

## TRANSPORTATION, VISIT LENGTH AND FREQUENCY, AND GROUP SIZE

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

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

## PERCEPTIONS OF THE RIVER

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

- The majority of the respondents—65%—indicated that the river in their area was “very important” to their enjoyment

of their recreation activity. It was particularly important to respondents in the Skokie Lagoons, Loop, and Cal-Sag areas.

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

## PART III ISSUES OF MANAGERIAL INTEREST

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

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

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

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

## IMPORTANCE OF RIVER USE AND ACCESS

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

### RECREATION USERS

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

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

**TABLE 3.5**  
**Importance of the river**  
**for recreational enjoyment, by area<sup>1</sup>**

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

<sup>1</sup>Based on survey question 7; differences across sites significant at the .01 level.

<sup>2</sup>These two response categories are reported together because only 4 of the 582 respondents reported the river was "detrimental" to their enjoyment.

**TABLE 3.6**  
**Importance of the river**  
**for recreational enjoyment, by activity<sup>1</sup>**

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

<sup>1</sup>Based on survey question 7; differences across sites significant at the .01 level.

<sup>2</sup>These two response categories are reported together because only 4 of the 582 respondents reported the river was "detrimental" to their enjoyment.

### ACCESS TO THE RIVER

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

**TABLE 3.7**  
**River access, by area**

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

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

**TABLE 3.8**  
**River access, by activity**

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

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

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

## DISCUSSION

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

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

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

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

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

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

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

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

## WATER QUALITY

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

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

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

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

**TABLE 3.9**  
**Perceptions of water quality deterioration, by area**

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

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

**TABLE 3.10**  
**Perceptions of water quality improvements, by area**

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

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

### WATER QUALITY BY AREA

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

### WATER QUALITY BY ACTIVITY

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

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

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

to feel that river quality in the metropolitan area had improved, and they were twice as likely as the overall sample to rate area river quality as having gotten *worse*.

### RESPONDENTS' PERCEPTIONS OF SOURCES OF DUMPING AND POLLUTION

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

### WATER QUALITY BY DEMOGRAPHIC GROUPS

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

### DISCUSSION

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

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

**TABLE 3.11**  
Perceptions of water quality deterioration,  
by activity

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

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

**TABLE 3.12**  
Perceptions of water quality improvements,  
by activity

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

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

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

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

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

## FACILITY AND DEVELOPMENT ISSUES

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

## FACILITY ISSUES BY AREA

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

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

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

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

**TABLE 3.13**  
**Facility likes and dislikes, by area**

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

<sup>1</sup>Differences across sites significant at the .01 level. <sup>2</sup>From questions 8, 9, & 10, based on the interview site. <sup>3</sup>From question 14, based on Chicago area rivers in general.

<sup>4</sup>Sparse cells may affect stability of results. <sup>5</sup>Facility-related changes refer to general issues like maintenance and related issues, while activity-related changes refer to activity-specific recommendations like stocking fish.

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

**FACILITY ISSUES BY ACTIVITY**

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

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

**DISCUSSION**

Facilities were an important issue, ranking only behind garbage dumping and water quality. But the respondents focused on maintaining existing facilities; many specifically mentioned garbage pickup and trail maintenance. They were

less interested in developing a new, large-scale complex of shops, boat slips, and other entertainment facilities like the North Pier development (although some did mention an interest in this type of facility development). There is some interest in additional boating facilities as indicated by the “other active” recreationist group’s interest in more boat ramps, and the Skokie Lagoon and North Branch/NSC visitors’ interest in canoeing and boating related facilities (e.g., rentals).

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

**CRIME, SAFETY, AND USER CONFLICTS**

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

**TABLE 3.14**  
**Facility likes and dislikes, by activity**

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

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

## CRIME AND SAFETY

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

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

## USER CONFLICTS

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

**TABLE 3.15**  
**Safety-related issues, by area**

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

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

**TABLE 3.16**  
**Safety-related issues, by activity**

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

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

## DISCUSSION

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

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

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

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

## NATURAL AREAS AND SCENIC QUALITIES

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

## NATURAL AREAS AND SCENIC BEAUTY BY AREA

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

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

**TABLE 3.17**  
Nature-related issues, by area

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

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

**TABLE 3.18**  
Nature-related issues, by activity

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

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

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

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

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

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

## DISCUSSION

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

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

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

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

Recreation visitors to the river may be specifically seeking out a less urbanized place to recreate, and the river corridor

offers this to them. Given the evidence of the importance to urbanites of trees and other vegetation in recreation areas, as well as the benefits of nearby nature to beleaguered urban dwellers, the public expenditure required to enhance the natural features of the Chicago River corridor may be warranted.

## PART IV CONCLUSIONS

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

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

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

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

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