Reclamation District criteria along leased sections of the river will eliminate fencing. Ronan Park, a joint park development project by the Water Reclamation District and the Chicago Park District on the North Branch, will be among the first parks in this part of the waterway to provide open access to the river for fishing and other interactive water uses.

- ***Personal safety:*** Until recently, fishing at Flatfoot Lake and the Beaubien Boating Center in the Beaubien Woods Forest Preserve was not considered safe. The areas were basically abandoned by the forest preserve because of gangs and crime, and the public was cautioned about using the facilities. New management of the preserve has helped reclaim these sites for fishing; increased maintenance and surveillance, removal of vegetation to increase visibility, an active stocking program at Flatfoot Lake, and other activities have helped bring safety and people back to the preserve. A major impetus for taking back Flatfoot Lake has been the Fishin' Buddies youth program, which uses the lake for outings and is assisting with the rehabilitation program described earlier. Elsewhere in the corridor, youth gangs sometimes use the waterfall site in River Park on the North Branch, interfering with fishing activity there.

- ***Safety of fish consumption:*** There is some question whether the fish caught out of the corridor's waters are safe to eat. Some we talked with felt fish from the harbor, ponds, and headwater areas were generally safe, but fish further downstream (including the lower North Branch, South Branch, Sanitary and Ship Canal, and Cal-Sag Channel) were not. Although most fishing in these downstream waters is thought to be done purely for recreation, there is concern about the health effects on those who might fish the waters for food.

Aesthetics and Nature:
Discussion here uncovered the following topics:

- ***Aesthetics of fishing:*** Although the levels of contaminants in fish caught on some reaches may make them unsafe to eat, most people who fish in the corridor do so for the same reasons that others fish in cleaner, less urban waters. Children seek adventure fishing along the river, older adults see it as a way to relax, and most find that fishing by the river provides a means of escape and contact with nature, even in the most urban of stretches.

- ***Fishing as nature-recreation:*** Nature-based recreation in city parks has been called an elitist activity by some park providers and interest groups, who argue that a greater proportion of limited funds should be spent on recreation activities and programs that serve more mainstream users. One park designer we interviewed, however, maintains that fishing is one nature-dependent recreation activity that does have a broad user constituency, but that fishing opportunities are quite limited in most Chicago parks. Fencing, channelized streams, poor fish habitat, and other barriers restrict fishing activity, but a stronger emphasis on natural streambank design and management could enhance shore fishing opportunities.

PROSPECTS AND IMPLICATIONS OF INCREASED FISHING ACTIVITY

As stated at the outset of this section, fishing is an activity whose potential in most places in the corridor is just beginning to be realized. As water quality continues to improve and recreational fisheries management becomes a serious endeavor, our interviewees felt fishing would no doubt expand both in the numbers of anglers and the places that are fished. Use at some locations, such as the Skokie Lagoons, is expected to increase dramatically in the near future as a result of rehabilitation efforts. Use at other places will increase more slowly as their waters recover without much active management. When we posed the question of increased fishing activity to our interviewees, several related issues were raised.

Water and Resource Quality:

- ***Potential for increased knowledge and awareness of resource quality:*** Water clarity is a primary indicator of water quality to many people, but clarity or other visible indicators do not attract people's attention as much as seeing people fishing on the water does. Although some who see people fishing question whether the water is clean enough for people to eat the fish they catch, the fact that fish even exist in the river is a major indicator of improving resource quality. As one person we spoke with observed, this level of awareness most often begins with those living near the water:

  The people who live near the inland waterways know that you can actually catch a fish in it, and when they see that it doesn't have great scabby ugly things on it—I mean, that you can catch a real live fish—they're quite impressed. With people that have some kind of contact with the waterway, the impression has improved and continues to improve…(David Bielenberg, Metropolitan Water Reclamation District).

- ***Limited view of benefits received from investments in stream management:*** The case for expanding governmental activities for recreational fishing was tempered by the realities of trying to implement such programs where limited benefits might be seen by those who pay for them. Residents in the headwater areas may not be receptive to watershed management activities such as shoreland and non-point source regulation, land acquisition, and tax increases that would improve recreational fisheries downstream from where they live. Some interviewees felt it was critical that watershed management go hand-in-hand with recreational fisheries management, but thought getting such activities approved at the local level would be difficult if direct benefits to residents could not be shown.

- ***Maintaining the sustainability of recreational fisheries:*** Traditional urban fisheries management has largely been relegated to stocking ponds with catchable-size fish that can survive long enough to be caught. These "put and take" fisheries are appropriate for many shallow ponds that freeze out (are depleted of oxygen) during the winter and are a good way to introduce children and other newcomers to the sport of fishing. Management of this type, however, is not cost effective or desirable for river fisheries. Increased fishing pressure in the corridor could wipe out much of the gain in fish quantity and type that has been realized through water quality improvement efforts. This might especially be true in the upper reaches of the corridor where carrying capacities for both fish and anglers are low.

Access and Facility Development:

- ***Potential for opening up new areas to fishing:*** As demand for fishing increases in the corridor, there is potential to develop new and existing resources for fishing. Interviewees mentioned the possibilities of allowing fishing on places currently closed to fishing such as Lake Katherine adjacent to the Cal-Sag Channel in Palos Heights, acquiring river edge properties or nearby ponds currently in private ownership such as the Lemont Quarries adjacent to the Sanitary and Ship Canal, and incorporating fishing into new park design such as the planned Chinatown Park along the South Branch. New forest preserve development for fishing will expand access opportunities for those with disabilities.
- ***Prospects for expanded recreational fisheries management programs:*** The Illinois Department of Natural Resources recently expanded its commitment to urban fisheries by creating a new district for Cook County. The fish biologist assigned to this district sees a greater emphasis being placed on monitoring and enhancement of the fisheries potential in the Chicago River corridor, in conjunction with other groups. Those who spoke about fish management in the Cook County forest preserves felt that good work was being done but that the program was seriously underfunded. In addition, forest preserve activities need to be expanded to manage streams in addition to the inland ponds and lakes that are the current focus of attention.

Safety and Use Conflicts:

- ***Consumption, health problems:*** As fishing increases, more people could look to the corridor as a source of food. In some areas of the corridor, fish consumption will continue to be a health risk even if the waters have been substantially improved. This continued risk is due to bottom sediments contaminated from past industrial activities, which can affect bottom feeding species such as carp and bullhead.
- ***Potential for increased use restrictions/prohibitions:*** Increased shore fishing could result in increased use restrictions or prohibitions on private land currently open to use. Abuse of privileges through littering or other inappropriate behavior as well as increased fear by owners of being held liable for accidents occurring on their property are reasons for past land closures, and could become more widespread as fishing activity expands in popularity and location of activity.
- ***Potential for increased use conflicts:*** Commercial and residential development and increasing urbanization and gentrification of the shoreline, especially near the downtown area, may result in conflicts and displacement of traditional shoreline recreation activities such as fishing.

RECOMMENDATIONS FOR IMPROVING FISHING OPPORTUNITIES

Most of the recommendations we received for improving recreational fishing opportunities in the corridor related to planning, management, and development. These recommendations include:

- ***Incorporate fishing and other shore-oriented activities into new park development:*** It is often easier to incorporate uncommon activities such as fishing into new park development than to try and change established policies and patterns of use at existing facilities. Two examples here are the designs for new Chicago Park District park development along the North Branch (Ronan Park) and South Branch (Chinatown Park), and the five new parks developed by the Water Reclamation District at their SEPA stations on the Cal-Sag Channel. The designs include unfenced, accessible shorelines that can accommodate fishing. As additional shoreline recreation sites are developed, similar access issues for fishing and other shore activities should be addressed.
- ***Develop new management and regulatory frameworks for evolving urban fisheries:*** Following the concern about sustainable fishery resources described earlier, fisheries managers need to look at innovative ways to manage and regulate urban fisheries. “Catch and release” is becoming an increasingly accepted way for managing rural and wildland fisheries, and novel programs that test the skills of the angler or otherwise limit the amount harvested are being used around the country. For example, the Lime Pits in Lakeland, Florida, are a series of spring-fed quarries much like those along the Sanitary and Ship Canal in Lemont. The conservation department in Florida acquired these pits and manages each one for a different recreational experience. Catch and release, trophy fishing, fly fishing only, and children-only fishing are some options that could be tried on the Lemont quarries, forest preserve lakes, or headwater stretches of the North Branch to maintain the sustainability of fish populations.
- ***Identify and examine new opportunities for fishing:*** This includes public acquisition of river edge and nearby ponds for fishing, such as the Lemont quarries; expansion of access to public properties near good fishing areas, such as the breakwall in the Inner Harbor at the mouth of the Chicago River; and securing of public access to private properties such as along the shores of Calumet Harbor.
- ***Expand public fisheries management programs:*** Urban fisheries programs of the forest preserve districts and the Department of Natural Resources could be expanded to move beyond pond stocking and more into stream habitat management, increased monitoring, and other improvement activities. Some of these activities could benefit from federal assistance programs, while others might rely on partnerships with private sector companies and non-profit groups.
- ***Expand work with volunteer groups to improve recreational fishing programs:*** Fisheries management must increasingly rely on volunteer groups to help do the work that needs to be accomplished. The Fishin’ Buddies and other fishing and conservation groups can provide valuable assistance in monitoring, habitat restoration, and other activities needed to improve recreational fisheries.

- ***Education and information programs needed for fishing:*** A better network is needed to inform anglers of waterway fishing opportunities, as well as to caution those who currently do fish about the potential health hazards of eating fish from certain waters. This information needs to be based on an expanded program of research and monitoring that accurately assesses the risks involved in eating various species from different locations along the waterway.

TRAILS

HISTORICAL BACKGROUND

Trails have long played an important role in the spectrum of recreation opportunities provided by parks and forest preserves in the Chicago River corridor. Ancient game trails and Indian portage routes paralleling watercourses evolved into today's recreational foot paths for river exploration by children and adult nature lovers. Some of the larger Chicago parks have formally designated systems of bicycle paths, carriage paths, and walking paths dating from the turn of the century. In the forest preserves, developed trail networks were built for controlling use and enhancing recreational experiences; these trails catered mainly to hikers and equestrians, and many of them were built by the Civilian Conservation Corps during the 1930s. These trails quickly became popular; in the post-war years more than 100 stables were developed on private land adjacent to Forest Preserve District of Cook County trails, with more than 4,000 horses for hire to the public. The first forest preserve bicycle trail in the Chicago area was developed along the Salt Creek in 1965 as an "experiment" by the Forest Preserve District of Cook County. The success of this small trail and the nearby Illinois Prairie Path, the nation's first rail-trail, encouraged the district the following year to plan its first major trail, a 20-mile alignment along the North Branch. The entire route was not completed until 1982, but by then demand for bike trail recreation had increased significantly, and Cook County and other forest preserve and park districts had embarked on additional trail planning and development. These activities signaled the birth of the modern greenway movement in Chicago, and metropolitan planners looked to green corridors for filling the demand for environmental and recreational opportunities in an era when land and funds for land acquisition were in short supply. Efforts by the non-profit group Openlands Project and the Northeastern Illinois Planning Commission, in cooperation with other agencies, resulted in a 1992 plan for greenways development in the region. The Chicago River corridor forms an important part of this plan, and a system of existing and proposed trails would interlink virtually every reach in the corridor.

CURRENT USE

Current trail use in the corridor follows the same three types of trails discussed in the historical context above, and includes:

Footpaths: These trails are usually single-track dirt paths that cross most undeveloped (i.e., forest, field) public and private open spaces. Footpaths parallel the river in many cases or link places of interest. Some of these trails can be quite wide and relatively permanent; others are barely visible and may fade out over time as people discontinue use. Footpaths are used by children, nature enthusiasts of many types, cross-country skiiers, anglers, and, increasingly, mountain bike riders. Because most of these trail networks are unplanned, there is little information on the density of this network or total length. Use is sparse in most cases, though footpaths leading from developed areas of parks or neighborhoods to popular areas such as river dams can be moderately trafficked.

Footpath systems were mentioned by those we interviewed as being prevalent in nearly every reach in the corridor. On the upper forks of the North Branch, informal footpaths wind though private and public open land, such as the network that links the Lake County Forest Preserves' Lake Bluff site with private conservancy lands to the north and south. Many forest preserve ecological restoration sites along the upper corridor, such as Lake County's Middle Fork Savanna and Berkeley Prairie (Reach 2) and Cook County's North Branch Restoration Project sites (Reaches 2, 3, and 5) also have their own footpath systems. Some of the most "developed" foot trails parallel the main stem of the North Branch where it flows through the forest preserve lands; these wider trails receive heavier use and are even included as part of the official Chicago River Trail Walking Tour in the Friends of the Chicago River's map series. On the North Shore Channel and further down on the North Branch (e.g., Ravenswood neighborhood of Chicago), foot trails parallel the steep wooded banks along Water Reclamation District property, and in some neighborhood areas residents have developed informal seating areas. The vacant industrial lands along the South Branch are also laced with footpaths, and wooded "Amazon" areas are used by children for nature exploration. Water Reclamation District frontage along the Sanitary and Ship Canal and Cal-Sag Channel and adjacent forest preserve land also includes footpath systems. Also along the Cal-Sag, packed spoil stone left from construction of the canal provides challenging micro-topography for mountain bike trails along the banks.

Developed trails: Developed trails are planned trails that follow a designated route through a public open space area. They are often looped networks that provide users with various options in length, difficulty, and location. Most developed trails are hardened with gravel or other material that prevents them from being eroded from use or washed out by rain, but they are not usually of sufficient standards to be desirable for use by narrow-tired bicycles. Developed trails occur in most of the larger forest preserve sites and are used for horse riding, hiking, cross-country skiing, mountain biking, and other uses. Although there were no statistics available for trail mileage along the Chicago River corridor, the Forest Preserve District of Cook County reports having more than 175 miles of developed trails throughout all its sites.

With increased suburban development and liability concerns, commercial stables near the corridor have decreased markedly in number from earlier times, although private horse owners continue to use the trails. Mountain bike use of developed trails has increased rapidly over the past few years, and the Palos Preserves is one of the most popular areas in the metropolitan area for such activity. Mountain bike rallies at the Palos Preserves have attracted several hundred participants. Cross-country skiing is also popular at Palos and other preserves in the corridor that have developed trails.

Multiple-use bicycle-grade trails[1]: These trails differ from developed trails in that they are most often engineered and maintained to facilitate use by narrow-tire bicycles. They are paved with asphalt or crushed limestone screenings; are wide enough to accommodate high use; and tend to be linear instead of looped, with lengths ranging from individual trails of less than one mile to interlinked multi-trail networks that extend for tens of miles. These trails cater to a diverse clientele that include not only bicyclists, but also walkers and runners, in-line skaters, parents with babies in strollers, and people in wheelchairs. Seasonal use may include cross-country skiing and/or snowmobiling, but some sections are plowed and maintained for year-round pedestrian and bicycle use. Most trails of this kind are used mainly by local residents (within 5 miles), but longer trail networks can attract visitors from across a region and even out of state—one example of the latter is the I&M Canal State Trail just south of the ChicagoRivers study area. Use on popular metropolitan trails can be very high on nice summer weekends; monitoring of the North Branch Bicycle Trail at the Skokie Lagoons showed more than 500 bicyclists per hour (3,000 per day) during peak use times, with annual use estimated at more than a quarter million visits.

There are currently more than 200 miles of multiple-use bicycle-grade trails within the metropolitan area. About 50 miles of these trails are along or adjacent to the Chicago River corridor; these include the 20-mile North Branch Bicycle Trail (sections of Reaches 2, 3, and 5) and the 9-mile I&M Canal Bicycle Trail (Reach 8), both developed by the Forest Preserve District of Cook County; the 7-mile (discontiguous) North Shore Channel Bikeway in Evanston, Skokie, and Chicago; and a 3-mile gravel section of the Centennial Trail developed by the Forest Preserve District of Will County (Reach 9). The Chicago Park District maintains bicycle-grade paths through many of its river parks, and some suburban park districts have developed spur trails linking their properties with other trail networks. An example of such a spur trail is the one developed by the Village of Palos Heights along a Commonwealth Edison powerline right-of-way, linking the Lake Katherine Nature Center with the Forest Preserve District of Cook County's Tinley Creek Bicycle Trail. Finally, a few self-contained bicycle-grade trails lie adjacent to the corridor, such as the Forest Preserve District of DuPage County's 8.5-mile Waterfall Glen Trail.

[1]Some of the information for this section on current use is based on previous research reported in Gobster (1990) and Gobster (1995).

In addition to these three major trail types, other paths, routes, and/or trail designations are found in the corridor. These include dedicated cross-country ski trails such as the Maple Lake Area trails in the Palos Preserves (near Reaches 8 and 10); urban riverwalks, notably the Chicago Riverwalk in Chicago's Loop (Reaches 5, 6, 7, and part of 8); historic trails such as the Gaylord Donnelly Canal Trail (formerly, the Lockport Historic Trail) (Reach 9); guided and self-guided walking tours, notably the Friends of the Chicago River's Chicago River Trail Walking Tour map series (covering Reaches 5, 6, 7, and part of 8); and unmarked and self-guided nature trails, such as the nature trail network at the Lake Katherine Nature Center (Reach 10). Water trails, another type of trail, were discussed in the boating section. Whether existing as separate trails or as a designation of one of the three main trail types already discussed, these systems extend the range of recreational trail opportunities in the corridor.

OPPORTUNITIES AND CONSTRAINTS TO USE

Because development of a trail network along the Chicago River corridor is still somewhat in its early stages, there was not a lot of discussion about issues relating to current trail use. The topics that were mentioned included the following:

Access:

- ***Public access to the waterfront:*** Although many footpaths, developed trails, bicycle-grade trails, and other trail types are on public land in the corridor, there are many places where private land ownership or leases restrict access. In other cases, primitive footpaths are the only opportunities existing on public lands, limiting the appeal and accessibility of the waterfront.
- ***Fragmented network of trails:*** Where trails do exist along or near the waterfront, they may not be continuous. This is especially the case with bicycle-grade trails in the upper and lower reaches of the corridor (i.e., above and below the North Branch Bicycle Trail), and with the Chicago Riverwalk in Chicago's Loop. This current fragmentation decreases the usability of existing trail segments and their attractiveness to non-local users.

Safety and Use Conflicts:

- ***Current high levels of use:*** The only area of the corridor where high trail use was mentioned as a potential problem was along the North Branch Bicycle Trail, where one forest preserve district official felt that crowding might detract from the experiences that visitors seek, possibly causing users to go elsewhere:

  I think there's a big percentage of forest preserve users that go out to get away from the crowd. Particularly along the North Branch Trail, on a nice summer or spring weekend day, I think the capacity is about maxxed out. There are people who won't go to those sites in high-use times just because of that; instead they'll go on a weekday morning when people are already at work. Some of the seniors or other groups that have that time available would be out using the system then (David Kircher-Forest Preserve District of Cook County).

- ***Neighborhood relations:*** At some locations along the North Branch Bicycle Trail, the route along forest preserve land comes close to private residences. Although many of these residents have come to appreciate and use the trail, some neighbors have complained about trail users and have been concerned about safety and crime.
- ***Vegetation management for safety:*** Trails require routine vegetation management to preserve sight lines for safety. Heavy use and occasional high-speed bicyclists using the North Branch Trail make view corridor maintenance especially important.

Aesthetics and Nature:

- ***Trails as a means of accessing nature experiences:*** The trail systems along the Chicago River corridor provide the primary means of access for corridor users to experience nature. This is especially the case for average forest preserve users, for whom a paved bicycle trail is the only way they would consider venturing into the wilder portions of the corridor. For example, many pedestrians, roller skaters, and bicyclists are attracted to the North Branch Bicycle Trail because of the views of the river, the trees, wildlife, and other natural features.
- ***Impact of trail use on the natural environment:*** On the downside, trail users can sometimes "love it to death" through overuse or misuse. Horse riders have eroded developed trails in forest preserve sites as have hikers, but recent concerns about ecological impacts of trail use have focused on mountain-bike enthusiasts who use single-track trails. In a few cases, we heard concerns from those we interviewed that mountain bikers have trampled flora at forest preserve sites along the North Branch and Palos Preserves where ecological restoration was in progress. A concern was also voiced that if mountain bikes are used at the wrong time and place they could disturb nesting birds.

PROSPECTS AND IMPLICATIONS OF INCREASED TRAIL RECREATION

Access and Facility Development:

- ***Prospects for trail development:*** Prospects for new trail development are excellent; many trails are beyond the conceptual planning stages, and some have been funded and are in the initial stages of design or construction. If all plans are realized, much of the Chicago River corridor will be connected by a network of trails, with linkages to many other trails throughout the metropolitan region and beyond. Currently proposed trails would easily double the length of the existing bicycle-grade system (now at about 50 miles) and add important new footpath/nature trails and riverwalk segments to the corridor. Proposed trails are briefly summarized below for each reach; see the reach-by-reach analysis in Part III for more detailed information.

  1) **Reach 1 – West Fork:** Development of a new trail system through the privately owned Techny Basin, with linkages to communities along the West Fork and the North Branch Bicycle Trail.

  2) **Reach 2 – Middle Fork:** Proposed development of a footpath/nature trail on Lake County Forest Preserves' Middle Fork Savanna site, with linkages to other forest preserve properties on the Middle Fork and the Des Plaines River.

  3) **Reach 3 – Skokie River (East Fork):** Proposed footpath/nature trail linking Lake County Forest Preserves' Lake Bluff site with private conservancy land; proposed linking of the North Branch Trail to the Green Bay Trail.

  4) **Reach 4 – North Shore Channel:** Proposed completion of a continuous bike trail system along the canal, with links to the North Branch Riverwalk and the Evanston Bikeway/Green Bay Trail.

  5) **Reach 5 – North Branch:** Proposed southern extension of the North Branch Bicycle Trail, with connection to the proposed North Branch Riverwalk (LaBagh Woods to Lawrence Avenue); tie-in of properties along the southernmost section of the North Branch to the Chicago Riverwalk downtown (see Reach 6).

  6) **Reach 6 – Chicago River (Main Branch):** Completion of a continuous, dock-level Chicago Riverwalk from Lake Michigan to Wolf Point, with connections to riverwalk sections along the North and South Branches and linkage with the Lakefront Path.

