

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-

ishment 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 led 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 shoreline 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 draw 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. These 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 privi-

leges 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 skiers, 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 through 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 trails¹: 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.

¹Some 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, steward-

ship 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.