

Minnesota River Valley Area Survey Summary Report



Report prepared by:
Minnesota Department of Natural Resources
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A number of organizations helped sponsor the study: City of Bloomington, Erik's Bike Shop, Friends of the Minnesota Valley, Lower Minnesota River Watershed District, Minnesota Department of Natural Resources, Minnesota Off-Road Cyclists, Minnesota River Valley Audubon Chapter, Minnesota Valley National Wildlife Refuge, Parks and Trails Council of Minnesota, Penn Cycle, and Quality Bicycle Products.

Dr. David W. Lime contributed to the development of the survey instrument used in the study.

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SUMMARY

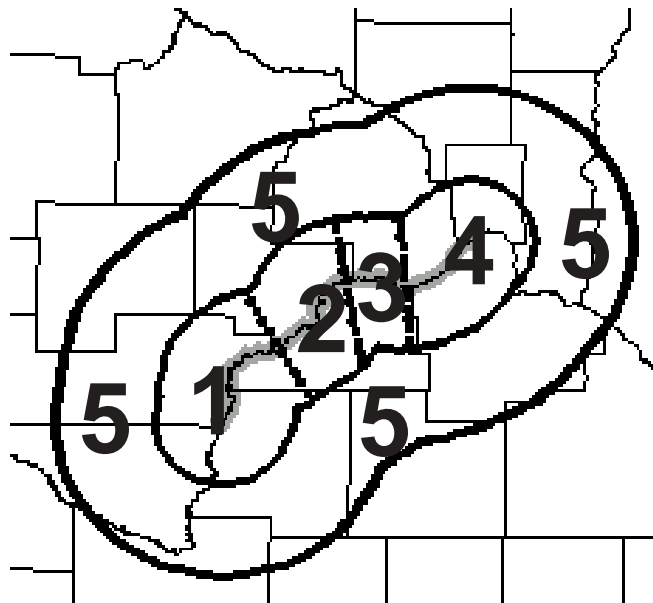
INTRODUCTION

The Minnesota River Valley is an important resource to residents of the greater Twin Cities metropolitan area. It is used for outdoor enjoyment and education; it provides habitat for fish and wildlife populations; and it is used for economic purposes. Given its location with respect to the growing Twin Cities metropolitan area, pressures on the Minnesota River Valley's resources can only be expected to grow for the foreseeable future.

The Minnesota Department of Natural Resources—Division of Parks and Recreation, along with the US Fish and Wildlife Service—Minnesota Valley National Wildlife Refuge, and the Friends of the Minnesota Valley designed a survey in 2001 to gain an understanding of the public's use and perceptions of the Minnesota River Valley area—the area between the River bluffs from Le Sueur downstream to the confluence with the Mississippi River. The survey offered citizens an opportunity to provide input into public policy discussions about future management of the Minnesota River Valley area.

The survey asked citizens about a number of topics: familiarity with the Minnesota River Valley area; how they get information (become familiar) with the area;

Minnesota River Valley Study Area



Five study-area regions with associated federal and state recreation areas in the MN River Valley:

Within 10 miles of MN River Valley segment from:

- (1) Le Sueur to Belle Plaine: contains a portion of MN Valley State Recreation Area.
- (2) Belle Plaine to Chaska: contains portions of MN Valley National Wildlife Refuge, State Recreation Area, and State Trail.
- (3) Chaska to Bloomington Ferry Bridge: contains portions of MN Valley National Wildlife Refuge, State Recreation Area, and State Trail.
- (4) Bloomington Ferry Bridge to Ft. Snelling State Park: contains Ft. Snelling State Park, and portions of MN Valley National Wildlife Refuge (location of visitor center), and State Trail.

- (5) Within 10 to 25 miles of preceding four segments.

how they currently use the area; barriers to further use of the area; perceptions of current natural resource quality and recreation opportunity conditions in the area, plus perceptions of recent trends in these same conditions; ideas for future management of the area; organizations they trust to make sound recommendations concerning the future of the area; and who they are (demographics).