  7) **Reach 7 – South Branch:** Completion of the Chicago Riverwalk from Wolf Point to Chinatown, with possible extensions along the South Branch to connect with the Centennial Trail, down Bubbly Creek to a proposed wetland park, and linkage with the proposed St. Charles Airline rail-trail.

  8) **Reaches 8 & 9 – Chicago Sanitary and Ship Canal:** Completion of the 20-mile bicycle-grade Centennial Trail with links to the I&M Canal Bicycle Trail, the Gaylord Donnelly Canal Trail (formerly, the Lockport Historic Trail), and other existing and proposed trail systems on the South Branch and Cal-Sag Channel.

  9) **Reach 10 – Calumet River, Little Calumet River, and Calumet-Sag Channel:** Proposed bicycle trail along the Calumet-Sag Channel would tie in with the footpath system at the Lake Katherine Nature Center, the Tinley Creek Bicycle Trail, the proposed Conrail rail-trail, and other existing and proposed trails to the east and west.

- ***Improving public access to the shore:*** As water quality in the river improves, land in the corridor is increasingly being looked on as a resource too precious to be given over exclusively to private use. To increase trail opportunities in the corridor, development will need to extend beyond public open space to incorporate lands that share other purposes, including commercial and industrial development. Guidelines developed by the Metropolitan Water Reclamation District for its leased properties along the North Shore Channel and Calumet-Sag Channel stress public access, as do guidelines and other initiatives governing

development of private riverfront land in the city and suburbs. At a minimum, these guidelines seek a narrow strip along the waterfront that can provide public access for a trail or river walkway.

Safety and Use Conflicts:

- ***Potential impacts on commercial and industrial development:*** The commercial and industrial interests we talked with had mixed feelings about shoreline trail development. In the case of commercial space, some felt that public access via a trail could bring in more customers to shops and restaurants, increase the interest/activity, and in some instances increase the safety of spaces through the increased presence of others. In other cases, public access to commercial and industrial spaces was seen as potentially creating safety problems such as crime, injury, theft, and vandalism. This view was particularly true of the industrial interests we spoke with, most of whom saw little compatibility between the current use of their property and a potential trail right-of-way.
- ***Potential impacts on nearby residents:*** Some of those familiar with residential sections of the corridor, where proposals would require trail development close to homes, were concerned about a loss of privacy and a perception that crime would increase in the area.
- ***Potential impacts on native plants and wildlife:*** Although most we spoke with felt that increased trail use and development in the corridor was a good idea, a few voiced concerns that it could harm the fragile plants and wildlife that now exist in parts of the corridor, particularly in forest preserves, nature preserves, and wooded slopes along the North Shore Channel. As mentioned previously, some people were concerned about the increase in specific user groups, such as mountain bikers. For others, however, the mere presence of a new trail into an undeveloped wildland was cause for concern.
- ***Potential impacts on nature-recreational experience:*** Trails, especially paved bicycle trails, can attract and concentrate large numbers of users, such as those who currently use the North Branch Bicycle Trail during peak spring and summer weekends. Because many use forest and nature preserve areas as a means of escape from the bustle of the city, a few we spoke with voiced concern that bicycle trail development could harm the experiential qualities now provided by the natural environment of the corridor.
- ***Impact on commercial river carriers:*** Barge operators and other commercial carriers we spoke with were generally neutral on the prospects of increased use of the shoreline by trail users. Some were concerned, however, that development of a continuous dock-level riverwalk in the downtown area might require structures that would extend outward from the shore or float on the water. In our interview with the carriers, they stated that any such encroachments on the river could be navigation hazards and thus would be opposed.

RECOMMENDATIONS FOR IMPROVING TRAIL OPPORTUNITIES

- ***Aim for a continuous, linked network of trails:*** A major goal of many planners and recreation providers we spoke with was to build a continuous, long-distance trail along the corridor that would link with other existing and proposed trails in a metropolitan network. In our interviews, some said that this emphasis on continuity was a goal for individual trail systems now being developed, such as the Chicago Riverwalk:

  I don't know that [having a trail on] both sides is as important as that it be continuous. I think if it's not continuous, if people have to resurface at street-level and cross traffic and so forth, you'll lose a lot of the charm of the experience (Hal Jensen–Chicago Riverwalk Corp.).

- ***Aim for diversity in the trail system:*** Diversity was another development goal expressed by trail proponents. Diversity of trail development was referred to in the context of design qualities, types of trails offered, and types of environments traversed. Proponents were concerned about incorporating diversity both within and across individual trails. Again, with respect to development of the Chicago Riverwalk:

  I think one of the very interesting aspects is that you will see a series of environments; you'll go through the back of the housings of some of the lift bridges, where you'll see the motors and the gears and the counterweight and all this, to see how these bridges actually operate. And then you'll have the more pastoral areas that are just green and benches and so forth…it's important that it not just be one, extended pastoral kind of thing. I think that because it's part of the heart of a major city, there should be some aspects of it that really speak to that (Hal Jensen–Chicago Riverwalk Corp.).

  On the macroscale, the system of footpaths, developed trails, bicycle trails, and other trails should provide a spectrum of trail opportunities for diverse trail users.

- ***Aim for an appropriate level of trail development:*** Several trail proponents we spoke with mentioned the need to take into account the context of development when designing and locating trails for diversity. Just as the Chicago Riverwalk should celebrate the urban context, the design of trails in more natural areas should be sensitive to protecting and providing experiences geared to the natural environment. In unique natural settings like the Middle Fork Savanna, this might mean a low-key footpath instead of an asphalt paved bike trail:

  Middle Fork won't even have the kind of level of development that Greenbelt has. Greenbelt has picnic shelters, it has a playground, it has a typical, "forest preserve" type of recreational activities; Middle Fork won't even have that. It really will be a passive trail system and recreation site. For one thing, it's more remote, and also it's higher quality, and we can concentrate our recreational efforts in other areas (Michael Fenelon, Lake County Forest Preserves).

- ***Phase in trail development:*** One concern voiced by a private commercial developer was that trail development proposals not "get ahead" of commercial development proposals for currently vacant land. In this particular case, a developer owns several large properties on the South Branch near downtown and is waiting for the right market conditions to develop the properties, but is wary that if not done right, trail development could become a liability:

  ...We prefer that people do not access our property at the present time. There's no reason to be down there, and we don't want people down there. And anything that causes people to be down there—we're not necessarily against it if there's a reason for people to be there—but we would be reluctant to say: "Sure. Here's your 15 feet. Come and go as you want." Because the next thing you know there would be campfires and…[But] if someone said: "Gee, here's what we're willing to do. We're going to put this path on your property. We're going to pay you some money. We're going to do this. This is how it's going to look." There may be a way that we would be convinced to do that (William Cromwell–CSX Real Property, Inc.).

- ***Develop a signage system:*** One final recommendation made with respect to trail development was to design and implement a signage system to mark the network of trails throughout the Chicago River corridor. This would not only serve practical purposes for directing trail users, but also serve as an awareness tool to the general public for whom the river has a poor to non-existent image:

  [We need to do] things like demarcate trails and develop a signage system so that people know where the river trail is. The river branches and turns through many neighborhoods in the city, but in most places people don't even know where to look. A good signage system would be the first step in better educating the public about the river itself…so that eventually, people's knowledge of the river will be as good as that of the lakefront. (Miriam Gusevich-Chicago Park District).

RESOURCE BASED RECREATION AND EDUCATION

Appreciation of the natural and cultural resources of the corridor often takes place in the context of activities already discussed, such as canoeing down a river or hiking along a trail. For some enthusiasts, however, natural and cultural resources become the overriding focus of their leisure experience, governing where and how areas are used. For this reason, we have singled out a group of activities that hold particular importance in the Chicago River corridor. These activities include nature-based recreation such as bird watching, and culturally-based activities such as viewing historic buildings. Although such activities are usually not thought of as related, the unique fusion between natural and cultural resources in the corridor makes it logical to group both under a single heading. Indeed, many individuals we spoke with, whether ecologists or architects, found it hard to divorce the two. Such a nexus is also why much of the waterway studied for ChicagoRivers has been given status as the first nationally designated Heritage Corridor by the National Park Service.

HISTORICAL BACKGROUND

The provision of nature-based recreation and education opportunities in the Chicago area largely coincides with the establishment of the forest preserve system at the turn of the century. As the system of parks and boulevards was being created within Chicago and its suburbs, visionaries such as Dwight Perkins, Jens Jensen, and Henry Cowles, and groups such as the Friends of Our Native Landscape, saw the need to develop a parallel system of regional parks with a focus on the natural environment. Distinguished from city parks by the newly coined term "forest preserve," the purpose of the regional park system would be to protect important vestiges of the region's natural landscape from development, and to supply nature-oriented recreation opportunities to residents of the region:

> *There the people from Chicago's crowded districts might have summer outings and freely camp, boat, fish, bathe, swim, pick and eat nuts and wild fruits, gather the flowers of the field and forest, see and hear the birds and other forms of wild animal life—close to the heart of Nature (Henry G. Foreman, 1904).*

As the forest preserve concept evolved and as the first areas were acquired and used, ideas of appropriate recreation activities and locations were refined. In contrast to the idealistic notion of people romping freely through a Garden of Eden as quoted above, forest preserve charters laid down rigid policies to protect the natural environment, such as outlawing any harvesting or destruction of flowers, trees, and wildlife. Active uses were confined to the margins of the preserves, and except for trails, interior areas were left undeveloped.

Nature-oriented outings and activities by the Friends of Our Native Landscape called early attention to sites that have since become forest and nature preserves. This attention spawned interest in plants and wildlife among a wider spectrum of urbanites, who began using the wild areas of the region to view spring flora and fall colors, watch birds, and participate in other passive nature-oriented activities. In 1945, the Forest Preserve District of Cook County began developing a formal nature education program, appealing to individuals, families, groups, and schools with on-site centers, nature trails, and outreach activities. With the growth of the environmental movement during the 1960s and 70s, nature recreation increased in popularity, and gasoline prices and shortages made close-to-home nature recreation more appealing. Newly formed local groups such as the Openlands Project and the Friends of the Chicago River, and chapters of national groups such as the Audubon Society, focused attention on urban natural resources, both as a source for nature-based recreation and as something that needed to be protected and enhanced. Passive forms of appreciation continue to dominate nature recreation and education activities, but increasing interest in improving degraded natural landscapes has sparked a growth in participation in volunteer stewardship activities such as ecological land restoration and river cleanup and monitoring.

People have always been interested in the past, but opportunities to enjoy and learn about historical and cultural aspects of people, places, and events have long been confined to indoor museums. As the Chicago metropolis grew, many of the structures and sites from earlier times gave way to "progress" in much the same way as natural areas were sacrificed. It was not until the late 1950s and 60s that the historic and cultural preservation movement began in earnest in this region. This movement helped build a popular appreciation of our past, and sites, buildings, structures, and districts were protected as tangible evidence of our rich and diverse culture. Interpretation became an important part of historic preservation, and cultural interpretive trails, guided tours, and "living history" programs gave added meaning to direct experience. In the late 1970s and early 1980s, professionals began to think more comprehensively about protecting the historic and cultural "sense of place," and cultural landscape preservation began to take hold in some rural areas of the eastern U.S. Designation of the I&M Canal in 1984 as a National Heritage Corridor further expanded the ideas of cultural landscape preservation to embrace industrial as well as rural and natural heritage, and it helped to improve the economic viability of the region as well as enhance leisure and recreational opportunities. Like nature-based recreation, stewardship activities related to cultural resources preservation have increased in recent years. Groups such as the Canal Corridor Association and the Friends of the I&M Canal National Heritage Corridor work on projects ranging from docent/interpretive programs and restoration and rehabilitation of historic buildings and sites to volunteer planning and coordination under the National Trust for Historic Preservation's Main Street Partnership program.

CURRENT USE

Current use of the Chicago River corridor encompasses all the natural and cultural resource-based recreation and education opportunities mentioned in the historical overview. Major activities and their are described in the following sections:

Natural and cultural resource appreciation: Natural and cultural resource appreciation activities include birding, plant identification, the exploration and viewing of archaeological and historic sites, and related activities such as photography. Many nature-based activities require natural landscapes high in biological diversity or integrity, or areas that are important for certain plant and animal species, such as spring and fall bird migration stopover points. The Chicago River corridor contains a wealth of areas for nature appreciation. Areas that have long been popular for birding include the Skokie Lagoons and other forest preserve sites along the North Branch; the sloughs and marshes of the Palos Preserves, the Lake Calumet area, and the Chicago and Calumet River harbors. As a result of water quality improvements, the North Shore Channel was also recently noted as a site for waterfowl and shorebird observation, as were the main waterways of the Sanitary and Ship Canal and Cal-Sag Channels. Many areas along the corridor are noted for rare plant species or diverse plant communities, and more than two dozen sites have been designated as Natural Area Inventory sites or Illinois Nature Preserves. These and other corridor sites identified in more recent inventories and assessments by the Chicago Department of Environment, the Chicago Park District, and the ChicagoRivers project are noted in the by-reach description in Part III of this chapter. Areas especially noted for their plant species and communities include the Middle Fork Savanna along the Middle Fork in Lake County; prairie, savanna, and woodland ecological restoration sites along the North Branch; a number of sites within the Palos and Lake Calumet areas, and the Romeoville and Lockport Prairies along the lower Sanitary and Ship Canal.

Many of the areas noted for their significance as natural areas are also important culturally. Numerous Indian archaeological sites were documented along the corridor in early archaeological surveys of the region, and some features, such as fish entrapment structures, are just now being identified in the North Branch forest preserves by Forest Preserve District of Cook County archaeologist Ed Lace. Lands in the Calumet and Sag Valleys were particularly important for Indian settlement and hunting. The 1673 "discovery" of the Chicago Portage (now the Sanitary and Ship Canal) by Marquette and Jolliet paved the way for European settlement, and settlement sites of Du Sable and Fort Dearborn along the Main Branch symbolize the birth of Chicago. Though many of these sites as well as more recent ones have long since been obliterated, the corridor remains filled with exemplary vestiges of the past century. From the banks of the Main Branch one can view a skyline of varied high-rise building styles that many say is unparalleled anywhere in the world, and the Main and South Branches offer an intriguing diversity of movable bridge types with styles ranging from functional to ornate. The waterways themselves are the most significant, if not conspicuous, cultural features of the Chicago River corridor. Waterway construction and improvement efforts included the 97-mile I&M Canal, 26 miles of which are in the ChicagoRivers study area and 20 miles of which still exist; the reversal of the Chicago and Calumet Rivers and construction major harbor areas; the construction of 54 miles of the Sanitary and Ship Canal, Cal-Sag Channel, and North Shore Channel; and the improvement of an additional 27 miles of waterway to transport goods and wastewater. The cultural history of this waterway remains very much alive and is appreciated through the experience of traditional (e.g., watching barges) as well as new recreational (e.g. boating) uses. And finally, the canal towns such as Lemont and Lockport and industrial areas and communities such as Pilsen (lumber docks), Bridgeport (Union Stockyards), and Pullman (Pullman railroad cars) that grew up along the corridor still retain much of their historic feel even though the activity that created them has died.

Education: As with natural and cultural resource appreciation, education can take place in many different ways and includes experiential learning as well as formal instruction. Defined for this section, education includes facilities and/or programs designed specifically for education on the natural, historical, or cultural aspects of the environment. In Lake

County, interpretive trails under development on the forest preserve district's Greenbelt site tell the story of the use, abuse, and restoration of the Skokie River. Further down along the Skokie River, the Chicago Botanic Garden offers nature education programs, including some that focus on the Chicago River. The Botanic Garden is also developing a river and landscape restoration project along the Skokie River on its grounds that will be added to the horticultural garden/landscape exhibits offered to visitors. The City of Evanston operates the Evanston Ecology Center and Ladd Arboretum on the banks of the North Shore Channel, offering programs and activities for school groups and residents. The Friends of the Chicago River, the Chicago Architectural Foundation, and other groups offer boat and walking tours of the Chicago River that tell about the river's natural and cultural history. Many of the city's institutions such as the Field Museum, Shedd Aquarium, and Academy of Sciences have offered additional educational programs about the river. In the Palos Preserves, the Forest Preserve District of Cook County's Camp Sawagwau and Little Red Schoolhouse Nature Center offer programs, instruction, indoor and outdoor exhibits, and a self-guided nature trail. Several museums, historic sites, and visitor centers along the I&M Canal National Heritage Corridor help interpret the corridor's important natural and cultural history. On the Cal-Sag Channel, public parks at the Metropolitan Water Reclamation District's SEPA Stations enable visitors to learn about water quality improvement efforts and techniques. Also on the Cal-Sag, the Village of Palos Height operates the Lake Katherine Nature Center, offering trails, programs, festivals, and other nature education opportunities. Finally, some schools in the corridor, including Glenbrook North High School in the North Shore suburbs and Northeastern Illinois University, Amundson High School, and Waters Elementary School in Chicago, have studied the Chicago River as part of their curriculum.

Volunteer Stewardship: Hands-on work in protecting and enhancing cultural and natural resources was once considered a responsibility reserved for professional employees. Increasingly, however, citizens are seeking opportunities to volunteer in stewardship activities, and public and private groups interested in seeing sites and areas restored are welcoming the value volunteers can bring to projects that often operate with very limited budgets. The range of volunteer interests is wide, and while some activities like the ecological restoration of native plant communities are becoming highly visible, many other stewardship programs are also contributing to the improvement of the resources of the corridor:

> *We're working with many different groups. There's a number of groups doing restoration work besides the Volunteer Stewardship Network. We are looking at the mountain bike problem, working with the Mountain Bike Manufacturing Association on an education program for bike users…There are a number of other groups that we work with. I can't even estimate the number of fishing groups that the fisheries biologists work with. Other groups have done projects for us; it's an astronomical number of users. Everybody that's got a special interest in some way or other contacts the forest preserve to try and get what they need from us.…For birds, there's the groups that are the more typical nongame type groups, that get into nest structures, bluebird trails, and boxes. And then there's the hunting groups, and many of them do projects for waterfowl, even though there's no hunting on forest preserve land. There's one like Ducks Unlimited here in the southwest suburbs; they donated 100 wood duck houses that cost $30 apiece or something like that. The houses are scattered all through the Palos region for wood ducks to use, and even though they don't hunt in here, the group still provides that benefit to wildlife. A lot of things like that go on (Ralph Thornton, Forest Preserve District of Cook County).*

As evidenced by this activity in the Cook County forest preserves alone, stewardship activities throughout the corridor are too numerous to mention. Prominent stewardship programs in the corridor profiled in Part II of this chapter include the North Branch Restoration Project, the Cook County Clean Streams Committee, the RiverWatch program of the Friends of the Chicago River, the volunteer programs at the Lake Katherine Nature Center run by the Village of Palos Heights, and the Main Street Partnership of the Canal Corridor Association.

Although many of the activities of volunteer stewardship programs sound like real work and indeed accomplish many of the objectives of the agencies and groups who run the programs, volunteers are attracted to such activities to fulfill various social, recreational, aesthetic, and even spiritual needs:

> *There is a "**recreational**," and I put that in quotes, side of restoration that is very important to people. Just getting outside. But also, maybe more importantly, is **the desire to help**, to actually do something useful and hands-on for the ecology …Really, this whole thing is kind of a healing art and I think for many people it **restores a balance in their lives**, decreasing their alienation from nature by getting right in there and getting their hands dirty…There's a real **aesthetic quality** that is very beckoning about restoration, too—different plants have different lifestyles, have different life cycles and have different feelings or energies to them, like a thistle is prickly and has a certain look to it, a little forbidding-looking. And then other plants are soft and more gentle and more approachable…I also think people are very interested in **learning more about the history** and settlement of this area…Also, as you start to get to know people of like mind and like feeling, there's a definite **social connection** through it all, too. And there's a very nice feeling of what we're doing as being a little bit weird, a little bit different, anyway…[Finally, involvement in restoration] can get to a **deeper level of meaning**. It starts to feel like we're really inhabiting this place in a different way. Like most people sort of skim the surface of the place. We get out there and get our blood, sweat and tears involved with the place. And get to know the lay of the land in a very intimate way. I've probably spent as much time in Miami Woods as I've spent anywhere except my house or where I work since moving here to Chicago. So there's a certain connection that's made there with the land (Robert Lonsdorf, North Branch Restoration Project—emphases added).*

Consumptive nature activities: Besides fishing (discussed previously), other resource-oriented recreation opportunities that are consumptive in nature include hunting, trapping,

and harvesting wild plants. These activities are forbidden in all forest preserves, limiting opportunities to private and other designated public land.

Most municipalities prohibit the discharge of firearms within their boundaries, restricting gun hunting to the few unincorporated areas near the corridor, most of which are in Will County. An exception to the firearms prohibition is on the far south side of Chicago, where waterfowl hunting takes place on some private lands around Lake Calumet. Also in Chicago, a unique public hunting opportunity exists at the Illinois Department of Natural Resources' William Powers Conservation Area, where 25 duck and goose hunting blinds are available through an annual random drawing. Besides William Powers, few other public lands in the corridor allow hunting. Archery and trapping are allowed under state regulations, and are practiced on some private lands in the corridor with a success that is surprising within a metropolitan area. For example, the mosaic of woodland and agricultural areas of Cook and Will Counties south of the Cal-Sag Channel produces a surprising number of "trophy" bucks every year.

The harvesting of wild edibles is a popular activity that takes place in many wildland areas in the corridor. Wild edibles include nuts and berries familiar to the general populace, as well as mushrooms, leaves, and fern heads known only to aficionados and people of certain ethnic or cultural groups. Much of this harvesting happens on forest preserve lands in the corridor, and is thus done illegally. Finally, some places in the corridor are known for their drinking water, which is taken from hand pumps at certain forest preserve sites or collected from surface springs. Some believe these waters have health benefits, while others enjoy the water simply for its taste.

OPPORTUNITIES AND CONSTRAINTS TO USE

Most of the people we spoke with saw few constraints to providing cultural and natural resource-based opportunities for recreation and education in the corridor. However, three general sets of "threats" to the natural and cultural environment could directly or indirectly affect corridor opportunities. The greatest perceived threats to use came from pollution and development of the corridor that could degrade the present qualities of the cultural and natural environment. A second set of threats came from other recreational activities, such as mountain biking and canoeing, where overuse or inappropriate use could harm restoration projects or rare plant communities. The final set of threats came from those engaged in nature-oriented activities, where high levels of use or certain consumptive activities might degrade the environment.

On the positive side, many interviewees spoke very highly of the "fit" of natural and cultural recreation and education opportunities with other recreation and resource management objectives. In many cases, appreciative and educational opportunities can enhance visitors' recreational experiences of park and forest preserve sites—for example, those who come to sites for picnicking or bicycling. Moreover, stewardship and volunteer opportunities can help accomplish important resource management objectives and stretch the limited budgets available for these activities. Finally, several interviewees told us that the corridor provided unique opportunities to merge natural and cultural resource awareness and appreciation. This special blending can help guide the future development of the corridor for recreational and non-recreational goals.

PROSPECTS AND IMPLICATIONS FOR INCREASED NATURAL AND CULTURAL RESOURCE-BASED RECREATION AND EDUCATION

Some specific proposals for increasing opportunities in the corridor for activities discussed in this section include:

- The Chicago Park District is beginning to restore natural landscapes in several of its parks, and is working with local community groups to accomplish this work. One of these sites, Gompers Park along the North Branch, has received funding for wetland restoration through the Urban Resources Partnership as a ChicagoRivers demonstration project.
- The Chicago Park District has also begun development of a park on the Chicago Origins site at the South Turning Basin. The park would provide recreation and river access, interpret the natural and cultural history of the Chicago region, and provide an urban gateway to the I&M Canal National Heritage Corridor.
- The Forest Preserve District of Cook County's Land Acquisition Plan takes a step forward in addressing nature education opportunities beyond its existing nature centers. Particular attention is given to opportunities within urban Chicago. The plan states:

  > *In Chicago's core, the Forest Preserve District will focus on expanding its network of nature education and outreach programs. These existing sites could include schools, parks, community centers, and other public spaces that span Chicago. This initiative will also bring people from the city to the nearby preserves to enjoy, learn and work in a natural setting. Ultimately, the Forest Preserve District could explore partnerships with the City and the Chicago Park District to add new nature education centers and staffing to underserved neighborhoods of Chicago, as well as increasing the accessibility of the preserves to Chicagoans.*

  In early 1995, the district announced it would begin implementing this plan by hiring additional naturalists and purchasing a mobile environmental van that would reach into urban communities.
- The Forest Preserve District of Cook County has also proposed development of a Chicago Portage Interpretive Facility and Visitors Center at its Chicago Portage Woods Forest Preserve on the Sanitary and Ship Canal, to interpret the history of the Chicago Portage and I&M Canal.
- The Chicago River Aquatic Center has proposed a central technical information and skills center for boating in the Chicago River corridor.

- The Chicago Academy of Sciences received partial funding through the Urban Resources Partnership to develop and implement an environmental education program that focuses in part on the Chicago River ecosystem.
- In early 1995, the Friends of the Chicago River and the Metropolitan Water Reclamation District of Greater Chicago brought together a group of individuals and groups interested in river education to discuss the potential for developing a river education center.

RECOMMENDATIONS FOR IMPROVING RESOURCE-BASED RECREATION AND EDUCATION OPPORTUNITIES

Nature and Cultural Resource Appreciation: Many of the park and forest preserve managers we spoke felt there was a strong need to enhance existing river properties for natural and wildlife benefits, and in doing so, strengthen the link between the river and recreational use. This might include improving opportunities for direct interaction with the river through activities such as fishing, but would also include designing and managing the river edge for viewing and other passive forms of appreciation. As mentioned previously, this might include removing fencing and other visual and physical barriers to the river proper. These changes in design and management may be easier to institute in developing new park and forest preserve sites, where competition for limited open space with other activities has not yet begun.

Education: Open space managers and other recreation providers generally called for an expansion of existing programs and facilities oriented toward natural and cultural resources education. As described above, many plans and ideas are in the works for increasing education opportunities in the corridor, and as these are realized, many we talked to felt that the river could become a major focus for environmental and cultural resources education in the Chicago area.

Volunteer stewardship: Many we spoke with also recommended expanding volunteer stewardship activities in the corridor and focusing these efforts on the river proper through river cleanup activities, monitoring, improvement of fish and wildlife habitat, and ecological restoration of native shoreland plant communities.

Consumptive activities: No specific recommendations were given for increasing any consumptive recreation activities besides fishing. Those we talked with about hunting and trapping in the corridor felt these activities were declining because of increased development and were concerned about maintaining access to private lands. Forest preserve acquisition is not a solution in this particular case, however, for such lands are off-limits to most consumptive forms of recreation, including the harvesting of wild edibles. Forest preserve managers we talked with on this subject made no official recommendations, but acknowledged that most harvesting of wild edibles is low-key, in most cases does little harm to the environment, and can be an important part of the ethnic and cultural heritage of certain groups who otherwise may not visit the forest preserves.

OTHER RECREATION OPPORTUNITIES

HISTORICAL BACKGROUND

Today's parks, forest preserves, and other privately and publicly owned open spaces cater to a larger range of activities than the four types discussed thus far. This range reflects how our ideas of "open space" and "recreation" have expanded over time, and how such things should be provided to the citizens of a region. In Chicago, the parks movement began in the late 1860s, and early parks and boulevards were planned and laid out primarily for passive recreation such as picnicking and relaxing. Emphasis during this period of development was on linking the lakefront with prominent residential areas, and lands in the Chicago River corridor did not play much of a part in this scheme. The need for a regional park system was voiced during the 1890s to preserve natural landscapes and promote passive, dispersed recreation; this led to the creation of the county-level forest preserve system. The river corridors such as the North Branch and large tracts of wooded land such as the Palos area were targeted for purchase during this time. Around the same time, the city's elite also began establishing golf clubs, often catering to an exclusive membership. Lands purchased for these clubs often were low-lying marsh or farmland along river corridors, including numerous large parcels along the upper reaches of the North Branch.

Whether public or private, much of this early open space development was aimed at the well-to-do, with few opportunities available for the poor and working class of the expanding metropolis. The Progressive Reform era at the turn of the century changed that, and along with many initiatives to promote social justice came the neighborhood parks and playground movement. Heralded as "parks for the people," these smaller parks were located throughout neighborhoods of the city, and focused heavily on sports, programs, and other activity-oriented recreation and education. California Park along the North Branch was one of the early parks developed with such a neighborhood/activity orientation.

As suburban areas grew up around Chicago, many suburban parks were developed with similar goals in mind, combining passive and active uses on floodplain land that was difficult to develop for residential or commercial purposes. In recent years, many suburban municipalities have targeted river basin lands for more comprehensive park and open space protection, using acquisition and regulatory tools to achieve land use planning goals. In concert with developers, river basin lands are increasingly being considered as public and private open space assets, serving a variety of active and passive recreational purposes. From downtown riverwalks to wildland conservancy areas to private golf course communities, these park and open space areas provide a range of other recreational uses.

CURRENT USE

Other recreational uses that have not yet been discussed in this chapter are numerous, and those occurring along the

Chicago River corridor have been identified in the on-site survey and focus group chapters. Three main categories of other uses mentioned by those we interviewed for this study included:

Picnicking and related passive uses: The forest preserves in the Chicago region cater to a wide variety of activities already mentioned, but are perhaps best known and most heavily used for their picnic groves. With the forest and river forming an important scenic backdrop, visitors flock to these open and savanna-like sites from the first warm days in spring until the fall. The groves offer picnic tables and shelters, parking, restrooms, and related facilities, but are rarely designed with the same high level of development one might find in a city park. Pit toilets and hand-pumped drinking fountains are still found at some sites; although these are increasingly being replaced with modern facilities, most groves still have a rustic appeal, and some have unique stonework and other features dating from their construction by the Civilian Conservation Corps. Designated groves, available on a permit basis to groups, are often booked far in advance for weekend church and office parties and other organized events. From the Greenbelt Forest Preserve (Reach 3) south to Beaubien Woods (Reach 10), there are more than 40 forest preserve picnic groves in the Chicago River corridor. No reliable use estimates are available, but forest preserve use for picnicking and related activities is among the highest of all forest preserve recreation activities, and exceed several million visits annually.

Active sports: Municipal parks are also popular for picnicking, though most parks in Chicago or the suburbs do not provide grills, tables, or related facilities. Instead, these parks are often oriented toward active recreation, featuring both indoor and outdoor facilities for group sports and games. There are more than 30 municipal parks on the river throughout the corridor; most are located in the City of Chicago. Chicago Park District river parks include 6 "full service" neighborhood parks, 2 playlot parks, 6 passive parks, and 2 currently unimproved sites. A typical full service neighborhood park along the river in Chicago includes fields for baseball and football/soccer; basketball, tennis, and volleyball courts; one or more playlots; and a fieldhouse. Three of the largest Chicago river parks feature outdoor pools. These facilities are the principal focus of many people's use of these parks, and awareness or use of the river is often minimal.

Golfing: More than 25 golf courses, country clubs, and driving ranges are located on the river, with many more close by. Most of these are on the upper forks of the North Branch; the East Fork alone has no less than 12. Most golf opportunities in the corridor are provided by the private sector, with some private clubs open to members only. There are a few municipal courses as well, and the Forest Preserve District of Cook County owns and operates 5 golf courses and 1 driving range in the corridor. The river is a primary aesthetic feature for many of these courses, and in some cases is used as an obstacle or challenge for holes.

This summary of other recreation opportunities available in the Chicago River corridor shows that in general, picnicking and other passive recreation opportunities are largely the domain of the forest preserves, while active sports and related opportunities are usually provided by municipal park districts, and golfing opportunities are often associated with the private sector. There are, however, important exceptions to these generalizations. For example, the Lake County Forest Preserve's Greenbelt site provides a relatively high level of facility development, geared toward nearby urban and suburban areas that are lacking in park facilities; and the Forest Preserve District of Cook County operates its Whealan Pool facility on the North Branch. Conversely, several municipal parks are oriented towards passive use, and include few facilities beyond benches and paths designed for river appreciation. Finally, the Forest Preserve District of Cook County is an important supplier of public golfing opportunities; its courses and driving range are well used and among the most popular in the region.

OPPORTUNITIES AND CONSTRAINTS, PROSPECTS FOR INCREASED USE, AND RECOMMENDATIONS FOR IMPROVING OTHER RECREATION OPPORTUNITIES

Because activities falling into the "other recreation" categories were not explicitly discussed in our interviews, we did not systematically address questions relating to problems and opportunities, implications for increased use, or recommendations. However, some points relating to these other activities arose in our interviews, and we report them below.

- Development of the Chicago Park District's new Chinatown, Ronan, and Du Sable Parks along the river offers good opportunities to orient park design and passive activities to the natural river environment, including improvement of access to the river edge. Issues such as fencing are being dealt with so that new development and related uses will embrace the river landscape rather than ignore it or treat it as a liability. These parks could become prototypes for future park rehabilitation in the corridor.
- Likewise, it is doubtful that new forest preserves along the river will concentrate on "full service" facility development for active sports. For example, Lake County Forest Preserves has no plans to build much more than primitive trails at its presently undeveloped properties along the Middle Fork, and although Cook County does plan to rehabilitate its Whealan Pool along the North Branch, most of its future site development plans are oriented toward trails and more rustic or nature-oriented recreation opportunities.
- As mentioned in the boating section, a perceived conflict and potential safety problem makes some forest preserve managers hesitant about developing a canoe trail along the North Branch as it flows through golf courses. Similar conflicts and safety problems could also arise in the case of land-based trail development across golf course property. With the multiple recreational benefits that river corridors can provide, some managers are looking for ways to expand the use of single-purpose facilities such as golf courses. In the case of some golf courses, the redesign of

holes and routing of trails may help minimize conflict and safety problems and expand facility use. In other cases, time-of-day, day-of-week, or seasonal zoning may accomplish similar objectives in the sharing of resource use.

- By the same token, some managers saw a need and opportunity to expand the nature and wildlife benefits that golf courses and active use parks currently provide. The Forest Preserve District of Cook County, for example, is looking at ways in which the river edge along their golf course properties can be re-landscaped to enhance wildlife habitat, restore native plant communities, and reduce fertilizer and runoff into the river system. Similarly, municipal park managers are increasingly sensitive to water quality and native plant community issues, and are engaging in some small scale restoration projects in active use parks. Mentioned in the previous section, the Gompers Park Urban Resources Partnership/ChicagoRivers demonstration project is a prime example of a project that is attempting to expand nature-related benefits in the context of active recreational use.

PART V CONCLUSIONS

This chapter examined the supply of recreation and open space opportunities in the Chicago River corridor from three perspectives: who provides them, what they are and where they are located, and how they can be increased in the context of other values and uses. To address these perspectives, we spoke with resource experts representing diverse user and interest groups, and compiled relevant secondary materials from many different sources. The picture resulting from these efforts is very encouraging, yet significant challenges must be faced before many of the plans and proposals described in these pages can be successfully realized.

RECREATION AND OPEN SPACE PROVIDERS

Study findings showed that the Chicago River corridor has a wide range of recreation and open space providers, as well as other landowners and lessees that contribute to its appeal and vitality. Public ownership of corridor lands is significant, and while the metropolitan area has benefited greatly from the foresight of the creators of the county forest preserve districts, perhaps the most significant opportunities for future recreation and open space enhancement can be found on the extensive land holdings of the Metropolitan Water Reclamation District of Greater Chicago. As the MWRD articulates its recently expanded policy of multiple use, particularly with respect to public access on leased properties, broad goals need to be addressed within the constraints and conditions of present land uses at particular sites. Our interviews with industrial land lessees showed significant reservations about public access across property for reasons of cost, safety, and security. These cautions extended to public agency lessees as well in terms of future lease conditions that call for removing fencing and regrading the banks to bring people closer to the river. As leases are renewed under the River Renaissance and North Shore Channel Criteria, the MWRD should work closely with lessees to ensure an optimal mix of public access with other uses and considerations. Incentives, cost sharing with other units of government and the private sector, technical assistance, and other tools could be used to help implement these forward-looking policies.

Our findings also showed that a significant amount of public lands in the Chicago River corridor are the focus of intensive programs of ecological management and restoration. Public agencies, in cooperation with volunteer restoration and other stewardship groups, are helping make the corridor a model for urban ecosystem management through some of the most innovative programs in the nation. The lessons learned from managing suburban forest preserve properties are being applied in some urban parks and private open spaces, but surely more could be done. For example, restoration projects underway in the City of Chicago at Gompers Park and Beaubien Forest Preserve through the ChicagoRivers/Urban Resource Partnership demonstration projects are steps in this direction. They not only hold tremendous value for enhancing urban open space as functioning ecosystems, but can also provide essential nearby nature experiences for urban residents. Private open space, particularly in the northern headwater sections of the corridor, also plays a critical role in sustaining the overall system in terms of water quality, biological diversity, wildlife habitat, aesthetics, recreation, and other values. Innovative development projects such as the Techny site on the West Fork can be used as models for blending ecological management with private development, as well as for public access and use. Lessons learned from these public and private attempts at ecological management and restoration need to be applied on other public and private sites. In this respect, important opportunities exist for golf courses along the river, which account for significant acreage on the upper forks of the North Branch. Even if open space is not all publicly accessible for active recreational use, it can provide publicly valued ecological roles.

The importance of partnerships established between the public and not-for-profit sectors in accomplishing recreational and open space goals cannot be overstated. As identified in this report, the diverse activities of not-for-profit groups in the corridor range from hands-on land and water management to recreation, preservation, education, and economic development. As federal and state funds for public land acquisition and management programs continue to shrink, local and regional public agencies will no doubt have to rely increasingly on the not-for-profit sector to accomplish activities they once did on their own. Public agencies are fortunate to have a not-for-profit infrastructure already developed that functions in many parts of the corridor, and for agencies that don't, many models exist for transport to new locations. Public agencies can work to help organize constituencies, and regional not-for-profits can help develop local groups to address specific issues and concerns. Both sectors can increase volunteer participation by tailoring involvement activities to better meet the social, recreational, aesthetic, and other values that people seek in activity participation.

Study findings also showed that private sector companies not directly concerned with recreation and open space nonetheless can play an important role in providing corridor recreation and open space opportunities. Excellent models exist in the corridor of private industries who have improved the aesthetics of their riverbank property and some who have worked closely with local units of government to plan for and provide public access across their property for trails and riverwalks. Guidelines formulated for the downtown sections of the Chicago River have made a positive impact, and corresponding guidelines are now being developed for other inland waterways in the city. These guidelines hold the key to future recreation and open space development in the city, as vacant industrial parcels along the South Branch are converted to new uses, and as industrial areas along the North Branch are modernized. Similar opportunities to protect shoreland open space values now exist in the rapidly developing north suburban areas, and the many communities along these reaches can play a key role in guiding private development, from improving landscaping to dedicating riverwalks. As one current example, the Village of Glenview is improving the riverfront in its downtown area and is working with adjacent communities in developing a greenway riverwalk along the West Fork of the North Branch.

RECREATION AND OPEN SPACE OPPORTUNITIES

A major contribution of this study was a fairly comprehensive inventory of recreation and open space opportunities currently available in each reach of the corridor, as well as a sketch of opportunities planned or proposed in the future. The difficulty of assembling such an inventory taught us about the diversity of opportunities that exist, as well as the high level of ongoing activity to increase these opportunities. There is no doubt that inaccuracies exist in the inventory, and even more certainty that it will soon need to be updated. Nevertheless, the result of the effort demonstrates the value of taking a look at the broad spectrum of public and private opportunities across multiple jurisdictions.

The wealth of opportunities currently existing in the corridor include more than 50 miles of bicycle-grade trails, and many more miles of developed trails and footpaths. Plans and ongoing projects will greatly increase mileage, and not only provide connections to all reaches within the corridor but also link it together with greenways throughout the metropolitan region and beyond. Current boating and fishing opportunities are more modest, though as water quality continues to improve in the corridor additional resources will undoubtably be channeled into further development of these opportunities. Skokie Lagoons on the East Fork and Flatfoot Lake just off the Calumet River are two current examples of restoration projects that will significantly increase boating and fishing opportunities in the corridor. Restoration projects in the river proper pose a different set of challenges, but are no less realizable as goals. Perhaps the least visible but most significant recreation and open space opportunities in the corridor are those we discussed under the heading of natural and cultural resource-based recreation and education. These activities include a diverse amalgam of opportunities, from birding to hunting to restoration of historic buildings and ecologically significant landscapes. The Chicago River corridor contains some of the most significant opportunities of this kind in the metropolitan region, state, and in some cases, the nation. More importantly, as initiatives such as The Nature Conservancy's biodiversity initiative and the Lake Calumet Ecological Park are implemented, they can become national models of how we can ensure a more harmonious coexistence between people and nature in urban areas.

RECREATION AND OPEN SPACE ISSUES AND CONCERNS

Although plenty of possibilities exist for increasing recreation and open space opportunities in the corridor, care must be taken to integrate them with other corridor values, including economic and environmental values. Most we spoke with showed a high level of enthusiasm for more trails, boating, fishing, and natural and cultural activities, but they were also concerned about user conflicts, limitations in access, safety and security, loss of economic livelihood, and potential damage to land and water resources. These issues and concerns were spelled out in detail by the resource experts, but so were many creative and workable recommendations and solutions for minimizing potential problems. Among such recommendations were informational campaigns to raise public awareness of the resource and responsibility for its protection; technological or environmental modifications to shoreline, land, and water areas that would minimize problems; coalitions of agencies and other groups who might act as "river authorities" to mediate conflicts and resolve issues among various river users; and improved programs of education, management, and regulation. Many of these potential solutions are readily available for implementation; in fact, some are already in place in some reaches of the corridor and only need to be exported elsewhere. As plans and programs aimed at recreation and open space development evolve in the years ahead, we hope that the ideas and recommendations documented here can help deal with the challenge of learning how to use and respect the Chicago River for all its values.