The study area includes five regions within 25 miles of the target reach of the Minnesota River from Le Sueur to the confluence of the Minnesota with the Mississippi River at Ft. Snelling State Park (see map on preceding page). The study area is large enough to ensure that most potential users of the Minnesota River Valley area are included in the study. It contains just over 2 million adults, who comprise 56 percent of all Minnesota adults.

Three-hundred surveys were mailed to a random sample of adult residents in each study-area region, for a total of 1500 surveys. After remails, 52 percent of the surveys were returned. The response rate is adequate to characterize a broad segment of the population that has at least some interest in the Minnesota River Valley area. It is not adequate, however, to characterize the entire population, since 48 percent did not respond, and nonrespondents most likely have a lower level of interest in the area than respondents.

FAMILIARITY WITH THE MN RIVER VALLEY AREA

Nearly one-fourth of respondents had “never heard of the area before,” and another one-third “did not know very much”. Those who “knew a few things about the area” comprised a sizable portion (39%), and those who “knew a lot” comprised a small portion (5%). It is good to keep in mind that these responses are from the half of the target population who responded to the survey and, thus, are probably from people who have a higher awareness of the area than those who did not respond.

These results are not indicative of high familiarity. Familiarity with the MN River Valley area is lower than would have been expected based on results from a similar study for the Mississippi River in the Twin Cities.

HOW DO YOU GET INFORMATION ABOUT THE MN RIVER VALLEY AREA?

For respondents who have at least some awareness of the area, information is received from a few primary sources and a wide variety of secondary sources. Informal information sources (“family and friends,” “I live near the area”) are among the primary sources, which is not an unusual finding for this type of study. State parks are a primary source, too. Two state parks exist in the study area. State park sources are followed by newspapers, the MN DNR web site, road maps, recreation maps/directories, information at the MN Valley Refuge (which is in the study area), and TV or radio (including cable TV).

RECREATION USE OF THE MN RIVER VALLEY AREA

Of respondents who have at least some awareness of the area, the large majority (73%) has participated in an outdoor recreation activity in the area in the last 12 months. The specific

activities respondents participate in are similar to what is found in MN state parks, and may well be similar for most large nature-based parks and refuges. Hiking/walking and sightseeing, coupled with observational/learning activities (“visiting historic/cultural sites,” “self-guided nature walk,” “nature/wildlife observation,” “looking at kiosks or visitor center exhibits”) are the leading activities. These are followed by picnicking, biking (other than mountain biking), fishing and nature/wildlife photography. Mountain biking is a less common activity than other types of biking. Participation in winter-dependent activities is lower than in other activities. Cross-county skiing is the leading winter activity. Motorized activities are not all that common; 7 percent of respondents engage in snowmobiling and 1 percent in ATV riding.

BARRIERS TO THE RECREATION USE OF THE MN RIVER VALLEY AREA

Barriers to participation (whether further or any participation) are dependent on a number of factors. Two universal factors—commonly found in studies of this nature—are time, as reflected in the top-ranked barrier “I don’t have enough time to use the area as much as I would like”; and intervening opportunities, as reflected in the frequent indication of the barrier “there are other good places to do things closer to home.” Other leading factors depend on the level of awareness the respondent possesses of the area. For those with low awareness, lack of basic information is a barrier. As awareness of the MN River Valley area rises, the barriers change and begin to reflect characteristics of the area that affect the quality of one’s experience in using the area. For respondents who “knew a lot” about the area, the barriers of “the area is too developed” and “the area is too noisy” stand out. Also standing out for respondents with higher awareness are safety concerns, signage concerns, and concerns about accessibility for people with disabilities.

CONDITIONS AND TRENDS IN THE MN RIVER VALLEY AREA

Respondents who had at least some knowledge of the area were asked their perceptions of conditions and trends in the part of the area with which they were most familiar. Even with these “knowledge” qualifications for respondents, many did not feel confident in judging conditions or trends. For respondents who felt confident in expressing an opinion, “scenic beauty” was judged of highest quality among the resource items, and was, on average, judged just above “good.” The “overall quality of natural resources” and “fish and wildlife populations and habitat” were judged between “fair” and “good,” while “water quality” was judged the lowest at “fair.” Trends over the last 10 years for these resource items were all judged near “stayed about the same,” with water quality skewed slightly toward “worsened” and the others skewed slightly toward “improved.”

For the recreation opportunity items, the condition of items related to recreation/exercise and to learning were rated near “good,” while items related to fishing and hunting were rated lower between “good” and “fair.” Perceived trends over the last 10 years for both fishing and hunting are close to “stayed about the same,” but skewed slightly toward “worsened.” For the other items related to recreation/exercise and learning, the trends are skewed toward “improved.”

IDEAS FOR FUTURE MANAGEMENT OF THE MN RIVER VALLEY AREA

A primary purpose for this study was to ascertain public opinion on the future management of the MN River Valley area. To accomplish this, respondents who had at least some awareness of the area were asked whether they agree or disagree with a series of statements about the management of the area over the next 25 years. The statements were designed to incorporate a wide variety of potential uses of the area and options for managing the uses.

The statements with which respondents mainly agreed concerned the increase of efforts to preserve fish and wildlife habitat, and expanded efforts to provide outdoor recreation and learning opportunities. In addition, respondents mainly agreed that government purchases of private land for fish and wildlife habitat and outdoor recreation should be increased.

Respondents were ambivalent about the possibility of future management successfully balancing the needs of a wide range of uses, including fish and wildlife, recreation, commerce/industry and other private land development. More respondents agreed than disagreed with this possibility, but a majority did not agree. Similarly, respondents were ambivalent about the idea of managing more for the benefit of fish and wildlife and less for the benefit of outdoor recreators. It would appear that respondents want a balance between resource preservation and recreation use, a balance that is always a challenge to achieve for nature-based park and refuge managers.

Respondent mostly disagreed with the idea that business uses of the area should be promoted for the jobs and income they would produce. Respondents also mostly disagreed that providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area. Nearly half (47%) “strongly disagreed” with the appropriateness of motorized recreation uses in the area.

TRUST IN ORGANIZATIONS TO MAKE SOUND RECOMMENDATIONS CONCERNING THE FUTURE OF THE MN RIVER VALLEY AREA

Coupled with the ideas for future management of the area are the organizations respondents trust to make sound recommendations about this future. The organizations most trusted are a combination of federal agencies (National Park Service, Fish and Wildlife Service), a state agency (MN Department of Natural Resources) and some non-government organizations (The Nature Conservancy, Audubon Society, Friends of the MN Valley). These are organizations with a resource-protection mission that is usually accompanied by a recreation-use mission, a combination of missions that seems consistent with the most-preferred future management ideas for the area. Local government, the MN State Legislature and the Metropolitan Council have the lowest trust ratings.

MOUNTAIN BIKING

A number of people involved in this study wanted a more detailed examination of mountain biking and mountain bikers. There were enough returns in the survey from mountain bikers (73 surveys) to provide a general description of this activity, but there are not enough returns to break mountain bikers down further into subgroups.

Mountain biking is a medium-sized activity in the MN River Valley area: mountain bikers comprise 13 percent of all respondents who have at least some knowledge of the area.

The mix of activities mountain bikers participate in is similar to others who participate in the area. As a group, mountain bikers are more active. They are more engaged in more activities in the area than others who are activity participants, but mountain bikers have basically the same large and small activities as other participants, with a few noteworthy differences: mountain bikers are much more likely to be joggers/runners in the area, and more likely to fish and boat.

Of the 24 outdoor recreation activities included in the survey, mountain biking contains the youngest participants on average. It is also the sixth most male-dominated activity, following hunting, fishing, snowmobiling, ATVing and dog sledding.