APPENDIX 4.1
INFORMATION SOURCES

INTERVIEWS

(Numbers next to names indicate separate interviews)

PUBLIC LAND MANAGERS

Formal interviews

1. George Kelly, Architect Planner, Environmental Design Section
   David H. Bielenberg, Architect Planner, Environmental Design Section
   Edward Smetana, Interactive Video Manager, Real Estate Department

   Metropolitan Water Reclamation District of Greater Chicago

2. David M. Eubanks, Greenway Planner
   David Kircher, Chief Landscape Architect
   Forest Preserve District of Cook County, Illinois

3. Ralph Thornton, Land Manager
   Anthony Ponziano, North Regional Superintendent
   Forest Preserve District of Cook County, Illinois

4. William Granberry, South Regional Superintendent
   Forest Preserve District of Cook County, Illinois

5. Michael Fenelon, Director of Planning, Conservation, and Development
   Lake County Forest Preserves

6. Miriam Gusevitch, Architect, Design Division
   Chicago Park District

7. Bob Kushnir, Superintendent, River Park
   Chicago Park District

8. Mary Bak, Director of Development
   Village of Glenview

9. Don Wirth, Director of Parks and Forestry
   City of Evanston

10. Bill Banks, Naturalist, Lake Katherine Nature Center
    City of Palos Heights

Informal interviews

11. Steve Pescitelli, Northeastern Illinois Streams Project Manager
    Illinois Department of Natural Resources

12. Mike Jones, Fisheries Biologist, Cook County District
    Illinois Department of Natural Resources

13. Scott Garrow
    William Powers Conservation Area
    Illinois Department of Natural Resources

14. Chris Merenowicz, Fish Biologist
    Forest Preserve District of Cook County

15. Bob Porter, Superintendent
    Lemont Park District

16. Walt Schamber
    Lake Bluff Park District

NON-PROFIT GROUPS

Formal Interviews

17. Bill Koenig
    Friends of the Chicago River and
    Cook County Clean Streams Committee

18. Robert Lonsdorf, Land Steward
    North Branch Restoration Project

19. Christine Lee
    Audubon Society

20. Susan Urbas, Executive Director
    Chicago River Aquatic Center

21. Hal Jensen, Executive Director
    Chicago Riverwalk Corp.

Informal interviews

22. Laurel Ross, Director
    Volunteer Stewardship Network
    The Nature Conservancy

23. Gerald W. Adelman, Executive Director
    Openlands Project

24. Emily Harris, Executive Director
    Canal Corridor Association

PRIVATE COMMERCIAL RECREATION PROVIDERS

Formal interviews

25. Mike Borgstrom, Vice President
    Wendella Boat Tours

26. Ralph Frese, Owner
    Vic Hurtowy
    Chicagoland Canoe Base, Inc.

27. Mark Berman, Manager
    Marina Towers Marina

28. Nick Boudos, Owner
    Kathy Agelson
    Frank
    Windjammer Marina

29. Ron Haskell, General Manager
    North Pier Chicago

COMMERCIAL AND INDUSTRIAL INTERESTS

Formal Interviews

30. William Cromwell, Planner
    CSX Real Property, Inc.

31. William R. Lyon, Real Estate Representative
Tribune Properties, Inc.

Mike Debisch, Site Manager
Tribune Freedom Center

32. R. O. (Rudy) Wulf, Real Estate Manager
Mike, Real Estate Manager
Commonwealth Edison Co.

33. Mark Walbrun, Director Capital Projects
Kurt Weissheimer, Managing Director of Real Estate
Chicago Union Station Company

34. Todd Hudson and other members
Illinois River Carriers Association

35. Michael Gotkin, General Counsel
Farley Candy Co.

Informal interview

36. Charles Finkl, President
A. Finkl and Sons
Chicago, IL

MISCELLANEOUS

Formal interview

37. Peter Schurla, Deputy Chief
Special Functions Group
Lt. Earl Zuelke, Commanding Officer
Marine Unit – Special Functions Division
Chicago Police Department

Informal interview

38. John Husar, Outdoor Writer
Chicago Tribune

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APPENDIX 4.2
DISCUSSION GUIDES FOR RESOURCE EXPERT INTERVIEWS

OUTLINE OF INTERVIEW QUESTIONS FOR PUBLIC LAND MANAGERS

Introductory comments:

1. *Model Urban Rivers Project—NPS/FOCR project: Assessment & Plan*
2. *USFS assessment of recreation user and interest group perceptions*
3. *"Chicago River Corridor" explanation and show on map—concerned with your parcels*
4. *Interview format is informal and open-ended (1-1½ hours); besides some general background questions will cover 3 major areas:*
   - *–Agency **ownership & management** of lands along the river*
   - *–**recreation use** of the river and river corridor on your lands*
   - *–Your constituency groups and their **images and perceptions** of the river*
5. *Will record and take notes so we don't miss anything*

A. General Introductory Questions

"First we'd like to get a little information about you and your position with the district…"

1. Position/title in the district? *(include name(s) of those interviewed)*
2. Number of years with the district?
3. Job duties now and over time? *(Ask about familiarity with specific lands owned by district)*

B. Ownership and Management

"In this first set of questions we want to focus on ***ownership and management of district lands*** to get an idea of the character of the lands owned by the district and how they are managed for various purposes."

1. First, what section(s) of the river(s) are within your jurisdiction? (Use map and if possible obtain detailed map showing holdings).
   a. Total acreage and/or number of river miles?
   b. Contiguity of parcels? (scattered, consolidated)
2. Does your district have any policies or plans for increasing ownership/holdings along the river?
   a. No/Yes —> If yes, When? Where? How?
3. "Next, we'd like to get an idea about the character of properties owned along the river corridor and the policies and programs for managing the river corridor."
   a. First, how would you describe the ***overall character of the river corridor*** and the district's philosophy for managing it (e.g., let-it-be, active management)? *(If appropriate, ask about the district's mission and how river management policies are in keeping with that mission…)*
   b. How important of a role do the river corridors play in the district's land holdings **overall**?
   c. What about the ***immediate shoreline*** area (river banks)? Can you describe the...
      - –physical character? (e.g., steep sloped)
      - –vegetation and how it's managed? (e.g. upland woods, open areas, marshy)
      - –what about management of the shoreline for various use objectives? Are things done to...
        - –facilitate or discourage recreation (e.g., canoe access, fishing piers)?
        - –enhance wildlife habitat?
   d. What about the ***adjacent corridor*** area (up to ¼ mile or so from the shoreline)? Can you describe the...
      - –physical character? (upland, floodplain)
      - –vegetation (natural communities and developed/mowed areas for recreation)
   e. What about the ***river itself***? Can you describe...
      - –its width, flow (seasonal change), and navigability?
      - –management of in-stream materials? (e.g. are hanging branches for habitat or navigation obstructions?)
      - –water quality?
   f. What about ***adjacent land uses*** including nearby roads and bridge crossings?
   g. What about any ***in-stream (non-recreational) use*** (e.g., barge traffic)?
      - –how do these uses affect your ability to manage river for other management goals?

C. Actual Recreation Use of the River and River Corridor

"Our next set of questions aims at issues regarding actual recreation use of the river and river corridor.."

1. First, how important of a role do the river corridors play in the recreational use of the district's land holdings **overall**? If possible, can you estimate the percent of total recreational use that is river oriented—either directly (e.g., fishing, boating) or indirectly (e.g., viewing, walking or sitting along)?

2. What about ***direct uses*** of the river, such as fishing and boating—*(Probe for important use areas, popular spots or features, estimates of numbers of users for activity/location.* ***Also, get idea of change over the years...)***
   a. Fishing—locations/facilities?
   b. Canoeing/boating—locations/facilities?
3. What about ***indirect uses*** of the river corridor, such as biking, hiking, and nature activities—*(Probe for important use areas, popular spots or features, use levels for activity/location,* ***changes over the years...)***
   a. Paved trails—biking and walking?
   b. Unpaved trails—hiking and mountain biking?
   c. Nature observation—e.g., birdwatching/ photography?
   d. Other (e.g., nut and seed collecting)?
4. One relationship we'd like to get a better feel for is how management of the vegetation in the river corridor affects its recreational use. Thinking broadly about the mix of land uses in the corridor, can you characterize the type and numbers of users in the following areas...
   a. Natural (wooded) areas—who uses them, how many, for what?
   b. Mowed areas—who uses them, how many, for what?
   c. Developed facilities (buildings, paved areas)—who uses them, how many, for what?
5. What kinds of information/programs/etc. does the district have that relate to the river (ask for specific examples)?
6. Does the district sponsor any river recreation activities or work with user groups (e.g., canoe trips)?
7. What are the prospects or district policies for increasing recreational use?
   a. How does the district view the idea of increased recreational use? (specific activities)
   b. Are changes (managerial, financial, environmental) needed to accommodate increased recreational use of the river and corridor?

D. People's Images and Perceptions of the River

"Our final set of questions focuses on the topic of people's images and perceptions of the river corridor on your district's lands...."

1. First, who do you feel your ***major constituent groups*** are? Who do you serve, both recreational and nonrecreational interests?
2. One major group we'd like to know about is ***recreational visitors***. How do you think recreationists perceive the river in your holdings? *(Ask first generally, then probe for these specific dimensions...)*
   a. ***Aesthetics***— *(Probe for both positive (e.g., nature) and negative (e.g., odors) aspects; if possible, name specific locations, features, etc.)*
   b. ***Safety*** *(probe for* ***physical safety*** *(e.g., drownings, water quality) and* ***personal safety*** *(e.g., crime, gangs, cults) aspects. If possible, name specific locations, features, etc.)*
   c. As a ***recreational resource***—
      (1) direct (fishing, boating) and
      (2) indirect (viewing, walking along, biking along) Do you think recreational visitors who use the trails see the river as a primary aesthetic feature? Do you think some are not even aware the river is there?
   d. ***Wildlife habitat***
   e. ***Water quality***
3. A second major interest group includes ***adjacent landowners***. How do you think adjacent landowners perceive the river in your holdings? *(Ask first generally, then probe for these specific dimensions...)*
   a. ***Aesthetics*** *(again, positive and negative aspects)*
   b. ***Safety*** *(again, physical and personal safety, perceived vs. actual)*
   c. As a ***recreational resource***—how good is access from the neighborhoods?
      (1) direct (fishing, boating) and
      (2) indirect (viewing, walking along, biking along)
   d. ***Wildlife habitat and vegetation*** *(positive and negative—deer invading yard and eating vegetation)*
   e. ***Water quality***
4. How do you think _____***(name of other constituent group)*** perceive the river in your holdings? *(Ask first generally, then probe for these specific dimensions as appropriate...)*
   a. ***Aesthetics*** *(again, positive and negative aspects)*
   b. ***Safety*** *(again, physical and personal safety, perceived vs. actual)*
   c. As a ***recreational*** resource
      (1) direct
      (2) indirect
   d. ***Wildlife habitat and vegetation*** *(positive and negative)*
   e. ***Water quality***

OUTLINE OF INTERVIEW QUESTIONS FOR PRIVATE NOT-FOR-PROFIT GROUPS

Introductory comments:

1. *Model Urban Rivers Project—NPS/FOCR projects: Assessment & plan*
2. *USFS assessment of recreation use and interest group perceptions*
3. *"Chicago River Corridor" explanation and show on map*
4. *Interview format is informal and open-ended (1 hour or so); besides some general background areas, we will cover three topics:*
   a. *Group and member/clientele profile*
   b.. *How members/clientele think about and use the river corridor*
   c.. *River corridor enhancement for recreation and other values*
5. *We will record and take notes so that we don't miss anything.*

A. General Introductory Questions

"Before we begin the interview we'd like to get a little information about you and your group (or, confirm that the information we have is correct)":

1. Name of group, years in existence.
2. Your title/position, number of years, have duties changed over time (if you are not the director, who directs the group)?

B. Group and Member Profile

"In this first section, we are interested in what your group does and who your members and/or clientele are."

1. What is your group's purpose and how do you accomplish it (generally, and with respect to the Chicago River corridor)?
   mission
   programs
   policies and guidelines
   planning activities
   partnerships/cooperation with public agencies, private groups
2. Has your focus with respect to the Chicago River changed in recent years?
3. Who are your members and/or clientele? Where do they come from? (Probe for specifics—e.g., demographic profile)

C. Perceptions and Use of the River Corridor

"In this section, we're interested in your thoughts and experience of how your members and/or clientele perceive and use the river and the corridor."

1. What activities are your members and/or clientele involved in with respect to the river? What benefits do they get from being affiliated with your group (e.g., access to areas and activities, personal benefits, etc.)?
2. What areas of the corridor most concern your group? What is your knowledge of and level of involvement with these areas? What areas or places do you use or manage?
3. What do your members and/or clientele think about the river? What do they like or dislike about the river? What kinds of changes have they noticed?
   –water quality
   –cultural & historic features
   –natural areas
   –safety—
      –personal
      –physical
   –obstructions
   –user conflicts
4. Has the character of the river and its corridor changed over the past 5-10 years? How? (Probe: water quality, vegetation, etc.)
5. What about the "general public"? Do you think that their perception of the river corridor is different from your members/clientele?

D. River Corridor Enhancement for Recreation and Other Values

"In this section, we are interested in your thoughts about improving the river corridor for recreation and other values your group is interested in.

1. Would your group favor increased recreational use of the river corridor? Why (or why not)? What kinds of activities?
2. What improvements do you think are most needed to enhance the river corridor for recreation? Other values your group is interested in?
3. How do you think these changes should come about—public sector initiatives, private sector investments, partnerships? What would/could *your group's* role be in bringing about these changes? (Probe for changes in policy, laws, or management)?
4. Do you see increased user conflicts with increased recreational use? Would these user conflicts be a problem? How could they be prevented or minimized?
5. Do you think that your members and/or clientele would like or dislike increased recreational use of the river (crowding)?

E. Conclusion

Are there other people you recommend that we talk to?

Thanks for your time!

OUTLINE OF INTERVIEW QUESTIONS FOR COMMERCIAL RECREATION PROVIDERS

Introductory comments:

1. *Model Urban Rivers Project—NPS/FOCR projects: Assessment & plan*
2. *USFS assessment of recreation use and interest group perceptions*
3. *"Chicago River Corridor" explanation and show on map—where are they on the map?*
4. *Interview format is informal and open-ended (1 hour or so); besides some general background areas, we will cover three topics:*
   a. *recreation services provided*
   b. *how people think about and use the river corridor*
   c. *increased recreational use of the river corridor*
5. *We will record and take notes so that we don't miss anything.*

A. General Introductory Questions

"Before we begin the interview we'd like to get a little information about you and your business (or, confirm that the information we have is correct)":

1. Name of company, years in business.
2. Your title/position, number of years, have duties changed over time? (if you are not the owner, who owns the business?)
3. Do you own the land where your facility is located, or do you rent? If you rent, who is the owner and what is the lease arrangement?

B. Services Provided and Customer Profile

"In this first section, we are interested in what services your business provides to river users and the level of interest in these services over time."

1. What recreational services do you offer?

rental	sales	mooring
service	lessons	other

2. How many canoeists/boaters are there interested in boating the river? Is this a large market (boaters/weekend day)? How many boaters do you have *here* (per weekend day)? What percentage simply use the river as access to the Lake?
3. Has your level of business changed in the past year? Five years?
4. Do you anticipate increased use in the near future? Decreased?
5. Who are your customers? Where do they come from? (Probe for specifics—e.g., demographic profile)
6. What other river-related recreational activities do your customers pursue while boating (e.g., fishing, photography, birdwatching)?
7. Are there other corridor-related features that bring your customers to your marina (e.g., forest preserve, trails)?
8. Do you do anything to manage the river or its corridor (e.g., your landing areas) to enhance recreation opportunities (e.g., cut brush, dredge, plant trees).

C. Perceptions and Use of the River Corridor

"In this section, we're interested in your thoughts and experience of how people perceive and use the river and the corridor."

1. Has the character of the river and its corridor changed over the past 5-10 years? How? (Probe: water quality, vegetation, etc.)
2. What do your customers think about the river? What do they like or dislike about the river? What kinds of changes have they noticed?
   –water quality
   –cultural & historic features
   –natural areas
   –safety: – personal (crime, gangs, etc.)
   – physical (drowning, water quality)
   –obstructions (trees, dams, garbage)
   –user conflicts (other boaters, commercial traffic, anglers)
3. What about the "general public"? Do you think that their perception of the river corridor is different from your customers?
4. Where do your customers go along the river (indicate on map)? What spots are favorite? Why are they favorite (Probe: good fishing, wildlife, aesthetics [what is appealing?])?
5. Where *can* they go? (in terms of physical barriers/obstructions, safety, etc.)
6. Are there specific places where your customers cannot go now, but they would like to?

D. River Corridor Enhancement for Recreation

"In this section, we are interested in your thoughts about improving the river corridor for recreation—we are interested in all kinds of recreational activities, not just boating."

1. Would you favor increased recreational use of the river corridor? Why (or why not)? What kinds of activities?
2. What improvements do you think are most needed to enhance the river corridor for recreation?
3. How do you think these changes should come about—public sector initiatives, private sector investments, partnerships? What would/could *your* role be in bringing about these changes? (Probe for changes in policy, laws, or management)?
4. Do you see increased user conflicts with increased recreational use? Would these user conflicts be a problem? How could they be prevented or minimized?
5. Do you think that your customers would like or dislike increased recreational use of the river (crowding)?

E. Conclusion

Are there other people you recommend that we talk to?

Thanks for your time!

OUTLINE OF INTERVIEW QUESTIONS FOR MANAGERS OF COMMERCIAL AND INDUSTRIAL PROPERTIES ALONG THE CORRIDOR

Introductory Comments:

1. *Model Urban Rivers Project—NPS/FOCR projects: Assessment & plan*
2. *USFS assessment of recreation use and interest group perceptions*
3. *"Chicago River Corridor" explain and show on map —where are they on the map?*
4. *Interview format is informal and open-ended (1 hour or less); besides some general background areas, we will cover three topics:*
   a. *our company's use of the river*
   b. *how people think about and use the river corridor in your area, including public access*
   c. *increased recreational use of the river corridor*
5. *We will record and take notes so that we don't miss anything.*

A. General questions about your company...

"Initially, we'd like to get a little information about you and your business (or, to confirm that the information we have is correct)":

1. Name of company, number of years in business
2 Nature of business
3. Your title, position, number of years, duties over time
4. Location(s) along the river corridor
5. Do you own the land where your facility is located (on the river)? If not, from whom do you lease? What are the terms (length of lease, stipulations on type of use, access)?

B. Company Perceptions and Use of the River & Corridor

1. How does your company use the river & corridor?

   Direct use—e.g., barge deliveries? Is the river essential to your business (e.g., switching to truck/train deliveries too expensive, use water for cooling, etc.) ?

   Indirect use—e.g., lunchroom faces the river?

2. How has your company's use of the river changed? Past use? Historic use in this area? Prospects for future use?
3. How does your company manage the shore area (landscaping, fencing, lighting, security patrol)? Does the building or facility incorporate the river (face it, etc.), or not?
4. What is the impact of water quality on your use of the river?

C. Public Use and Access to River & Corridor

1. Is there public access to the river at your site? Does the company view public access positively or negatively?
2. Is there public access at your shore area from people coming for up or down stream?
3. What recreational use is made of the river near your facility (*instream:* canoeing, fishing, motor boats; *shoreside:* riverwalks, etc.)? How does your company view this use? Problems, opportunities?

D. River Corridor Enhancement for Recreational Use

These next questions are about opportunities for recreational use of the river ***in general****, and are not limited to the river at your site:*

1. Do you see opportunities for increased recreational use of the river? *Shoreside? In-stream?*
2. Do you have concerns about increased recreational use?

   These next questions are more directly concerned with increased recreational use of the river in your facility's area:

3. What problems or opportunities might there be with increased recreational use of the river in your facility's area? If you see problems with increased usage, how close can this use be before it interferes with your business?
4. Are there changes that could be made (managerial, legal, etc.) that would change your view of the opportunities/constraints with respect to public access to the river and/or increased recreational usage?
5. FOR MWRD LESSEES: What are your company's thoughts on policies like the MWRD River Edge Renaissance? If a policy like this were applied to your river property, what would the impact be for your company? Would your company view these changes positively or negatively?

NOTES

This project was designed and implemented by the author and by the co-principal investigator Lynne Westphal. Some of the inventory information for Part III of this chapter was collected and verified by Andre Gaither of the National Park Service. This chapter benefited from the helpful comments of David Eubanks of the Forest Preserve District of Cook County, Michael Fenelon of Lake County Forest Preserves, Richard Lanyon of the Metropolitan Water Reclamation District of Greater Chicago, and John Dwyer and Lynne Westphal of the Forest Service.

C H A P T E R 5

Analysis of Chicago River Recreation Habitats

Charles Nilon, Principal Investigator
Scott Huckstep, Contributor

SUMMARY OF FINDINGS

This project examined how vegetation and other physical and social factors help provide accessible "recreation habitat" for nearby residents along the Chicago River corridor. Nine neighborhoods identified in a related study of nearby residents' perceptions of the river (Gobster, 1998—see Chapter Two) defined the study sites for this research. The sites spanned the 150-mile corridor and included a representative range of physical and social conditions.

Analysis of physical characteristics at the study sites identified 629 distinct vegetative units and 34 different vegetation classes. In a study site level analysis, significant differences in vegetation cover type and dominant vegetative class were found across study sites. Sites also differed in environmental disturbances such as presence of trash, soil compaction, dumping, and vandalism; and in the way trails and fencing facilitated or inhibited access to the river edge. Differences in vegetation, environmental disturbances, and access between sites were related to how far a site was from the center of the study area, downtown Chicago; with areas closest to downtown having less closed-forest cover, greater environmental disturbance, and less access than more distant, suburban sites.

A block group analysis of social characteristics showed significant differences in social, economic, and demographic make-up of the 109 U.S. Census block groups associated with the study sites. Two categories of block groups were identified; one characterized largely by upper income white homeowners, the other largely by lower income black renters. Paralleling the study site level analysis, a comparison of physical and social factors showed that sites bordering block groups having predominantly lower income black renters tended to have a lower percentage of closed forest vegetation units, a higher percentage of areas with environmental disturbances (trash, dumping, and vandalism), and a higher percentage of fenced areas blocking access to the river than sites bordering block groups having predominantly upper income white homeowners.

Findings from both the study site and block group analyses may help explain results from the study of nearby residents' perceptions, where participants who lived near sites with a low quality physical environment and less access to the river tended to have a more negative overall impression of the Chicago River in their neighborhood. Such findings may help managers identify improvement projects where they are needed most, to better provide all corridor residents with a quality river environment for their enjoyment.

INTRODUCTION TO THE STUDY

Recent research has noted the importance of nearby open spaces to urban residents. Open spaces within 1 mile of a residence are an important source of nature-based recreation for children and adults (Johnston, 1990). The USDI Fish and Wildlife Service (1992) estimated that 3.4 million Illinois residents use these areas each year for non-game wildlife activities.

The ChicagoRivers study area includes a large amount of public and private open space. Little information, however, is available on how open space sites are used by local residents, or what factors influence their use. In May 1993, we began a project to characterize the physical and social features of open space sites. Our goal was to identify variables useful for predicting whether these sites provided "recreation habitat": vegetation and other features that facilitate or inhibit use of and access to open space sites for recreational purposes (Greer, 1990).

OBJECTIVES

1. To classify the vegetative structure, land use history, and current types of disturbances in open spaces found within representative residential neighborhoods in the Chicago River corridor.
2. To determine user access to these open spaces. This assessment includes an analysis of riverbank characteristics that may increase or limit river use, as well as an analysis of access to river-based activities.
3. To identify the social, economic, and demographic characteristics of residential areas that are relevant to the use of nearby open spaces.
4. To determine if open spaces bordered by neighborhoods with different social, economic, and demographic characteristics differ in vegetation characteristics, land use history, current patterns of disturbance, and user access.