Mountain bikers get information about the area in basically the same ways as others, with a few notable differences: mountain bikers are more likely to use web sites for information, as well as recreation opportunity maps and directories, and the MN state park brochure.

The mountain-biker barriers to further participation in the area are most similar to the barriers of respondents with some knowledge of the area. Barriers are led by lack of time (by far), and lack of information. These are followed by lack of signage about history/culture and nature/wildlife, and by the area being too developed. Intervening opportunities (other good places closer to home) is not a high-ranked mountain-biker barrier, nor is noise in the area, safety concerns, accessibility for people with disabilities, or trails of poor quality.

Mountain bikers have a similar perception of current conditions and trends as other respondents, once their higher awareness of the MN River Valley area is accounted for. This similarity extends to the perception of the current conditions and trends in “opportunities to recreate/exercise outdoors,” the one item that is most closely associated with a specific activity such as mountain biking. In addition, mountain bikers are close to other respondents on their perceptions of aggressiveness of recent efforts to protect water quality and wildlife habitat.

The ideas for future management of the area do not differ greatly by whether the respondent is a mountain biker or not, with a few notable differences: mountain bikers agree more than other respondents that “opportunities to recreate/exercise in the area should be expanded”; and they agree more on the two items that respondents overall agreed with least, namely, “business uses of the area should be promoted for the jobs and income they produce” and “providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area.” These last two items, however, remain at or near the bottom of items with which mountain bikers agree.

Mountain bikers and other respondents are closely aligned on the level of trust they have in organizations to make sound recommendations concerning the future of the MN River Valley. Mountain bikers put slightly more trust than other respondents in all the U.S. organizations (National Park Service, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers), but the overall ordering of organizations from the most to the least trusted is nearly the same for mountain bikers and other respondents.

INTRODUCTION

The Minnesota River Valley is an important resource to residents of the greater Twin Cities metropolitan area. It is used for outdoor enjoyment and education; it provides habitat for fish and wildlife populations; and it is used for economic purposes. Given its location with respect to the growing Twin Cities metropolitan area, pressures on the Minnesota River Valley's resources can only be expected to grow for the foreseeable future.