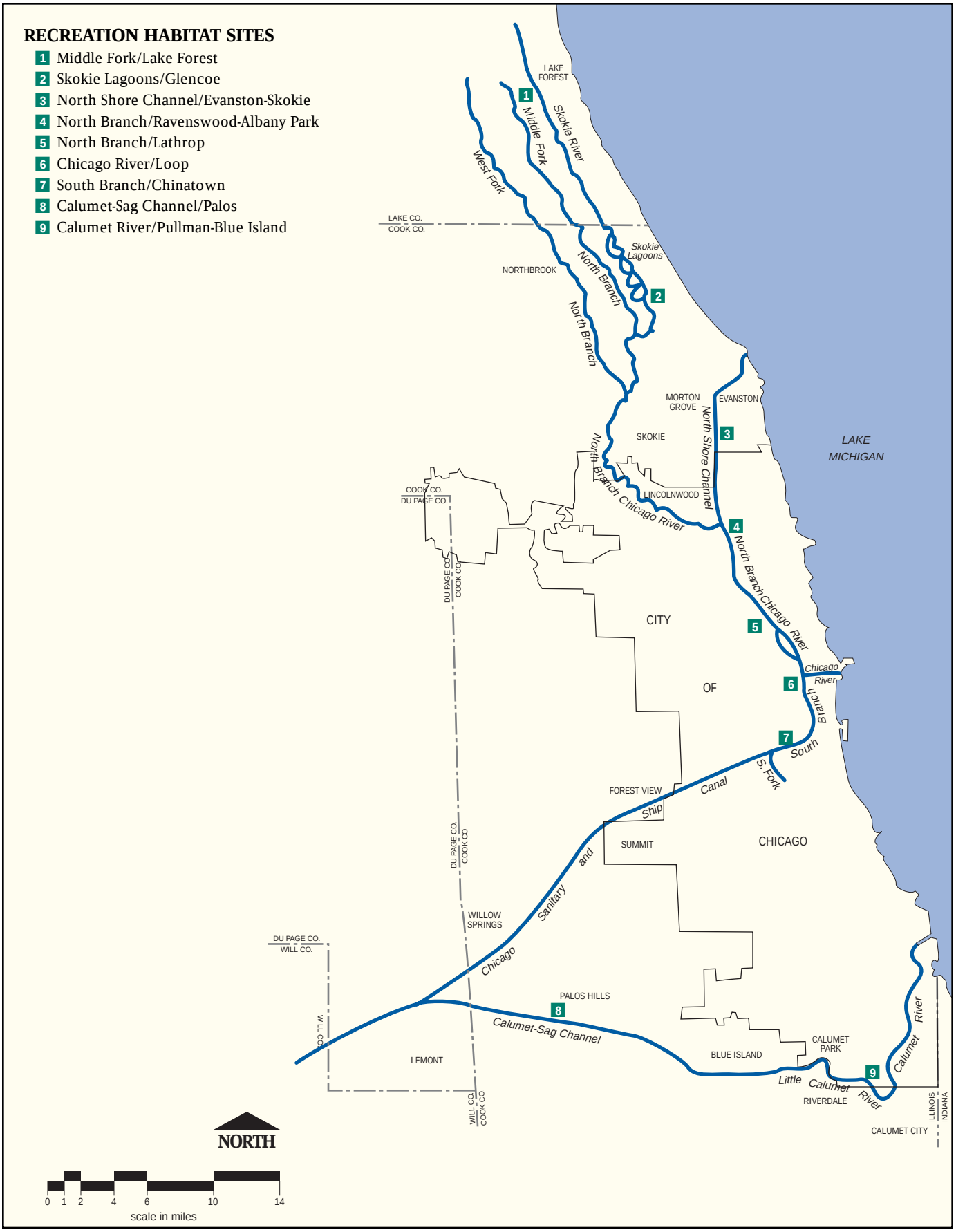

FIGURE 5.1
Location of study reaches with location of recreation habitat sites

METHODS

REGIONAL CHARACTERISTICS AND ACCESS

STUDY SITES

Nine study sites were located within seven reaches of the ChicagoRivers project area (Table 5.1 and Figure 5.1). The study sites were identified by Paul Gobster and Lynne Westphal in their focus group study of river perceptions and uses by nearby residents (Gobster, 1998—see Chapter Two in this report). The focus group areas were selected to represent the range of residential neighborhoods in the Chicago River corridor. Each study site included all open spaces within 0.5 miles (0.8 km) of a branch of the river.

CLASSIFICATION OF OPEN SPACES

Open spaces within each study site were characterized using a vegetation classification system for urban natural areas developed by Rogers and Rowntree (1988). This system classifies open spaces based on plant formation type (cover type) and the dominant life form of understory (< 15 ft. (5 m.)) plants. Each study site was located on 1:2400 scale aerial photographs obtained from the Metropolitan Water Reclamation District of Greater Chicago, Cook County Highway Department, and Lake County Department of Planning and Environment. The boundaries of vegetation units—open spaces at least 1 acre (0.47 ha) in size that were dominated by one of five plant formation types (cover types)—were marked on each map (Table 5.2). We visited each study site between May and August 1993 to verify the plant formation classification and to complete the description of the unit. This description classified each unit based on the life form of vegetation less than 15 feet (5 m.) tall and on the presence of indicators of historical land use and current environmental disturbance (Rogers and Rowntree, 1988; Sisinni and Anderson, 1993) (Tables 5.2 and 5.3).

The percent occurrence of each plant formation type, vegetation class, historical land use indicator, and environmental disturbance category was determined for each study site using the SYSTAT Tables procedure (Wilkinson, 1990). A chi-square test of independence (Wilkinson, 1990) was used to

TABLE 5.1
Location and description of recreation habitat sites

Study Site	River Name	Study Reach	Neighborhood
1	Middle Fork North Branch Chicago River	2	Lake Forest
2	Skokie River/Skokie Lagoons	3	Glencoe
3	North Shore Channel	4	Evanston-Skokie
4	North Branch Chicago River	5A-B	Ravenswood-Albany Park
5	North Branch Chicago River	5B	Lathrop
6	Chicago River/South Branch Chicago River	6, 7	Loop
7	South Branch Chicago River	7	Chinatown
8	Calumet-Sag Channel	10A	Palos
9	Calumet-Sag Channel	10C	Pullman-Blue Island

TABLE 5.2
Plant formation and life form categories used to classify vegetation units

Category	Description
Plant Formation (Cover Type)	
Closed Forest	Trees > 15 ft (5 m) tall with interlocking crowns
Woodland	Minimum of 40% tree cover without interlocking crowns
Scrub	Woody vegetation 1.5 ft-15 ft (0.5-5.0 m) tall
Herbaceous Vegetation	Grass and grasslike plants, woody vegetation vegetation < 40%
Scarcely Vegetated	Bare mineral soil, sand, rock or pavement dominates
Life Form of Vegetation < 15 ft (5 m) tall	
Phanerophytes	Plants that grow taller than 1.5 ft (0.5 m) and do not die back below that height
Chamaephytes	Branches or shoots remain < 1.5 ft (0.5 m) above ground
Hemicryptophytes	Shoots die back to ground level; buds at level of ground
Cryptophytes	Buds or shoots survive below ground

TABLE 5.3
Historical indicators and environmental disturbance variables used to classify vegetation units

Variable	Description
Historical Indicators (Indicators of Previous Land Uses)	
Building	Presence of building or building foundation
Exotic Plantings	Presence of escaped non-native/exotic plant species
Hedgerow	Presence of hedgerow or fencerow plantings
Landfill	Presence of dump site
Road	Presence of paved or dirt road
Environmental Disturbance (Indicators of Current Disturbance)	
Dumping	Dumping of trash or yard waste
Erosion	Evidence of soil erosion
Fire	Evidence of fire or arson
Soil Compaction	Evidence of compaction by vehicles or foot traffic
Trash	Presence of scattered trash or litter
Vandalism	Presence of vandalism or graffiti

test if the percent occurrence of each plant formation type and of the five most frequently occurring vegetation class differed significantly ($p < 0.05$) among the study sites. A Spearman rank correlation test (Wilkinson 1990) was used to determine if the percent occurrence by study site of each historical land use indicator and environmental disturbance variable was significantly correlated ($p < .05$) with its distance from downtown Chicago, also known as the Loop. The Spearman rank correlation test is used to determine if there is an association between a variable (historical land use and environmental disturbance) and another ranked variables (study site distance from the Loop). This analysis is frequently used to show the influence of distance or of a gradient.

ACCESS TO RIVER REACHES

Access to the river was evaluated during the field assessment of vegetation units adjacent to a river reach. We recorded the presence of sidewalks or trails adjacent to the river (foot access), roads or parking lots (auto access), and fences that blocked direct contact with the river. We used the Spearman rank correlation test to determine statistically significant correlations ($p < 0.05$) between the percent occurrence of these features in study sites and distance from the Loop (Wilkinson, 1990).

Potential barriers to river-based activities were identified by characterizing the banks of units adjacent to the river and by identifying river reaches with heavy barge traffic. We recorded the presence of crushed rock, pavement, and vegetation on the banks of each unit adjacent to a river. Again, a Spearman rank correlation test was used to determine if the percent occurrence in each study site of these variables was significantly correlated ($p < 0.05$) with distance from the Loop. Information on high barge traffic areas identified by the U.S. Coast Guard (no date) was used as an additional measure of barriers to access for river-based activities. We compared the number of high traffic areas per mile to identify areas where river-based activities might be restricted.

NEIGHBORHOOD CHARACTERISTICS AND ACCESS

SOCIAL, ECONOMIC, AND DEMOGRAPHIC FACTORS

Social, economic, and demographic factors influence the use of open spaces. Knox (1987) noted that these variables may present barriers that limit the ability of an individual to visit a site or participate in an activity. We wanted to know if there were differences in the characteristics of open spaces and in access to the river among neighborhoods that differed in social, economic, and demographic characteristics. We used 13 variables from the 1990 U.S. Census to describe the economic, social, and demographic characteristics of block groups that bordered vegetation units (U.S. Department of Commerce, 1992) (Table 5.4). Block groups are small subdivisions of census tracts that are analogous to neighborhoods.

Principal components analysis was used to identify the combinations of census variables that explained at least 50 percent of the differences among the 109 block groups associated with study sites (Wilkinson, 1990). Principal components analysis is a statistical procedure that combines several variables into a smaller group (principal components) that explains major trends or differences within a data set. Each block group has a score for each principal component that reflects the response to the associated trend or pattern of difference. We used the SYSTAT K-Means cluster analysis program to classify the census tract block groups into two categories based on major differences in social, economic, and demographic characteristics (Wilkinson, 1990).

RELATIONSHIP OF PHYSICAL AND SOCIAL FACTORS

Finally, we used chi-square analysis to examine the relationship between the two socially defined block group types identified in the principal components analysis, and the physical measures of vegetation, land use, disturbance, and access.

TABLE 5.4
Social, economic, and demographic variables used to characterize 1990 U.S. Census block groups adjacent to sites

Variable	Description
Economic Status	
HH1PKIDS	Percent of households with single parent and children < 19 years of age
MEANRENT	Mean monthly rent ($) of occupied housing units
MEANVAL	Mean value ($) of occupied housing units
Social Status	
POWNER	Percentage of owner-occupied housing units
PRENTER	Percentage of renter-occupied housing units
VEHACCESS	Percentage of occupied housing units with access to a vehicle
Demographic Status	
OVER64	Percentage of residents > 64 years of age
UNDER19	Percentage of residents < 19 years of age
PAMIND	Percent of population that is American Indian
PASIAN	Percent of population that is Asian/Pacific Island
PBLACK	Percent of population that is Black/Non-Hispanic
PHISPAN	Percent of population that is Hispanic
PWHITE	Percent of population that is White/Non-Hispanic

RESULTS

REGIONAL LEVEL

VEGETATION UNIT CHARACTERISTICS

There were significant differences ($p < 0.05$) in the percentage of each cover type among the study sites (Table 5.5). Herbaceous units were the most frequently occurring cover type in six of nine study sites, while woodland units occurred most frequently in the remaining three sites. Closed forest units were restricted to the Lake Forest, Glencoe, Palos, and Pullman/Blue Island study sites. Units scarce in vegetation were common in the Evanston/Skokie, Loop, and Chinatown study sites (Table 5.5).

We identified 629 distinct units and classified them into 34 vegetation classes (Appendix 5.1). More than half the units were classified into one of five categories: lawn with trees (VA2b1) (11.6%), deciduous woodland with herbaceous understory (IIB2a1c) (11.0%), artificial surface (VID) (10.5%), deciduous woodland with woody understory (IIB2a1a) (10.2%), and tall forb (VA3a2) (9.4%). There were significant differences ($p < 0.05$) in the percentage of these top five vegetation classes among the study sites (Table 5.6). Of these differences, the Evanston/Skokie, Lathrop, and Loop sites had a higher percentage of units classified as "lawn with trees" compared to the other sites, and the Evanston/Skokie, Loop, and Chinatown sites had more units classified as "artificial surface."

TABLE 5.5
Percent occurrence of plant cover type by site

		Cover Type[1]				
Study Site	Number of Units	Closed Forest	Woodland	Scrub	Herbaceous	Scarcely Vegetated
Middle Fork/Lake Forest	67	23.9	20.9	4.5	46.3	4.5
Skokie Lagoons/Glencoe	152	23.7	46.1	3.3	24.3	2.6
North Shore Channel/Evanston-Skokie	45	0.0	26.7	4.4	42.2	26.7
North Branch/Ravenswood-Albany Park	58	0.0	50.0	6.9	29.3	13.7
North Branch/Lathrop	26	0.0	23.1	0.0	65.4	11.5
Chicago River/Loop	46	0.0	10.9	6.5	56.5	26.1
South Branch/Chinatown	22	0.0	36.4	0.0	31.8	31.8
Calumet-Sag Channel/Palos	100	13.0	24.0	7.0	39.0	17.0
Calumet River/Pullman-Blue Island	113	7.1	22.1	3.5	48.7	18.6

[1]Significant difference between study sites (Pearson chi-square=148.152, df=32, $p < .001$).

TABLE 5.6
Percent occurrence of five most abundant vegetation classes by site

		Vegetation Class[1]					
Study Site	Number of Units	Lawn w/trees	Woodland w/herbaceous understory	Artificial Surface	Woodland w/woody understory	Tall forb	Other
Middle Fork/Lake Forest	67	9.0	9.0	4.5	7.5	11.9	58.0
Skokie Lagoons/Glencoe	152	4.6	14.5	2.0	13.2	3.3	62.8
North Shore Channel/Evanston-Skokie	45	22.2	2.2	20.0	11.1	0.0	44.5
North Branch/Ravenswood-Albany Park	58	10.3	15.2	10.3	24.1	6.9	32.7
North Branch/Lathrop	26	38.5	0.0	7.7	11.5	3.9	38.4
Main Channel/Loop	46	28.3	4.4	23.9	2.1	8.7	32.5
South Branch/Chinatown	22	0.0	27.3	27.3	4.6	22.7	18.1
Calumet-Sag Channel/Palos	100	6.0	5.0	9.0	13.0	16.0	51.0
Calumet River/Pullman-Blue Island	113	13.3	15.9	15.0	1.8	14.2	39.8

[1]Significant difference between study sites (Pearson chi-square=167.704, df=40, $p < .001$).

There were no significant correlations between distance from the Loop and the percent occurrence of the five historical indicators in each study site (Table 5.7). There were significant correlations between percent occurrence of a disturbance variable in a study site and distance from the Loop for four of the six site characteristics (Table 5.8). Trash ($r = -0.336$, $p < 0.001$) and soil compaction ($r = -0.244$, $p < 0.001$) had the strongest correlations with distance from the Loop. These disturbances were more likely to occur in study sites closer to the Loop. Dumping ($r = -0.173$, $p < 0.001$) and vandalism ($r = -0.079$, $p = 0.048$) showed similar, though less strong trends.

ACCESS TO RIVER REACHES

Fencing and foot access were significantly correlated with distance from the Loop (Table 5.9). Fencing was negatively correlated ($r = -0.440$, $p < 0.001$) with distance, indicating that access to the river was blocked more frequently in central city study sites. Access to river reaches by sidewalks and trails was positively correlated ($r = 0.388$, $p < 0.001$) with distance, indicating that the river was most accessible from more distant, suburban study sites.

We found significant correlations ($p < 0.05$) between all three bank characteristics and distance from the Loop (Table 5.10). Cover by vegetation was positively correlated ($r = 0.412$, $p < 0.001$) with distance, indicating that suburban study sites were more likely to contain this bank characteristic. Cover by paved ($r = -0.356$, $p < 0.001$) and rock ($r = -0.242$, $p = 0.001$) surface was negatively correlated with distance, indicating that units in central city study sites were more likely to contain these bank types.

Six river reaches were designated as high barge traffic areas by the U.S. Coast Guard (Table 5.11). Two of the nine study sites—Palos and Pullman/Blue Island—were located within these high traffic reaches.

TABLE 5.7
Percentage of vegetation units with occurrence of historical indicators

		Indicators of Historical Land Use				
Study Site	Number of Units	Building	Exotic	Hedgerow	Landfill	Road
Middle Fork/Lake Forest	67	3.0	13.4	4.5	0.0	6.0
Skokie Lagoons/Glencoe	152	0.7	10.5	1.3	0.7	0.6
North Shore Channel/Evanston-Skokie	45	0.0	22.2	11.1	0.0	0.0
North Branch/Ravenswood-Albany Park	58	1.7	25.9	1.7	0.0	0.0
North Branch/Lathrop	26	0.0	11.5	0.0	0.0	0.0
Main Channel/Loop	46	0.0	19.6	4.4	0.0	0.0
South Branch/Chinatown	22	0.0	0.0	0.0	0.0	4.6
Cal-Sag Channel/Palos	100	0.0	5.0	0.0	0.0	0.0
Calumet River/Pullman-Blue Island	113	8.9	9.7	4.4	0.0	2.7

TABLE 5.8
Percentage of vegetation units with occurrence of current environmental disturbance

		Current Disturbance					
Study Site	Number of Units	Dumping[1]	Erosion	Fire	Compaction[1]	Trash[1]	Vandalism[1]
Middle Fork/Lake Forest	67	3.0	4.5	0.0	1.5	7.5	0.0
Skokie Lagoons/Glencoe	152	6.6	11.8	4.6	1.3	52.0	0.0
North Shore Channel/Evanston-Skokie	45	4.4	0.0	0.0	6.7	57.8	2.2
North Branch/Ravenswood-Albany Park	58	34.5	24.1	1.7	8.6	56.9	5.2
North Branch/Lathrop	26	15.4	15.8	0.0	19.2	80.8	0.0
Main Channel/Loop	46	2.2	4.4	0.0	30.4	71.7	0.0
South Branch/Chinatown	22	36.4	4.6	0.0	40.9	100.0	0.0
Cal-Sag Channel/Palos	100	23.0	1.0	2.0	19.0	56.0	0.0
Calumet River/Pullman-Blue Island	113	31.9	0.9	0.9	19.5	79.7	3.5

[1]Significant ($p < .05$) correlation with distance from Loop.

NEIGHBORHOOD LEVEL

SOCIAL, ECONOMIC, AND DEMOGRAPHIC DIFFERENCES

Two principal components explained 50.6 percent of the variation among block group social, economic, and demographic variables (Table 5.12). The first component, explaining 32.9 percent of variation among block groups, was characterized by positive loadings for HH1PKIDS, PRENTERS, and PBLACK; and negative loadings for VEHACCESS, MEANVAL, PWHITE, and POWNER. This component described a separation between block groups with upper income white homeowners and lower income black renters. The second component, explaining 17.7 percent of variation among the block groups, was characterized by positive loadings for UNDER19, POWNER, and PBLACK; and negative loadings for PRENTERS. This component described a separation between block groups with black families that were homeowners and block groups dominated by renter-occupied housing.

Scores for the first two principal components were used to classify the block groups into two categories. Residents in block group category one were largely upper income white homeowners. Residents in block group category two were

TABLE 5.9
Percentage of vegetation units with access to reaches and with fencing that blocked access

	Access Category (%)			
Study Site	Number of Units	Fenced[1]	Auto Access	Foot Access[1]
Middle Fork/Lake Forest	10	10.0	0.0	100.0
Skokie Lagoons/Glencoe	55	1.8	16.4	98.8
North Shore Channel/ Evanston-Skokie	12	66.7	0.0	41.7
North Branch/ Ravenswood-Albany Park	39	53.9	0.0	59.0
North Branch/Lathrop	9	77.8	11.1	33.3
Chicago River/Loop	14	45.5	14.3	64.3
South Branch/Chinatown	8	25.0	25.0	50.0
Calumet-Sag Channel/Palos	13	0.0	7.7	92.3
Calumet River/ Pullman-Blue Island	22	35.7	4.6	68.2

[1]Significant ($p < .05$) correlation with distance from Loop.

TABLE 5.10
Percent occurrence of bank characteristic variables in vegetation units adjacent to river

	Presence of Bank Feature in Unit (%)			
Study Site	Number of Units	Paved[1]	Rock[1]	Vegetation[1]
Middle Fork/Lake Forest	10	0.0	0.0	100.0
Skokie Lagoons/Glencoe	55	0.0	0.0	100.0
North Shore Channel/ Evanston-Skokie	12	0.0	0.0	100.0
North Branch/ Ravenswood-Albany Park	39	7.7	20.5	84.6
North Branch/Lathrop	9	44.4	33.3	77.8
Main Channel/Loop	14	71.4	21.4	14.3
South Branch/Chinatown	8	12.5	37.5	62.5
Calumet-Sag Channel/Palos	13	23.1	76.9	76.9
Calumet River/Pullman-Blue Island	22	18.2	77.3	68.2

[1]Significant ($p < .05$) correlation with distance from Loop.