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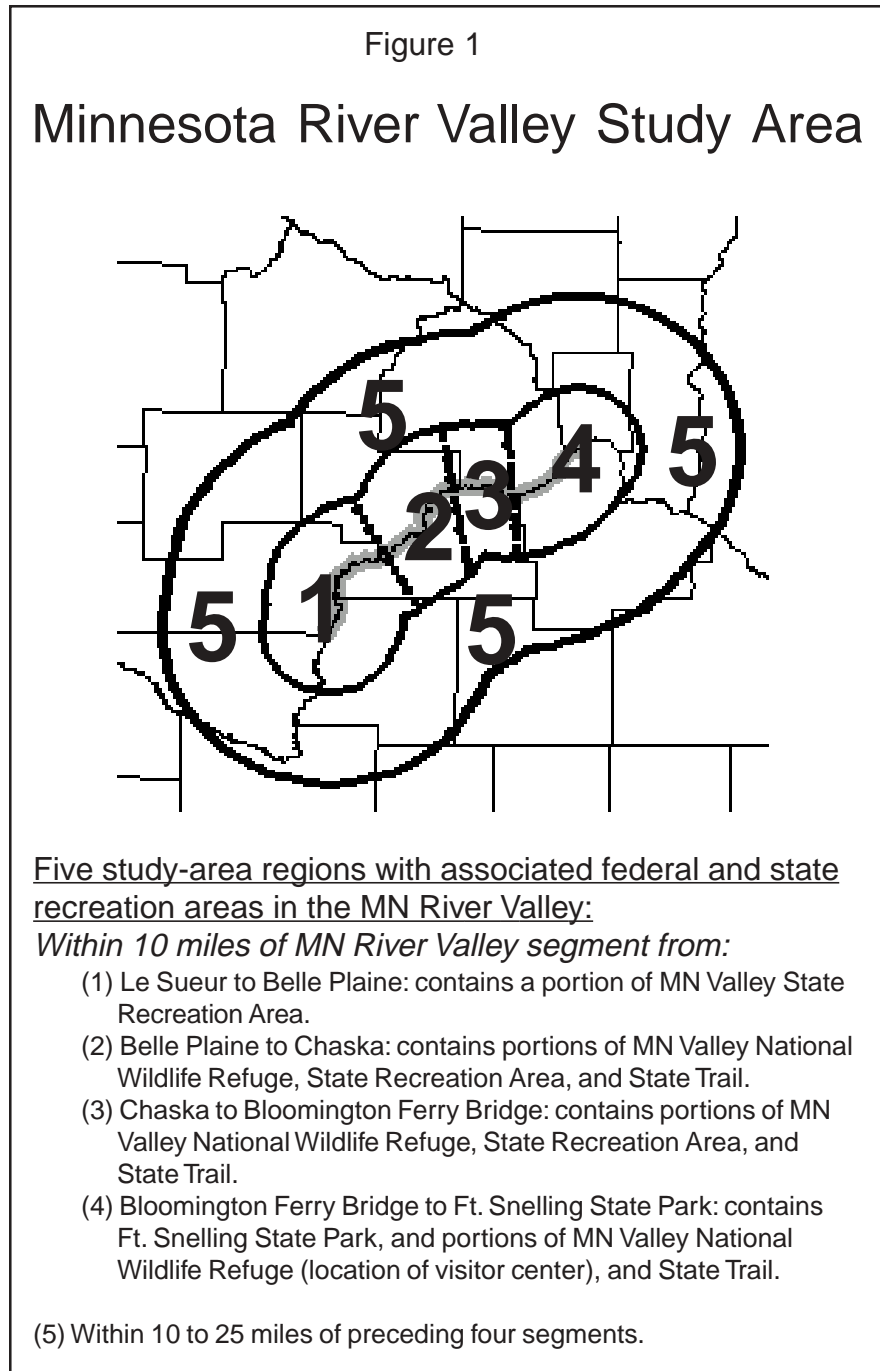
The survey asked citizens about a number of topics: familiarity with the Minnesota River Valley area; how they get information (become familiar) with the area; how they currently use the area; barriers to further use of the area; perceptions of current natural resource quality and recreation opportunity conditions in the area, plus perceptions of recent trends in these same conditions; ideas for future management of the area; organizations they trust to make sound recommendations concerning the future of the area; and who they are (demographics).

The study area includes five regions within 25 miles of the target reach of the Minnesota River from Le Sueur to the confluence of the Minnesota with the Mississippi River at Ft. Snelling State Park (Figure 1). Four of the regions are within 10 miles of four Minnesota River segments, and the fifth region extends these four out to 25 miles. The small portion of this fifth region that extends into Wisconsin was excluded. A radius of 10 miles delineates the market area from which a majority (or near majority) of state trail, state park, and boating use in the Twin Cities originates (References 1, 3 and 6). The larger radius of 25 miles

ensures that most potential users of the Minnesota River Valley area are included in the study.

Three-hundred surveys were mailed to a random sample of adult residents in each study-area region, for a total of 1500 surveys. After remains, 52 percent of the surveys were returned. The response rate—given the survey topic and target population of the general citizenry of a large metropolitan area—should be considered normal, neither high nor low. The return rate is adequate to characterize a broad segment of the population that has at least some interest in the Minnesota River Valley area. It is not adequate, however, to characterize the entire population, since 48 percent did not respond, and nonrespondents most likely have a lower level of interest in the area than respondents.