TABLE 5.11
Chicago River reaches with heavy barge traffic (number of high target areas) identified by U.S. Coast Guard

Reach	Name of Reach	Length (mi.)	Number High Target Areas	Number High Target Areas/Mile
8	Sanitary and Ship Canal	8.2	13	1.6
9A	Sanitary and Ship Canal	10.0	5	0.5
9B	Sanitary and Ship Canal	12.5	5	0.4
10A	Calumet-Sag Channel	15.9	3	0.2
10B	Little Calumet River	7.1	1	0.1
10C	Calumet River	6.8	2	0.3

TABLE 5.12
Principal component loadings for socioeconomic and demographic variables

Variable	PC1	PC2
HH1PKIDS	0.804	0.405
UNDER19	0.335	0.677
OVER64	-0.247	-0.365
PRENTER	0.772	-0.538
POWNER	-0.762	0.543
VEHACCESS	-0.771	0.282
MEANRENT	-0.341	0.074
MEANVAL	-0.654	0.230
PAMIND	0.154	-0.053
PASIAN	0.087	-0.343
PBLACK	0.667	0.617
PHISPAN	0.273	-0.396
PWHITE	-0.769	-0.409
Eigenvalue	4.275	2.302
Percent Variation	32.9	17.7

TABLE 5.13
Mean (+ standard error) of selected social, economic, and demographic variables by block group category[1]

Variable	1	2
HH1PKIDS	4.1 + 0.5	23.8 + 2.8
UNDER19	20.4 + 1.0	32.9 + 1.6
PRENTER	34.1 + 3.1	45.4 + 5.8
POWNER	65.5 + 3.2	54.6 + 5.8
VEHACCES	85.2 + 1.9	69.3 + 4.9
MEANVAL	179,110 + 14,355	68,000 + 6,995
PBLACK	4.6 + 0.9	85.6 + 3.5
PWHITE	81.8 + 2.1	10.9 + 2.5

[1] All mean are expressed in percents except for MEANVAL, which is in dollars.

TABLE 5.14
Percent of block groups assigned to each block group category by site

	Block Group Category[1]	
Study Site	1	2
Middle Fork/Lake Forest	100.0	0.0
Skokie Lagoons/Glencoe	99.4	0.0
North Shore Channel/Evanston-Skokie	56.5	43.5
North Branch/Ravenswd.-Albany Pk.	100.0	0.0
North Branch/Lathrop	11.1	88.9
Chicago River/Loop	57.5	0.0
South Branch/Chinatown	100.0	0.0
Calumet-Sag Channel/Palos	100.0	0.0
Calumet River/Pullman-Blue Island	44.1	55.9

[1] Units bordered by nonresidential block groups (n=20) excluded from analysis.

TABLE 5.15
Percent occurrence of vegetation unit cover types by adjacent block group category

	Cover Type[1]					
Block Group Category	Number of Units	Closed Forest	Woodland	Scrub	Herbaceous	Scarcely Vegetated
1	501	13.8	34.7	4.4	35.3	11.8
2	108	3.7	15.7	3.7	54.6	22.7

[1] Significant difference among adjacent block group categories (Pearson Chi-Square= 33.482, df = 4, $p < 0.001$).

largely lower income black renters (Table 5.13). Block groups in category two were found only in the Evanston/Skokie, Lathrop, and Pullman/Blue Island study sites. Twenty vegetation units were located next to non-residential block groups. These units were excluded from further analysis (Table 5.14).

VEGETATION UNIT CHARACTERISTICS

Vegetation cover (plant formation type) differed ($p < 0.05$) between the block group categories (Table 5.15). Vegetation units bordered by category one block groups had a higher percentage of closed forest and woodland cover and a lower percentage of herbaceous and scarcely vegetated cover types than those bordered by category two groups. There were no differences between block group categories in the percentage of units of the most common vegetation classes (Table 5.16).

There were no differences in historical land use indicators among the two block group categories. However, the block group categories did differ significantly ($p < 0.05$) in four of six environmental disturbance variables (Table 5.17). Trash, dumping, and vandalism were more common in vegetation units adjacent to block groups in category two. Soil erosion was more common in units adjacent to block groups in category one.

TABLE 5.16
Percent occurrence of five most abundant vegetation classes by block group category

	Vegetation Class						
Block Group Category	Number of Units	Lawn w/trees	Woodland w/hemic.	Artificial Surface	Woodland w/phaner.	Tall forb	Other
1	501	8.0	12.4	8.8	11.8	10.0	49.1
2	108	24.1	6.5	16.7	4.6	8.3	39.8

TABLE 5.17
Percent occurrence of historical indicators and disturbance characteristics of vegetation units by adjacent block group category

	Block Group Category	
Characteristic	1 (n= 501)	2 (n= 108)
Historical Indicators:		
Building	1.8	4.6
Exotic Plantings	12.4	11.1
Hedgerow	1.8	6.5
Landfill	0.2	0.0
Road	1.4	0.9
Environmental Disturbance		
Dumping[1]	15.9	24.1
Erosion	7.6	4.6
Fire	2.2	0.0
Soil Compaction[1]	10.4	18.5
Trash[1]	53.5	75.0
Vandalism[1]	1.0	2.3

[1] Significant difference between block group categories (Pearson Chi-Square > 5.991, df=2, $p < 0.05$).

No differences were found in bank characteristics of units adjacent to the two block group types (Table 5.18). Access to the river differed ($p < 0.05$) in one of three categories. More units in block group category two had fences blocking access to the river.

DISCUSSION AND CONCLUSIONS

The objectives of our study were to classify and describe open spaces within 0.5 miles of the Chicago River system and to identify factors that may be important in modeling and predicting recreational use of these green spaces. We examined variables related to the physical and social characteristics of the river system at nine study sites in the corridor.

In our first level of analysis, differences in cover type among the study sites follow a pattern found in studies of green spaces in other U.S. cities (Nilon, 1991; Rowntree, 1984). Study sites near older or more densely developed neighborhoods closer to the central city (Evanston/Skokie, Ravenswood/Albany Park, Lathrop, The Loop, and Chinatown) differed from newer or less densely developed city and suburban neighborhoods further from the central city. Also, northern suburbs (Lake Forest, Glencoe) were different from southern study sites (Palos, Pullman/Blue Island). In addition, differences among the study sites were also likely related to the size of open space and the land use history of the sites.

We identified 11 variables that describe differences between vegetation units at the study site or block group level of analysis (Table 5.19). Three of the 11 variables that describe differences between study sites (cover type, vegetation class, bank vegetation) reflect the urban versus suburban pattern described in the previous paragraph. The remaining eight variables represent site characteristics and features that may lead to differences in perception and use of the river and associated open spaces. Four disturbance variables (dumping, soil compaction, trash, and vandalism) identify human activities that may lead to a negative impression of the site or unit. This is supported by the results of focus groups conducted in areas associated with each study site (see Chapter Two). Focus group participants who lived in study sites with the highest percentage of units with these disturbance factors had a negative perception of the Chicago River in their neighborhood.

The access variables indicate that the more urban study sites have less access to river reaches than the more suburban sites. This may also explain a negative perception of the river in some of the more urban focus groups.

Our second level of analysis focused on differences at a neighborhood or block group level that are defined by social, economic, and demographic differences. Race, income, and home ownership described the major differences between block groups in our study area. Relationships between these factors and physical site variables in many cases paralleled results of the study site analysis: Sites bordering block groups occupied largely by lower income black renters (like the study sites closer to the central city) tended to have higher rates of environmental disturbance, less access to the river, and less forest and woodland vegetation than sites bordering block groups occupied largely by upper income white homeowners (like study sites in suburban areas further from the center city). Like the study site analysis, these results may also suggest that differences in perception and use may occur at the neighborhood and block level. In both cases, these findings can help managers identify priorities for environmental improvement so that all residents can benefit from high quality nature access opportunities.

TABLE 5.18
Percent occurrence of bank characteristics and river access variables for units adjacent to river by adjacent block group category

	Block Group Category	
Characteristic	1 (n= 157)	2 (n= 19)
Bank Characteristics:		
Vegetation	84.1	84.2
Paved	9.6	26.3
Rock	22.3	47.4
Access to River		
Auto Access	**8.3**	**10.5**
Foot Access	79.0	31.6
Fence[1]	24.2	84.2

[1] Significant difference between block group categories (Pearson Chi-Square > 5.991, df=2, $p < 0.05$).

TABLE 5.19
Vegetation unit variables that differ ($p < 0.05$) at regional (study site) or neighborhood (block group) level

	Level of Analysis	
Variable	Study Site	Block Group
Unit Type		
Vegetation Cover	X	X
Dominant Vegetation Class	X	
Land Use History and Disturbance		
Dumping	X	X
Erosion		X
Soil Compaction	X	
Trash	X	X
Vandalism	X	X
Access to River		
Access by foot	X	
Fence blocking access	X	X
Paved bank	X	
Rock bank	X	
Bank Vegetation	X	

APPENDIX 5.1

TABLE 5.1.1
Vegetation Classes

Classification	Description	Frequency	Percent
CLOSED FOREST			
1. IB1a1a	Deciduous w/ broad leaved evergreen Understory phanerophytes	40	6.4
2. B1a1b	Deciduous w/ needle leaf evergreens Understory chamaephytes	6	1.0
3. IB1a1c	Deciduous w/ needle leaf evergreens Understory hemicryptophytes	26	4.1
4. IB1b1c	Deciduous w/needle leaf evergreens Understory hemicryptophytes	1	0.2
WOODLAND			
5. IIA2a1c	Evergreen coniferous w/rounded crowns Understory hemicryptophytes	1	0.2
6. IIB2a1	Deciduous w/o evergreen Understory hemicryptophytes	29	4.6
7. IIB2a1a	Deciduous w/o evergreen Understory phanerophytes	64	10.2
8. IIB2a1b	Deciduous w/o evergreen Understory chamaephytes	22	3.5
9. IIB2a1c	Deciduous w/o evergreen Understory hemicryptophytes	69	11.0
10. IIB2d1a	Deciduous w/o evergreen riparian Understory phanerophytes	1	0.2
11. IIB2d1c	Deciduous w/o evergreen riparian Understory hemicryptophytes	6	1.0
SCRUB			
12. IIIA1	Deciduous thicket	13	3.2
13. IIIB1a	Upland deciduous shrubland	7	1.1
14. IIIB2	Evergreen shrubland	1	0.2
HERBACEOUS			
15. VA1b1	Medium tall grassland w/ trees	35	5.6
16. VA1b2	Medium tall grassland w/ shrubs	6	1.0
17. VA1b3	Medium tall grassland w/o woody plants	9	1.4
18. VA1c1	Short grassland w/ trees	3	0.5
19. VA1c2	Short grassland w/ shrubs	2	0.3
20. VA2a1	Meadow w/ trees	1	0.2
21. VA2a2	Meadow w/ shrubs	1	0.2
22. VA2a3	Meadow w/o woody plants	4	0.6
23. VA2b1	Lawn w/trees	73	11.6
24. VA2b2	Lawn w/ shrubs	4	0.6
25. VA2b3	Lawn w/o woody plants	39	6.2
26. VA3a2	Tall forb	59	9.4
27. VA3a5	Perennial—ruderal vegetation on debris	1	0.2
28. VA3a6	Perennial—ruderal vegetation on cultivated land	5	0.8
29. VA3b1	Ephemeral halphytic vegetation	2	0.3
30. VA3b2	Ephemeral ruderal vegetation growing on debris	1	0.2
31. VB1a3	Freshwater vegetation	3	0.5
32. VB1c1	Forb flush	1	0.2
SCARCELY VEGETATED			
33. VID	Artificial surfaces	66	10.5
34. VIE	Compacted surfaces	20	3.2

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CHAPTER 6

CitySpace: Understanding Chicagoans' Outdoor Needs[1]

Dan Stolze[2]

INTRODUCTION

CitySpace is a joint planning effort by the City of Chicago Department of Planning and Development, the Chicago Park District, and the Forest Preserve District of Cook County to address open space opportunities in the City of Chicago. To provide a user-based perspective on open space issues, the Forest Service funded a research project, "Understanding Chicagoans' Outdoor Needs." The objectives of the research were to:

1) Identify city areas that have diverse types of open spaces, open space needs, population densities, and ethnic compositions;

2) Describe current outdoor activities and uses of open spaces by Chicagoans, and factors that enhance or inhibit these activities and uses;

3) Determine the range of open spaces that participants deem important, and the reasons for their importance;

4) Identify priorities for changing and improving open spaces that will enhance use of Chicago open spaces.

RESEARCH METHODS AND STUDY SITES

These objectives were addressed in focus groups with adults and teens in seven Chicago neighborhoods, a total of 14 focus groups in all. The study was directed by the Forest Service and the non-profit group Openlands Project and was conducted by the Metro Chicago Information Center (MCIC).

The Chicago River was one of several key open space types focused on in the study. Four of the seven neighborhoods chosen for the sample were located near the river (Figure 6.1):

1) Norwood Park: This northwest side community area has abundant forest preserve and park lands, and its residents, most of whom are white, rank near the top in socioeconomic status. The neighborhood chosen from Norwood Park borders the Caldwell Woods and Indian Road Woods Forest Preserves near Devon and Milwaukee Aves. These preserves allow access to the North Branch of the Chicago River and related recreational facilities.

2) Logan Square: This north side community area, primarily Latino, ranks among the lowest in the city in socioeconomic status and public open space opportunities. Participants for the focus groups came from the neighborhood near Fullerton and Western Aves., about ½ mile west of the North Branch of the Chicago River. The river is mainly industrial here with little public or private open land, and principal access opportunities are views of the river from bridges.

3) Bridgeport: This mixed white-Latino working class community is located on the near southwest side and ranks among the lowest in the city in public open space opportunities. Focus group participants came from the neighborhood near 32nd and Morgan Streets, about ½ mile east of Bubbly Creek (South Fork of the South Branch of the Chicago River). The river is mainly industrial here, with some private land that is open and undeveloped.

4) Hegewisch: This far south side community, solidly white middle class, is bordered by parks, forest preserves, and state conservation lands. The neighborhood chosen for study is near 130th Street and the Calumet Expressway and is bisected by the Calumet River. There is some public access to the Little Calumet River at the Beaubien Woods Forest Preserve, as well as some vacant industrial lands along the Calumet and Little Calumet Rivers. Major industries also line the river here.

Because of the proximity of the river to these neighborhoods, focus groups were asked about their perceptions and use of the river as an open space resource.

FINDINGS

KNOWLEDGE AND AWARENESS

Of the eight focus groups conducted in neighborhoods near the river, the two Logan Square groups talked least about the river. The river did not seem to be a salient component in their neighborhood open space experience, perhaps because so little of it is accessible, either physically or visually. In fact, when Logan Square teens did talk about the river, they mentioned places in other neighborhoods rather than in their own.

In contrast, for Norwood Park focus group participants the forest preserves of the North Branch of the Chicago River were a central part of their outdoor recreation experience. Participants in these groups were aware not only of the river in their neighborhood, but also of places along it to the north. Part of this awareness had to do with the North Branch Bicycle Trail, which runs north from their neighborhood for nearly 20 miles to its terminus at the Chicago Botanic Garden.

FIGURE 6.1
Map of study reaches with location of nearby cityspace focus groups

Participants in both the Bridgeport teen and adult groups also knew quite a bit about the river in their neighborhood. Bubbly Creek has an infamous past as a dumping ground for the former Chicago Stockyards. Its current use is also infamous; a large vacant stretch on the east side of the river by 35th Street is called "the rocks" and is used as a hangout by local teenagers and by the homeless. The term "the rocks" refers to the large rocks that line the upper bank above the river. Several wooded areas along the river in this neighborhood are called "the Amazons" for the dense pioneer tree vegetation that covers the land, giving it a wild, jungle-like appearance.

Hegewisch focus group participants did not make a clear distinction between the Chicago River corridor and other water bodies and waterways near their neighborhood. The Hegewisch community is surrounded by wetlands, forest preserves, large and small lakes, and small rivers in addition to the Calumet and Little Calumet Rivers; in conversations about the use of this complex system, it was difficult to separate Chicago River corridor waters from the others.

CURRENT PERCEPTIONS AND USE

Several Norwood Park adults mentioned using the nearby Bunker Hill Forest Preserve for picnicking, bike riding, in-line skating, and other activities, and they liked living near the forest preserves for the woods and wildlife. They felt the river contributed to the scenery of the area. Some mentioned hearing of a place where they could rent canoes and expressed an interest in canoeing the river. Although the adults generally felt the forest preserves were well-used and well-maintained, some adults saw problems due to the "sleaze-bags" that hung out there, drinking, fighting, and doing drugs. Participants in the teen group, who used the forest preserves frequently, mentioned activities similar to those mentioned by the adults as well as fishing in the river. Some of the teenage girls were concerned with the safety of using the forest preserve bicycle trails because the trails were isolated from people, and said they were not allowed to go there without an adult.

Participants in the focus group of Logan Square teens did not use the river in their neighborhood, but used park and forest preserve sites on the North Branch north of their neighborhood. These sites included River Park and LaBagh Woods. Teens used River Park mainly for athletic sports with no apparent ties to the river; several teens used the river at LaBagh Woods to hike along and explore. Their perception of the river at LaBagh was generally positive.

Participants in the Bridgeport focus groups generally felt negative about the quality of the river in their neighborhood. Several mentioned that the vacant land along Bubbly Creek was used as a fly-dumping area for garbage like old building materials, and that old and stolen cars were dumped along the banks and burned or driven into the river and sunk. The overall poor maintenance of lands along the river made them a source of rats. The river itself was thought by most to be highly polluted and to smell bad. The long history of industrial pollution of Bubbly Creek is thought to be the reason for the bubbling, and participants suspected that dumping from industries along the river continues today. Adult participants did not use the river, but mentioned that teens used the "rocks" and the "Amazons" to build bonfires, drink, use drugs, and entice police to chase them. The adults considered this use more of a nuisance than a serious problem. Teen participants used the rocks to hang out, play "it," and drink, and they mentioned that other teens and young adults had parties and used drugs there, did graffiti, and burned cars. They added that homeless people lived in abandoned cars there. The Amazons were less used; one part was recently deforested and other sections were fenced off. Still, the area attracted neighborhood children to ride bikes, catch snakes, and explore.

Hegewisch focus group participants liked the large undeveloped open spaces that surround their neighborhood and said those spaces made them feel separate from the metropolitan region, "like our own little town." The Chicago River corridor contributes to this feeling with forest preserve and vacant industrial lands along the banks of the Calumet and Little Calumet Rivers. The wetlands of Lake Calumet, Wolf Lake, and the rivers are appreciated for wildlife and other natural values, and some older participants recalled hunting raccoons and trapping muskrats in the area. Several teens used the area for boating and fishing, and some mentioned that for sport they would jump off the railroad bridge east of the Calumet Expressway into the Little Calumet River. Teens also mentioned winter sledding and summer exploring in an area of the river corridor they called the "Coal Hills," which they characterized as "toxic river land" where "there used to be these big fires that looked like quicksand so if you stepped in it all this smoke would come up, and you could burn your foot in it."

FUTURE ENHANCEMENT AND DEVELOPMENT

Participants in the Norwood Park focus groups felt the open space in the parks and forest preserves was adequate, and they desired little more in the way of facility improvements. In some cases, however, the respondents felt that the safety of these areas could be improved with more monitoring by police, such as along the bicycle trails.

Participants in the Bridgeport focus groups wanted additional open space in their neighborhood and saw the surplus vacant land along the river as a potential opportunity for many outdoor recreational uses. First, however, both the land and the river would need to be cleaned up. Few thought the river would ever be cleaned up enough to swim in, but several thought that canoeing and other water activities could realistically take place. Suggestions for improving the shorelands included cleaning up the area by the rocks and the Amazons, as well as planting trees to enhance the aesthetics.

Logan Square focus group participants said little about the river in their neighborhood, but generally felt that more, and safer, open space was needed.

Hegewisch focus group participants did not mention specific improvements that could be made along the Chicago River corridor, but in general felt that developing open space facilities and improving land and water quality could increase the recreational use of the open space in their neighborhood.

CONCLUSIONS

The CitySpace focus group study sheds additional light on perception and use of the Chicago River corridor by Chicago residents, and it profiles four communities not covered by the ChicagoRivers on-site or focus group studies. As with the previous studies, the CitySpace study shows that neighborhoods differed greatly in how people feel about and use the river for recreation. Variation in this study occurred with respect to environmental quality of the resource, amount of open space available along the river, accessibility of that open space, safety concerns, and other issues. Some of the unique shoreland areas in the Hegewisch and Bridgeport areas show how undeveloped urban open space functions as a recreational resource, especially for children, teens, and young adults. The Bridgeport area in particular showed the promise that currently undeveloped Chicago River land could yield in filling the demand for open space in severely underserved areas. Finally, with half of the focus groups in this study made up of teens, the CitySpace study provides unique insights that did not come out in the ChicagoRivers studies, and underscores the importance of understanding the perceptions and uses of open space by this major group of users.

NOTES

1. This research was funded in part through Cooperative Research Agreement 23-93-31 between the USDA Forest Service and the Openlands Project. For full details on the research project, see: Metro Chicago Information Center. (1994). *CitySpace Chicago Community Focus Group* Report. Chicago: MCIC.

2. Metro Chicago Information Center, 360 N. Michigan Avenue, Suite 703, Chicago, IL 60601.

C H A P T E R 7

Open Space Needs in Chicago's Chinatown Area[1]

Tingwei Zhang[2]

INTRODUCTION

Chicago's Chinatown community lies along the South Branch of the Chicago River just southwest of downtown Chicago (Figure 7.1). Chinatown is home to nearly half of all Chinese Americans living in the City of Chicago, and its unique cultural identity attracts tourists from throughout the metropolitan region. But although there are many interesting restaurants and shops to visit, park and open space amenities for Chinatown residents and tourists are sparse. Currently, the only public park in the core Chinatown area is the ⅓-acre Sun Yat-Sen Playground. A 1990 Chicago Park District study found the Chinatown area among those communities in "greatest need" of additional park space. In recognizing this deficiency, the Chicago Park District has proposed creating a new park on vacant industrial land along the South Branch of Chicago River. The recently purchased 12-acre parcel just north of Chinatown is awaiting plans and funding for development.

This study was conducted to better understand the ethnically based leisure needs and preferences of Chinese Americans living in Chinatown and to determine how the new river park could be designed to serve the needs of the community who would be its major users. The study provides important additional information to ChicagoRivers in that it focuses on one of the major new open space development projects in the corridor, and shows how river planning can address the needs and preferences of particular groups. The objectives of the study were:

1) To characterize leisure patterns of the Chinese American community in Chicago's Chinatown in terms of activities, frequency, and location;

2) To understand preferences and problems relative to leisure and recreation, in general and in relation to new park and open space development;

3) To identify variations in leisure activities and open space preferences as a function of age, gender, generational status, and other factors.

RESEARCH METHODS AND PROCEDURES

Face-to-face interviews (n= 203) were conducted with a representative sample of Chinese Americans ages 13 and over. Respondents were contacted in homes, stores, and community centers in the core Chinatown area. Closed- and open-ended questions provided information on respondents' current outdoor activities, locations where they participate in these activities, frequency of participation, size of group in which they participate for stated activities, and problems encountered when engaging in or attempting to engage in activities. Other questions focused on activity and environmental preferences, in general and as they related to the proposed new Chinatown park. Two group discussions were also conducted with children 6-12 years of age (n = 39) to obtain information from a group who would be important users of the new park. The children were asked a brief set of questions about outdoor activities they liked and locations where they played. They were also asked to draw pictures and describe in words what their "ideal park space" would be like if one were built in their community.

FINDINGS

CURRENT USE PATTERNS AND ACTIVITIES

Findings on activity preferences showed that for many Chinese Americans living in Chicago's Chinatown, outdoor recreation activity has strong cultural meaning and significance. These cultural ties are not only evident in participation in and preferences for traditional activities such as taiji, but may underlie activities that are also popular within mainstream Anglo American culture. "Relaxing" was one such activity. In contrast to most surveys of Anglo leisure, many respondents in this survey found it hard to define relaxing in terms of discrete leisure activities or separate it from the non-leisure part of their daily lives. "Swimming," another popular activity, has strong cultural ties to the Guangdon (Canton) province of China from where more than 90 percent of current Chinatown residents originated. Older, first-generation respondents were more likely to mention cultural ties with such activities, while younger adults and children were more likely to have adopted the leisure activities and patterns of their Anglo American peers.

BARRIERS TO PARTICIPATION

Top barriers to participation included lack of "availability of nearby open space" and "availability of facilities," two problems that might be reduced by the proposed new park along the South Branch. However, additional barriers such as the "quality of the natural environment," "safety," and "discrimination" could inhibit participation even when the new park is

FIGURE 7.1
Map of study reaches with location of Chinatown Area

built. On the environmental quality issue, some residents of Chinatown were concerned that the land for the new park, as well as the river itself, might be too polluted to be safely used for recreation. This feeling may have a cultural dimension in that Chinese culture views a sound natural environment as an extension of a decent human life, and if a new park is developed on a river still perceived as seriously polluted, residents may not accept the park as a part of their community. On the issues of safety and discrimination, several respondents mentioned past incidents of crime and racial epithets aimed at Chinese Americans in neighborhoods surrounding Chinatown, and they were concerned that these problems might carry over into the new park.

PARK DEVELOPMENT PREFERENCES

Despite these concerns, Chinatown residents were overwhelmingly positive about the prospects of a new park in their community. When asked what kinds of things they would like to see incorporated into the new park, respondents in the face-to-face interviews said they would most like to see natural and built amenities for passive use and appreciation, including landscaping (trees and flowers), seating areas, walking paths, and an attractive river edge treatment. Other desired facilities included a swimming pool and courts for various ball games such as basketball, volleyball, and tennis. In the children's group discussions, each child was asked to draw a picture of an ideal park. The drawings most often showed facilities for playgrounds (e.g., see saws, slides, swings) and picnics (e.g., picnic tables). Secondly, the children's drawings frequently included elements of nature—trees, flowers, grass, rivers, pools, red suns, white clouds, blue skies, and birds—in their images of an ideal park.

CONCLUSIONS

This study examined the leisure preferences and open space needs within a discrete, homogeneous ethnic community located along the Chicago River Corridor: the Chinese Americans of Chicago's Chinatown. Individual and group interviews with Chinatown adults and children provided a detailed look at ethnically based leisure preferences, in general and as they relate to a proposed new park along the South Branch of the Chicago River. Findings show that although some popular activities are no different from what might be expected for the mainstream Anglo American population, the meaning and significance of those activities have clear and unique ties to Chinese culture. Preferences for the new Chinatown park development mirror activity preferences, emphasizing facilities that enhance the natural environment for passive activities. Notable differences in activity preferences were found within the sample of respondents according to age, generational status, and other factors. The study deepens our understanding of how people perceive and interact with the Chicago River and provides a case study of how cultural and community needs can be assessed and incorporated into local corridor planning.

NOTES

1. This study was funded in part through Cooperative Research Agreement 23-93-26 between the USDA Forest Service North Central Forest Experiment Station and the University of Illinois at Chicago. For a more complete account of this study, see: Zhang, T. (1994). *Open Space Needs in Chicago's Chinatown Area.* Chicago, IL: Center for Urban Economic Development, The University of Illinois at Chicago; Zhang, T., and Gobster, P.H. (in press). Leisure preferences and open space needs in an urban Chinese American community, *Journal of Architectural and Planning Research.*

2. Additional information may be obtained by writing directly to Tingwei Zhang at the University of Illinois at Chicago. Urban Planning and Policy (M/C 348), 412 S. Peoria, Chicago, IL 60607.

C H A P T E R 8

Use of the Chicago River by Canoeists, Kayakers, and Rowers[1]

Joan M. O'Shaughnessy[2]

INTRODUCTION

Boating is becoming popular in some areas of the corridor, but many planners and interest groups feel the Chicago River can provide even more close-to-home boating opportunities for metropolitan Chicagoans. There is a particular interest in "human powered" boating opportunities in the corridor, i.e., canoeing, kayaking, and rowing. To support the goals of the ChicagoRivers assessment, this study took an in-depth look into the recreational use of the Chicago River corridor by canoeists, kayakers, and rowers. The objectives of the research were to:

1) Identify the use patterns and user characteristics of Chicago River canoeists, kayakers, and rowers;

2) Examine their motivations, preferences, and perceptions of their sport and their experience of the river;

3) Solicit recommendations for improving the river for non-motorized boating.

RESEARCH METHODS AND PROCEDURES

Because of corridor's length and sparse use, it was decided that the most efficient way of contacting Chicago River canoeists, kayakers, and rowers was through paddling and rowing clubs and through organizations that had sponsored canoe trips on the river. This sampling strategy misses non-affiliated boaters but is believed to capture a significant share of the population who has used the river. Postcards were sent to members of the Prairie State Canoeists (canoe and kayak club) inquiring if they had paddled or rowed the river in the previous 3 years, and if so, if they would care to fill out a mailed questionnaire. Questionnaires were also mailed to all members of the Chicago River Aquatic Center (rowing club) and to individuals who had taken organized canoe trips on the river sponsored by the Friends of the Chicago River, the Chicago Shedd Aquarium, and the North Branch Restoration Project. Completed questionnaires were returned by 138 of the 194 people who replied to the original postcard, a response rate of 71 percent.

The mail survey included closed- and open-ended questions about use of the Chicago River, respondents' experience in boating, reasons for using the Chicago River, satisfaction and enjoyment of their most recent Chicago River trip, and suggestions for improving the river for non-motorized boating.

FINDINGS

USE PATTERNS

The respondent sample was nearly evenly divided between those who belonged to boating clubs and those who attended sponsored trips. About 1/5 of the sample were rowers, and the rest were mostly canoeists. Club members tended to use the Chicago River more frequently and over a greater number of years than those attending sponsored trips; more than 2/3 of rowers used the river weekly or daily. Group size was highly dependent on user type; those on sponsored trips used the river in groups of 6 or more persons and club members padded or rowed in single boats.

More than 1/4 of the respondents lived within 5 miles of the section of the Chicago River they last paddled or rowed. The majority lived 6-20 miles from their boating location on the river, while few came from more than 20 miles away. In order of popularity, favorite stretches of the river were the North Branch, the South Branch, Skokie Lagoons, Main Fork, and the North Shore Channel. Rowers tended to favor the South and Main Branches where their boathouse was located, while canoeists and kayakers tended to favor the North Branch and Skokie Lagoons. Both rowers and paddlers tended to make round trips rather than one-way trips, with the slow current of the river facilitating upstream travel.

MOTIVATIONS AND PREFERENCES

Canoeists and kayakers differed from rowers and Prairie State Canoeists differed from organized canoe trip participants in their motivations for boating the Chicago River. Of 15 closed-ended responses, the 3 top-ranked motivations for each group are shown in Table 8.1.

TABLE 8.1
Top motivations for boating the Chicago River, by group

Sponsored Trip Participants	Prairie State Canoeists	Chicago River Aquatic Center
1. To be in nature	1. To see wildlife	1. To get physical exercise
2. To do something new	2. To be in nature	2. To row close to home
3. To have an adventure	3. To have privacy/ solitude	3. To have privacy/ solitude

Although both sponsored trip participants and Prairie State canoeists were motivated to seek nature experiences, motivations for doing something new and adventurous ranked high for sponsored trip participants but low for canoe club members. Likewise, both Prairie State Canoeists and Chicago River Aquatic Center rowers sought privacy and solitude in their Chicago River outings, yet their top-ranked motivations for seeing wildlife (for canoeists) and getting exercise (for rowers) ranked near the bottom of each others' lists.

Open-ended responses to questions about river preferences found environmental, cultural, social, and facilities/management issues both adding to and detracting from boaters' enjoyment of the Chicago River (Table 8.2). As is presumably true in more pristine nature settings, access to nature provided respondents the greatest pleasure on their Chicago River trips. Respondents' own words often conveyed the feeling of joy they appeared to experience in paddling or rowing a river running through the middle of an urban environment: "incredible beauty so close to home," "wonderful experience around every bend," "the sunrise when you are on the river is spectacular." Unique to an urban river setting, however, is the enjoyment that the river's cultural aspects provided respondents. Comments about city views, fascinating bridges, nearness to the industry along the banks—all the cultural components of trips on the Chicago River—was the second most frequently mentioned category by respondents for enhancing their river trips. In this regard, urban rivers potentially offer a range of opportunities not available on wildland rivers.

TABLE 8.2
Top-ranked items adding to or detracting from boaters' enjoyment of the river

Adding to	Subtracting from
1. Nature and outdoor experiences	1. Poor water quality and/or garbage
2. Cultural aspects	2. Motorized boats
3 Social aspects	3. Riverbank destruction
4. Sense of serenity or solitude	4. Obstructions, difficult portages
5. Sense of adventure or exploration	5. Lack and difficulty of access
6. Water conditions/ weather	6. People on the banks
7. Other	7. Lack of bathrooms and rest, emergency stops
8. Educational aspects	8. Weather
9. Accessibility	9. Lack of canoeing experience
	10. Other

MANAGEMENT RECOMMENDATIONS

The respondents' top recommendation for improving the recreational use of the Chicago River for boating was improving water quality and cleaning up garbage. Their other primary recommendations included providing more and easier places for entering and leaving the water, adding river facilities and rest stops, and resolving issues about powerboats and barges. Recommendations less often mentioned included providing access information, education, and publicity about the river and its facilities; removing major obstacles such as dams and providing portages; and maintaining and restoring nature.

Results of the study strongly support use of the Chicago River for non-motorized recreational boating. Respondents were highly satisfied with their river trips and were generally pleased with the many natural and cultural attributes the Chicago River offers, although they cited some significant problems that detracted from their enjoyment. Better marketing and improved river management can expand current use of the river to a larger, more diverse group of people and make the river more amenable to non-motorized use.

NOTES

1. This research was funded in part by the North Central Forest Experiment Station of the USDA Forest Service. For full details on the research project see O'Shaughnessy, J.M. (1994). *Traveling the Waters of the Chicago River: An Urban Recreation Resource for Canoeists, Kayakers, and Rowers.* Unpublished Master's Thesis, Department of Geography and Environmental Studies, Northeastern Illinois University, Chicago, IL.

2. Joan O'Shaughnessy, Skokie River Restoration Project, Chicago Botanic Garden, P.O. Box 400, Glencoe, IL 60022.

CHAPTER 9

Summary of People and the River

Paul H. Gobster and Lynne M. Westphal

INTRODUCTION

Five principal studies (including the U.S. Army Corps of Engineers' telephone survey published in a separate report entitled, "Resident Use and Perception of the Chicago and Calumet Rivers") and three support studies give a comprehensive look at how people perceive, use, and interact with the Chicago River. This final chapter summarizes the main characteristics and findings of these social science investigations and attempts to draw some lessons for future planning and management of the river for recreation and related values.

SUMMARY OF STUDY CHARACTERISTICS

Table 9.1 summarizes the main characteristics of the studies in this report. These characteristics, detailed below, include the scope of the studies and their objectives, sample, and methods of investigation.

SCOPE

A multiple study approach enabled us to understand both the breadth and depth of issues affecting people and the river. At the broad scale, the corridor-wide survey conducted by the U.S. Army Corps of Engineers provided information from users and non-users across the entire river corridor. A more narrowly defined survey of individuals who had canoed, kayaked, or rowed in the corridor also provided information about perception and use of the corridor's northern half, down to and including the South Branch of the Chicago River. This broad scale "demand" information was complemented by information on the current and anticipated "supply" of recreation and open space opportunities in each reach as identified through interviews with resource experts.

Building on this corridor-wide understanding of demand and supply, additional studies provided more in-depth looks at specific places within the corridor. Studies of neighborhood residents, recreation habitats, and Chinatown and CitySpace residents examined recreation and open space demand and supply issues at the neighborhood level. The on-site user survey provided a closer look at perceptions and uses of important or popular sites in the corridor. Figure 9.1 shows the neighborhood and site locations included in these studies. These more local studies were essential to complete the picture sketched out by the corridor assessment.

OBJECTIVES

As stated in the introductory chapter, the overall objectives of the social science studies conducted under the ChicagoRivers Demonstration Project were:

1. To identify and characterize the major constituent groups, settings, and recreational opportunities in the corridor.
2. To identify patterns of recreational use, perceptions of issues, and preferences for recreational activities, settings, and experiences.
3. To examine commonalities and differences in uses and perceptions for different areas or for different users of the river corridor.
4. To make recommendations for enhancing the river for recreation and related values and for improving river corridor planning and management based upon research findings.

Together and separately, individual studies were designed to fulfill these overall objectives. Surveys of neighborhood residents, on-site users, corridor residents, boaters, and CitySpace and Chinatown neighborhoods each emphasized social questions about use, perceptions, and preferences (objective two), but did so for different user populations. In contrast, studies of resource experts and recreation habitats emphasized questions about the physical settings, the groups who own or manage them, and/or the recreational opportunities present or planned for them (objective one). Most of the studies examined similarities and differences in study uses and perceptions (objective three), but did so for different locations (e.g., reaches, sites, neighborhoods), social group (e.g., age, social class), or group types (e.g., riparians vs. non-riparians, recreational activity type). Finally, a majority of the studies included recommendations for river enhancement and improvements in planning and management (objective four), either by summarizing the comments from study respondents or by drawing conclusions based on other research findings.

SAMPLE

Following the challenge from the original "Voices of the Stream" symposia that provided the catalyst for ChicagoRivers, we cast a broad net to listen to all constituent groups and individuals. In the eight studies covering the social dimensions of the river, we talked with more than

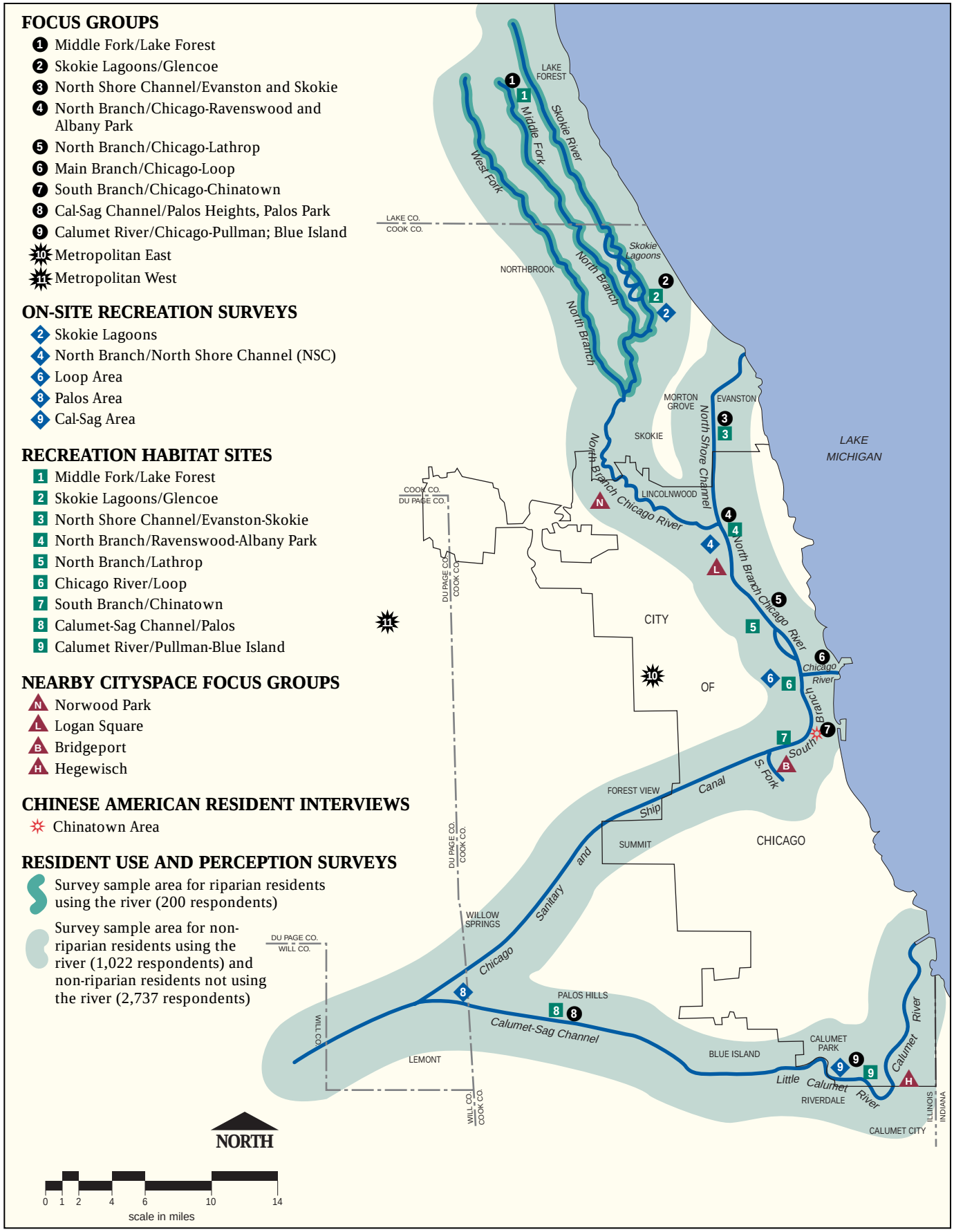

FIGURE 9.1
Map of study reaches with location of ChicagoRivers Demonstration Project Social Science Studies

TABLE 9.1
Characteristics of ChicagoRivers Demonstration Project social science studies

Chapter/Study	Scope	Objectives	Sample Size	Methods
PRINCIPAL STUDIES				
2. Nearby neighborhood residents	9 neighborhoods	• Select representative river neighborhoods • Examine awareness, perceptions, and use • Solicit ideas for river enhancement	98 Total (adults)	Focus groups
3. On-site recreationists	6 areas	• Identify full range of activities in corridor • Examine use patterns • Assess perceptions and river importance	582 Total	On-site survey
4. Resource experts	Corridor-wide	• Profile key groups who influence the river • Inventory current/potential recreation supply • Summarize issues for key activities • Identify strategies for river enhancement	27 Formal[1] 11 Informal 38 Total	Face-to-face interviews
5. Recreation habitats	9 neighborhoods	• Classify physical aspects of river open space • Determine user access to river • Identify sociodemographics of neighborhoods • Examine social-physical relationships	629 Vegetative units 109 Census block groups	Census data; trace measures
Corridor residents[2]	Corridor-wide	• Obtain statistically representative user sample • Assess use and non-use of river • Identify perceptions, preferences, and uses • Solicit ideas for river enhancement	200 Riparians 1,022 Nonriparians 2,737 Non-users 3,959 Total	Telephone survey
SUPPORT STUDIES				
6. CitySpace neighborhood residents	4 neighborhoods	• Identify diverse Chicago communities • Broadly describe current open space uses • Assess importance of open space types • Identify priorities for improving open space	32 Teens 32 Adults 64 Total	Focus groups
7. Chinatown residents	1 community area	• Understand Chinese American leisure needs • Assess preferences for new park development • Examine age, gender, generational differences	25 Teens 178 Adults 39 Children 242 Total	Personal and group
8. Canoeists, kayakers, and rowers	Corridor-wide (Reaches 1-7)	• Identify use patterns and user characteristics • Assess motivations, perceptions, preferences • Solicit ideas for river enhancement	138 Total	Mail survey

[1]The 27 formal interviews involved 44 people. [2]Study appears in a separate ChicagoRivers technical report entitled, "Resident Use and Perception of the Chicago and Calumet Rivers.".

5,000 people; these interchanges ranged from brief phone calls with corridor residents on why they had not used the Chicago River, to two-hour-long personal interviews with major providers and managers of open space.

Groups sampled in the individual studies have already been mentioned in the context of the study objectives discussed above. For comparison, Table 9.2 summarizes the major types of constituent groups included in the studies and identifies the kinds of subgroup comparisons made.

INVESTIGATION METHODS

Each study in this effort used the particular methods that would most effectively and efficiently address the individual and overall objectives of ChicagoRivers. These methods included:

- **Focus groups:** Focus group methods used in studies of nearby neighborhood residents, CitySpace neighborhood residents, and the Chinatown children's subsample (group discussion) gave us the opportunity to explore issues in depth, generate ideas from the interaction among participants, and use creative visualization tools to uncover ideas and options for enhancing the river corridor.
- **Face-to-face personal interviews:** Face-to-face personal interviews used in the resource expert study and the Chinatown study also provided an opportunity for in-depth communication. The chief advantage of this tool, however, was that it provided access to groups who are often difficult to reach through mail or telephone.
- **On-site survey:** The on-site survey provided an important way to identify the current range of activities in the corridor, and a means to examine the use of sites along the river, independent of where people lived.
- **Census data:** Census data used in the recreation habitat study helped profile resident groups along the corridor from social, demographic, and economic perspectives, and helped characterize and compare corridor reaches (via census tracts) and neighborhoods (via block groups).