The study area encompasses a large population by Minnesota standards. It contains just over 2 million adults, who comprise 56 percent of all Minnesota adults (Table 1). Most of these adults are in the more densely settled regions in



the vicinity of the confluence of the Minnesota River with the Mississippi River near Minneapolis, St. Paul, and a number of first-ring suburbs. The upstream segments have far fewer people and are more rural by comparison. Since the same number of surveys was mailed to each of the five regions, population weighting is employed to ensure that survey responses from a

region are appropriately represented when combined with responses from a different region. As a result, when survey findings are presented for the *entire* study area, the findings are heavily skewed toward the high-population areas.

This document is a summary of survey findings. It is descriptive by intent, and is not designed to advocate for any particular position or preferred management future. The summary is presented in the following topical order:

- Respondents' familiarity with the Minnesota River Valley area;
- How respondents get information (become familiar) with the area;
- How respondents currently use the area;
- Respondents' barriers to further use of the area;
- Respondents' perceptions of current natural resource quality and recreation opportunity conditions in the area, plus perceptions of recent trends in these same conditions;
- Respondents' ideas for future management of the area;
- Organizations respondents trust to make sound recommendations concerning the future of the area; and
- A specific look at the responses of mountain bikers—a user group on which the study project team wanted more information—to all of the topics of the survey.

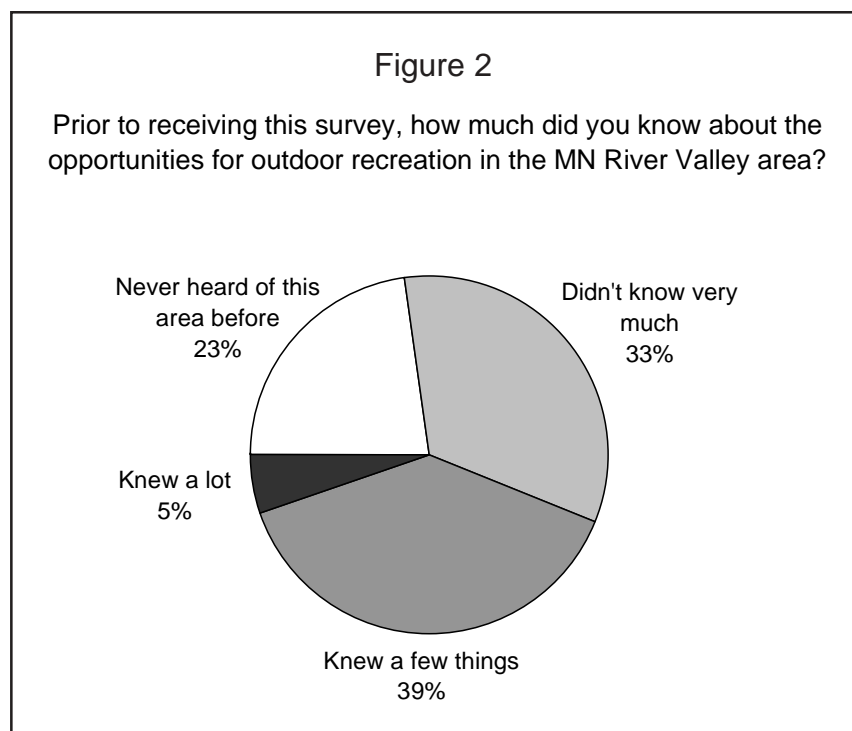
<u>River Segment Region</u>	<u>Population aged 18+</u>	<u>Percent</u>
<i>For regions (1) to (4), the region extends 10 miles from the River Valley segment</i>		
(1) Le Sueur to Belle Plaine	28,452	1.4
(2) Belle Plaine to Chaska	68,121	3.4
(3) Chaska to Bloomington Ferry bridge	217,028	10.7
(4) Bloomington Ferry bridge to Ft. Snelling State Park	918,411	45.2
(5) Within 10 to 25 miles of preceding 4 segments	<u>800,731</u>	<u>39.4</u>
Total	2,032,743	100.0

For those who would like more detail on the survey results and methodology, a tabulation document is available from the Minnesota Department of Natural Resources, Division of Parks and Recreation.

FAMILIARITY WITH THE MN RIVER VALLEY AREA

To gauge their general awareness of the area, respondents were asked to indicate their level of knowledge of outdoor recreation opportunities in the area. Nearly one-fourth of respondents had “never heard of the area before,” and another one-third “did not know very much” (Figure 2).

Those who “knew a few things about the area” were a sizable portion (39%), and those who “knew a lot” comprised a small portion (5%). It is good to keep in mind that these responses are from the half of the target population who responded to the survey and, thus, are probably from people who have a higher awareness of the area than those who did not respond.



Awareness of the area is higher for those living closer to the MN River Valley (regions 1 to 4) than those further away (region 5), and is higher for the more rural upstream segment from Le Sueur to Belle Plaine (Table 2).

Respondents, not surprisingly, are most familiar with the segment nearest to their home (Table 3). For the broader region (region 5), most of the population is concentrated nearest to MN River Valley segment 4. Overall, MN River Valley segment 4 is the segment with which the largest portion of respondents are most familiar (76%).

Table 2

Prior to receiving this survey, how much did you know about the opportunities for outdoor recreation in the MN River Valley area?

Response	Overall (percent)	-- Respondent's residence within 10 miles of River Valley segment --				(5) Respondent's residence within 10 to 25 miles of preceding 4 segments (percent)
		(1) Le Sueur to Belle Plaine (percent)	(2) Belle Plaine to Chaska (percent)	(3) Chaska to Bloomington Ferry bridge (percent)	(4) Bloomington Ferry bridge to Ft. Snelling SP (percent)	
Never heard of this area before	23	20	13	15	19	30
Didn't know very much	33	20	33	31	34	34
Knew a few things	39	50	46	49	42	32
Knew a lot	5	10	8	5	6	4
Total percent	100	100	100	100	100	100

Table 3

With which segment of the MN River Valley are you most familiar?
(excludes respondents who "never heard of the MN River Valley area before")

Valley segment most familiar with	Overall (percent)	-- Respondent's residence within 10 miles of River Valley segment --				(5) Respondent's residence within 10 to 25 miles of preceding 4 segments (percent)
		(1) Le Sueur to Belle Plaine (percent)	(2) Belle Plaine to Chaska (percent)	(3) Chaska to Bloomington Ferry bridge (percent)	(4) Bloomington Ferry bridge to Ft. Snelling SP (percent)	
(1) Le Sueur to Belle Plaine	7	86	5	3	3	12
(2) Belle Plaine to Chaska	7	14	42	15	4	5
(3) Chaska to Bloomington Ferry bridge	10	0	42	39	4	6
(4) Bloomington Ferry bridge to Ft. Snelling State Park	76	0	11	42	90	78
Total percent	100	100	100	100	100	100

A high percentage of respondents have at least some familiarity with their *most* familiar segment: 21 percent are “very familiar” with their most familiar segment, 68 percent are “somewhat familiar,” and only 11 percent are “not at all familiar.”

The preceding awareness figures for the MN River Valley are difficult to gauge as to whether they are low, high or about as expected. Comparables are not easy to find, because of all the details of geography, resource/facility type and survey methodology that are involved in qualifying comparables. One comparable, however, is available. In 1992, a study of the Twin Cities reach of the Mississippi River was conducted, and it included similar questions on awareness and familiarity (Reference 2). It was comparable in terms of survey methodology,

survey return rates, and distance from the river used to identify potential respondents (Mississippi River study used a 15 mile radius, and the 10-mile radius results for this MN River study are used for comparison). When the two studies are compared—for the most comparable segment from each study, which is the segment with the largest nearby population concentration—the Mississippi River is skewed toward higher familiarity, while the MN River is skewed toward lower familiarity (Table 4). In short, familiarity with the MN River Valley area is lower than would have been expected based on results for the Mississippi River.