TABLE 9.2
Groups sampled and subgroup comparisons made in the studies

Groups sampled	Subgroup comparisons
Nearby neighborhood residents	• those living in different neighborhoods along the corridor
On-site Users	• those recreating at different places in the corridor • those engaging in different activities—walking, biking, motor boating, sitting/relaxing, eating lunch
Resource Experts	• public land managers, private non-profit groups, private commercial recreation providers, and private commercial and industrial users
Corridor residents	• users and non-users of the river • riparians (live right on the river) and non-riparians (live off the river but in the corridor) • those living in different reaches along the corridor
CitySpace neighborhood residents	• those living in different neighborhoods along the corridor • teens and adults
Chinatown residents	• age, generational status, and other social and demographic factors
Canoeists, kayakers, and rowers	• paddlers and rowers • club members and sponsored trip participants

- **Observed trace measures:** Trace measures of access, previous land use, and environmental disturbance provided clues about how open spaces along the river are or could be used for recreation (recreation habitat study).

- **Telephone survey:** The telephone survey method obtained a random, statistically representative sample of corridor residents. This makes it possible to project findings from the sample to the study population within a measurable margin of error.

- **Mail survey:** Surveys mailed to past river boaters identified from organization mailing lists made it possible to efficiently contact a sample from a specific population that would be difficult to obtain on-site or assemble for focus groups because of their small numbers and scattered locations.

SUMMARY OF STUDY FINDINGS

When we examined research findings across all these studies, three major interrelated themes emerged: places, activities, and issues. First and foremost, when people talked about river and river-based activities and issues, they did so with reference to specific places to which they have physical, social, and emotional attachments. Discussions about places focused on people's awareness and knowledge of the river, places often used or otherwise regarded as special, and the meaning and values people held for the river or the sites, areas, or settings with which they were familiar. Second, recreation is often thought of as an activity-based pursuit, and the discussion of existing and desired opportunities for recreation usually took place within the context of a given set of activities. Thus, activities—use types and related patterns of use—formed another major theme in the findings from the different studies. Finally, discussions about providing activity opportunities often hinged on whether a certain set of conditions was being or could be met. These conditions defined issues that mostly fell into five broad categories: water quality, scenery and nature, facility development and maintenance, safety and user conflicts, and access.

In the remainder of this section, we attempt to synthesize the findings from all of the studies with respect to the themes of places, activities, and issues. Tables for each of these themes highlight principal findings, while the discussion in the text focuses on common and divergent findings among the studies.

PLACES

People's concept of place was fundamental to how the river was perceived and used. For most people, the Chicago River was not a 156-mile-long corridor that traverses the metropolitan region. Instead, it was the "ditch" in their backyard, the stream flowing under the bridge they sit on in their neighborhood park, or the stretch of water they enjoy while eating lunch at a downtown cafe or canoeing or bicycling at a county forest preserve. In other words, people know the river as a place with a specific location and limited extent, usually defined through direct experience. This is evident in the findings on "place knowledge" summarized in Table 9.3. People usually did not make connections between their place and the larger system of interconnected river reaches; when they did, it was often more on an intellectual and functional level than on a personal and emotional one. Thus, what was central to most people's conception of the Chicago River corridor was the place or places to which they had close personal ties.

Many of these specific locations along the river, as identified by experience, familiarity, and use, were considered "special places" to those who talked about them. A few of these special places were well known and had almost a symbolic or iconic status to those with whom we spoke in the different

TABLE 9.3
Summary of findings—place knowledge

NEIGHBORHOOD RESIDENTS	
• **Place Knowledge:**	Little knowledge of river beyond neighborhood and downtown, not seen as a connected system; different, colloquial names for reaches
• **Special Places:**	Nearby neighborhoods, local parks and preserves, downtown
• **Place Values:**	Passive use, scenery, symbolic values of nature (Middle Fork of the North Branch of the Chicago River, Skokie Lagoons), history (downtown)
ON-SITE USERS	
• **Place Knowledge:**	Most saw river as "very important" to their activity that day
• **Special Places:**	Nearby neighborhoods, river parks, forest preserves (LaBagh Woods, Skokie Lagoons), bike paths, downtown, marinas, restaurants
• **Place Values:**	Nearby nature/open space access, water use and appreciation, facilities, scenery, solitude and escape from the city
RESOURCE EXPERTS	
• **Place Knowledge:**	Experts had detailed knowledge of their properties and reach; felt recreationists saw river as important to use, if even as a backdrop
• **Special Places:**	Many sites in every reach
• **Place Values:**	River provides full spectrum of values, including nature, scenery, history, culture, recreation, economic
RECREATION HABITATS	
• **Place Knowledge:**	Inventory of vegetative, land use, and demographic characteristics of 9 neighborhood areas (same areas as neighborhood residents' study)
• **Special Places:**	Identifies areas of closed forest and other important vegetative types
• **Place Values:**	Quality vegetation, good access and good maintenance indicate quality "habitat" for recreation
CORRIDOR RESIDENTS	
• **Place Knowledge:**	Non-riparians visited Chicago River, Skokie Lagoons, and North Branch of the Chicago River most often; riparians most often visited reach on which they lived
• **Special Places:**	Most favored sections were Chicago River, Skokie Lagoons, North Branch of the Chicago River.
• **Place Values:**	Scenery, place for activities, escape from city, nature, history, quiet
CITYSPACE NEIGHBORHOOD RESIDENTS	
• **Place Knowledge:**	Varied by location: some unaware of river in their neighborhood; for others, river is a central part of their outdoor experience
• **Special Places:**	Local places of significance
• **Place Values:**	Nature, scenery, wild/undeveloped, escape/unsupervised
CHINATOWN RESIDENTS	
• **Place Knowledge:**	Most aware of river site for proposed new park
• **Special Places:**	Local park and private spaces in the community, some parks outside community but nothing currently on the river
• **Place Values:**	Passive use, natural environment, recreation facilities for children and adults
CANOEISTS, KAYAKERS, AND ROWERS	
• **Place Knowledge:**	Most had boated 2 or more sections in past 3 years; most often visited stretches were North Branch of the Chicago River, Chicago River, Skokie Lagoons
• **Special Places:**	Favored stretches were North Branch of the Chicago River (paddlers), Chicago River (rowers)
• **Place Values:**	Nature, exercise, wildlife, solitude, show support for river, learn, adventure, something new, escape urban pressure

studies. Places such as the Skokie Lagoons and the Chicago River downtown were such places. More often, however, special places were highly localized and in many cases were mentioned by only one person or a few people. We heard about hundreds of such places, some with official names such as the Middle Fork Savanna and the I&M Canal trail, and others with colloquial names known only to local residents, such as the "Amazons" and the "Coal Hills."

These special places were valued for many reasons. Some settings had outstanding natural or cultural attributes that made them special. Other places looked "ordinary," but provided a special area of solitude or escape from the city and from other people. Some special places were even more personally defined by the memories of experiences of those who used them. A few people in the studies refused to reveal the locations of special places for fear that their discovery by others would ruin the very qualities that made them special.

In summary, although planners often find it useful to think of corridors and open spaces as interconnected systems, we must consider the standpoint of people's everyday experience and recognize the importance of viewing the Chicago River System as an aggregate of discrete places. Planning that focuses on places—and the qualities and values that make them special—will help ensure that planning strategies are responsive to local needs and desires. At the same time, however, planners and managers can also help constituents see the big picture by tying local needs to overall strategies for protecting and enhancing the corridor.

ACTIVITIES

Although people's concepts and feelings toward place often reveal some of the most significant information for planning and managing sites, areas, and reaches along the corridor, people often most directly identify their concerns and desires for a place in terms of the activities they pursue or would like to pursue there.

The studies revealed a great diversity of activities and activity types along the corridor (Table 9.4). In its most narrowly defined sense, the river is used for water-based recreation activities like fishing and boating (and in a very few cases, swimming). The amount of this water-based use is small in comparison to overall corridor recreation activity, but it is increasing, and such activities should be considered in planning for the future of the river.

A much greater proportion of river corridor use is dedicated to land-based recreation that depends in part on the river as an important setting for activities. Many "passive" recreation and leisure activities fall into this use type, ranging from eating lunch or picnicking with the river as a scenic backdrop, to birdwatching and other nature-related activities possible only because the river provides the habitat for plants, animals, or entire ecosystems that are present. The use patterns associated with these activities are similarly diverse, ranging from short daily visits to nearby places to day-long outings in remote areas. For some, especially those who live on or near the river, passive use extends beyond what one might consider recreation activity, and daily viewing/experiencing the river contributes to these individuals' overall quality of life. In planning for these diverse passive activities, attention should be placed not only on providing spaces and facilities that enable use to take place, but also on doing so in a manner that enhances people's appreciation for the river and its setting.

In some cases, the river corridor supplies space for the pursuit of recreation activities that seem to depend little on the adjacent water environment. These activities include athletic team sports like baseball and soccer, and passive activities like reading and card playing. Findings show that the use patterns for these activities vary with respect to frequency and length of use, as well as along other important parameters such as group size. Despite these variations, findings from the on-site survey suggest that although some of those who engage in such activities may feel the river is not important to the enjoyment of their activity, many more think it is at least somewhat important. Because of this and because these activities are legitimate uses of urban park and open space, it is important to consider river appreciation in planning and managing for these activities.

ISSUES

The concerns and desires for improving places and activities in the corridor centered on five broad issue categories: water quality, scenery and nature, facility development and maintenance, safety and user conflicts, and access (Table 9.5). In most studies, water quality was the foremost concern. Respondents felt the waters of the Chicago River corridor were polluted, and although many saw recent signs of improvement, they felt much more work needed to be done. In several of the studies, it was apparent that people held an idealized image of what a "clean river" should be. This image—clear and fast-moving like a mountain stream—might limit the extent to which efforts to improve the water quality of the Chicago River can ever meet people's expectations. Perceptions of water quality differed with location, types of pollution, user group, and activity type. For example, respondents in the southern reaches of the corridor generally felt the river had more and worse kinds of pollution problems (e.g., toxic wastes, dumping) than did respondents in the northernmost reaches (e.g., natural debris, turbidity), and those who engaged in water-dependent recreation activities like boating often showed higher concerns about pollution than those who only walked or relaxed along the river. These findings indicate that there is no blanket solution for addressing water quality concerns, and they suggest that activities to improve water quality (or inform people about improvements) must be targeted to the particular locale or interest group.

TABLE 9.4
Summary of findings—activities

NEIGHBORHOOD RESIDENTS	
• **Use Types:**	Range from viewing river to passive nature-oriented activities to active sports; main focus on walking, biking, and passive activities
• **Use Patterns:**	Frequency ranges from daily to rarely. River used both as a corridor (trail recreation) and for distinct places (picnicking)
ON-SITE USERS	
• **Use Types:**	Fifty activities categorized: walking/hiking, biking, motor boating, fishing, sitting and relaxing, eating lunch, other passive, other active
• **Use Patterns:**	Most use was individual or in small groups; most drove to reach site; most use was from nearby neighborhoods or offices, but Skokie Lagoons, Palos, and Cal-Sag were regional attractions; half visit river weekly or more, and most visits were less than one hour long
RESOURCE EXPERTS	
• **Use Types:**	Four main activity types examined: boating (canoe/kayak, rowing shell, motor boat, excursion boat), fishing (shore and boat), trail recreation (walking/hiking, biking), and natural and cultural resource-based recreation and education (appreciative, educational, stewardship, and consumptive)
• **Use Patterns:**	Varies greatly by activity
RECREATION HABITATS	
• **Use Types:**	Examined historical indicators of land use and present features that facilitate or constrain use of the river
• **Use Patterns:**	Not examined
CORRIDOR RESIDENTS	
• **Use Types:**	Top mentioned activities included walking/jogging, sightseeing/tour boating, picnicking, bicycling, motor boating, observing wildlife
• **Use Patterns:**	Frequency of use highest for birdwatching, observing other wildlife, and walking/jogging; for non-riparians, most visited reaches were the Chicago River, North Branch of the Chicago River and Skokie Lagoons; riparians most often visited reach near their homes
CITYSPACE NEIGHBORHOOD RESIDENTS	
• **Use Types:**	River used by adults for viewing, trails, and aesthetic appreciation; use by youths included these activities and nature/adventure exploration, parties, boating, fishing, and even swimming
• **Use Patterns:**	Varies by neighborhood and age group from frequent to rarely
CHINATOWN RESIDENTS	
• **Use Types:**	Little river use at present; non-river activities include relaxing, ball playing, swimming, and taiji; desired uses for new park include passive nature appreciation, facilities for swimming and ball playing
• **Use Patterns:**	Frequency ranges from daily for relaxing and taiji to occasionally for sports activities; variations in frequency by activity and age
CANOEISTS, KAYAKERS, AND ROWERS	
• **Use Types:**	Primary use for canoeing/kayaking and rowing; related activities include nature exploration, exercise
• **Use Patterns:**	Most individual rowers used river daily or weekly, while most of those on organized trips were "first timers"; ⅓ had used river during 3 or more seasons; group size varied by group type; most outings were round trips (i.e., same put-in/take-out location); most trips were on the Chicago River (rowers) or North Branch of the Chicago River (canoeists/kayakers)

TABLE 9.5
Summary of findings—issues

NEIGHBORHOOD RESIDENTS	
• **Water quality:**	Most felt water was polluted, but indicators of pollution varied by group; water cleanup was the chief issue for most groups
• **Scenery/nature:**	Natural beauty was important in all locations; cultural scenery—buildings, bridges—was a positive feature in the downtown area
• **Facilities/upkeep:**	Maintenance of existing facilities and landscape is important; new facilities are also important, but should be appropriate to the setting
• **Safety:**	Included personal safety and the effect of vegetation on crime; physical safety from drowning or contact with polluted water
• **Access:**	Dimensions included: convenience/proximity to river, public ownership of property, fencing, continuity of access along the corridor, disparity of access/facilities between different reaches
ON-SITE USERS	
• **Water quality:**	Biggest problem discussed: over 1/2 saw water quality, dumping as problems; 1/3 said odor a problem; problems biggest for boaters, Cal-Sag groups, but these groups also saw biggest improvements
• **Scenery/nature:**	Scenery & nature most-liked river features; lack of natural areas rated as problem by 1/3 overall, highest for downtown group
• **Facilities/upkeep:**	Lack of facilities biggest problem after water quality and dumping; need for cleanup, trails, restrooms, boat launches, fish stocking, trees
• **Safety/Conflicts:**	Personal safety a problem for 1/5 overall, highest for walkers, North Branch & Palos groups; graffiti/vandalism a problem for 1/4, but high for North Branch group; conflicts less a problem, but higher among boaters and anglers, North Branch and Cal-Sag groups
• **Access:**	1/3 overall felt lack of open space was a problem; fences a problem for 1/4 in Chicago parks; best access/open space at Skokie Lagoons
RESOURCE EXPERTS	
• **Water quality:**	Recent improvements have increased use, especially for fishing; less an issue for other uses, though particular aspects can affect certain groups (e.g., in-stream debris affects North Branch boaters)
• **Scenery/nature:**	Natural and cultural scenery are important attributes of corridor for in-stream and streamside activities; design and engineering of river improvements can enhance or degrade aesthetics
• **Facilities/upkeep:**	Major discussion topic, especially as relating to trail development
• **Safety/conflicts:**	Major topic, especially for boating; many physical safety/conflicts between motor/non-motor recreational boats, commercial/recreational boats; fish consumption is a health concern; personal and physical safety are concerns at some locations in corridor
• **Access:**	Major topic for boating, fishing, trail activities; dimensions include access in and out of water, access to shore, visual access, fencing, equality of access for different users/different areas of the corridor
RECREATION HABITATS	
• **Water quality:**	Not addressed
• **Scenery/nature:**	Units identified with special or unique vegetative cover; exotic vegetation, soil compaction and erosion; low income-minority areas had less closed forest and more erosion
• **Facilities/upkeep:**	Units identified with dumping, trash, and vandalism; low income-minority areas had less upkeep
• **Safety/conflicts:**	Not addressed
• **Access:**	Units identified with roads and paths providing access to the river, fences blocking access; low income-minority areas had less access

TABLE 9.5 (Continued)
Summary of findings—issues

CORRIDOR RESIDENTS	
• **Water quality:**	Murky water, dumping, smells, "other" are problems for >⅔ non-riparians on most-visited reach, less for riparians (upper reaches)
• **Scenery/nature:**	Aesthetics highest-ranked value for most visited reach; lack of natural areas a problem for >½ non-riparians and ⅓ riparians
• **Facilities/upkeep:**	Lack of developed facilities a problem on most-visited reach for >½ non-riparians and about ¼ riparians
• **Safety/conflicts:**	Personal safety a problem on most-visited reach for >½ non-riparians and ⅕ riparians; conflicts were least-mentioned problems
• **Access:**	Lack of shore access a problem on most-visited reach for nearly ½ non-riparians; not problem for most riparians
CITYSPACE NEIGHBORHOOD RESIDENTS	
• **Water quality:**	South Fork of the South Branch of the Chicago River called "highly polluted" by Bridgeport groups; Hegewisch teens mentioned jumping off bridges into Little Calumet, and Hegewisch and Norwood Park teens fish and boat
• **Scenery/nature:**	Most felt the river contributed to the aesthetic and nature/wildlife values of their neighborhood; even abandoned industrial wildlands had an aesthetic appeal and attracted children for nature exploration
• **Facilities/upkeep:**	North Branch of the Chicago River forest preserves well-maintained; river lacked facilities and was poorly maintained in most other neighborhoods
• **Safety/conflicts:**	Some areas used by gangs and teens for drugs and drinking
• **Access:**	Access to river poorest in Logan Square; Bridgeport and Hegewisch groups could use more public park space
CHINATOWN RESIDENTS	
• **Water quality:**	River polluted to the extent that it could deter use of proposed park
• **Scenery/nature:**	New park should provide scenery/natural environment values
• **Facilities/upkeep:**	Present recreation facilities are minimal
• **Safety/conflicts:**	Areas outside Chinatown core (including new park) seen as dangerous
• **Access:**	New park will serve community recreation/open space needs
CANOEISTS, KAYAKERS, AND ROWERS	
• **Water quality:**	Pollution/garbage top-ranked dislike
• **Scenery/nature:**	Nature and outdoor experiences top-ranked like
• **Facilities/upkeep:**	Lack of bathrooms and emergency stops are problems
• **Safety/conflicts:**	Obstructions, difficult portages, and powerboat wakes are problems
• **Access:**	Lack and difficulty of access points

The importance of other issues varied both within and across the study samples. For example, in the focus groups of nearby neighborhood residents, personal safety was a principal concern for the Evanston-Skokie and Ravenswood-Albany Park groups, but protection of the natural environment outweighed safety concerns in the Lake Forest and Glencoe focus groups. Like water quality, the issues of safety and access were frequently multidimensional in nature: safety concerns included both personal (e.g., fear of crime) and physical safety (e.g., concerns of falling in the water), while access concerns included convenience, visual-physical access, public land ownership, equal access among groups, access into and out of the water, and other issues. It is clear when looking within and across studies that many disparities exist among groups and locations on most issues. Many of these, such as water quality and the natural environment, result from the physical nature of the corridor and the historical evolution of development across the metropolitan region, not from any deliberate attempt to shortchange one area or group to benefit another. Still, assets and shortcomings identified by individual studies and by comparison of findings across studies can help planners and managers identify how positive outcomes might be repeated elsewhere in the corridor and where current gaps might be filled.

CONCLUSIONS

In this last section we make some brief concluding comments about each of the principal objectives addressed in the studies:

- **Characterization of groups, settings, and opportunities:** A great diversity exists in the corridor, not only of resources and facilities available or proposed, but also of constituents who have an interest in them. The resource experts and recreation habitat studies were most directly aimed at identifying current and proposed opportunities for recreation and environmental enhancement; these studies can provide a solid basis for future corridor-wide planning and for development of realistic options and priorities for specific reaches or neighborhoods. Likewise, the entire set of studies in *People and the River* comprehensively characterizes the major constituents in the corridor, and such information can be helpful in implementing local and regional projects.

- **Demand for activities, settings, and experiences:** The summary of study findings on places, activities, and issues above provides substantial range and depth of demand information. Comparing this with information on supply suggests that in most cases planners and managers are on the right track, and that the corridor is ripe for further recreational enhancement if the appropriate precautions are taken and improvements are made. Serious problems remain with water quality, safety, and other issues and will take many years of concerted effort to alleviate. However, in most studies we found people had seen positive change occurring and were confident things could be further improved.

- **Variations in perception and use:** Research objective three examined variations in uses and perceptions for different areas or for different users of the river corridor. In many cases both within and between studies, we found differences in how people perceived and used the river and in what issues and concerns they found important or problematic. On a general level, however, people agreed much more than disagreed about what was important. In most cases there was a high degree of concern for the river at the local neighborhood level, a desire to see a diversity of activities and appropriate support facilities, and a demand for improved water quality, safety, access, and natural scenery. The information on variations in perceptions and use can help target planning and management efforts for specific locations and groups, keeping in mind that most people want to see the same general kinds of improvements made.

- **Strategies for enhancing Chicago rivers for recreation and related values:** Finally, conclusions about objective four for recommending improvements in planning and management activities show a need for taking a broad look at the river corridor to coordinate activities among the many groups, agencies, and businesses that have an interest in the future of the river. As far as understanding how people perceive, use, and interact with the river, however, future efforts will be most successful if they focus on local problems, issues, and opportunities at the neighborhood and community scale. Research showed that the highest knowledge, awareness, and concern lie at this scale, and hinted that commitment toward individual and group action is most likely on projects close to home.

The future of the Chicago River depends upon many individuals, groups, and agencies, acting singly and in cooperation, to realize the many bright possibilities described in this report. We hope that this report, by heightening awareness of people's interactions with the river, will help planners, managers, and other readers find ways to promote action at local and regional levels. If those in other metropolitan areas can see commonalities in the places, activities, and issues discussed in these pages, they may be able to transfer our findings and recommendations outlined to the rivers they seek to guide toward enhanced futures. Above all, as we rediscover our urban rivers, it is hoped that we might also rediscover the functional, aesthetic, and spiritual values through which people and the river were originally linked.