Table 4

How familiar are you with each segment of the . . .
 . . . Mississippi River in the Twin Cities? (1992 study⁺)
 . . . MN River Valley area? (2001 study⁺⁺)
 (note: each study included a map of the segments with the study's familiarity question)

<u>Most comparable segments between studies</u>	----- Degree of familiarity with segment -----			Total (percent)
	Not at all familiar (percent)	Somewhat familiar (percent)	Very familiar (percent)	
Mississippi River segment on Minneapolis-St. Paul border (1992 study)	16	57	27	100
MN River segment from Bloomington Ferry bridge to Ft. Snelling State Park (2001 study)	37*	46	17	100

⁺ Study divided the Twin Cities reach of the Mississippi River from Dayton to Hastings into four segments.

⁺⁺ Study divided the Twin Cities reach of the Minnesota River from Le Sueur to the confluence with the Mississippi River at Ft. Snelling State Park into four segments.

* Figure includes those respondents who "never heard of the MN River Valley area before."

HOW DO YOU GET INFORMATION ABOUT THE MN RIVER VALLEY AREA?

For respondents who have at least some awareness of the area, information is received from a few primary sources and a wide variety of secondary sources. Informal information sources (“family and friends,” “I live near the area”) are among the primary sources, which is not an unusual finding for this type of study (Table 5). State parks are a primary source, too. Two state parks exist in the study area. State park sources are followed by newspapers, the MN DNR web site, road maps, recreation maps/directories, information at the MN Valley Refuge (which is

in the study area), and TV or radio (including cable TV). No other source is indicated by over 10 percent of respondents.

There is good agreement among respondents from different regions on primary and secondary information sources, once the source “I live near the area” is eliminated (region 5 is further away from the River Valley than the other four regions). Respondents from the upper-river regions (especially, the regions from Le Sueur to Chaska) are less likely to receive information at a state park or at the MN Valley Refuge, perhaps because they live further away from these facilities than other respondents. Respondents in the broader region away from the MN River Valley (region 5) rely more on general information sources, including the MN Office of Tourism, TV or radio (including cable TV), travel guides, and recreation maps/directories.

Table 5

When you obtain information about the MN River Valley area, what are your most important information sources?
(excludes respondents who "never heard of the MN River Valley area before")

<u>Information Source</u>	<u>Percent indicating source</u>
Family and friends	33
Information at one or more Minnesota State Parks	33
Minnesota State Park brochure	32
I live near the area	27
Newspapers	25
The MN DNR web site	21
Road maps	20
Recreational opportunity maps and directories	19
Information kiosks at MN Valley Refuge	19
TV or radio (including cable TV)	17
Minnesota State Park <i>Traveler</i> newspaper	10
Travel guides	10
Web sites	10
MN Office of Tourism	9
Activity guides (e.g., mountain biking book)	9
City newsletters	8
MN Valley Refuge web site	7
PRIM recreation maps	5
National USFWS web site	5
The MN DNR telephone information center	4
Places I stay (e.g., motels, hotels)	3
Local chambers of commerce	3
Convention and visitor bureaus	2
All other sources	4

RECREATION USE OF THE MN RIVER VALLEY AREA

Of respondents who have at least some awareness of the area, the large majority has participated in an outdoor recreation activity in the area in the last 12 months (Table 6). Overall, the participation is nearly three-fourths (73%), and is higher

for the regions nearest the river (regions 1 to 4), and is higher for the more rural upstream region from Le Sueur to Belle Plaine (region 1). This pattern of inter-regional use of the area is consistent with the pattern of awareness of the area, which is expected since use and awareness should be related.

Table 6

Percent of respondents participating in at least one activity in MN River Valley area in the last 12 months
(excludes respondents who "never heard of the MN River Valley area before")

<u>Respondent's residence</u>	<u>Percent</u>
Overall (entire study area)	73
<i>Residence within 10 miles of MN River Valley segments 1 to 4:</i>	
(1) Le Sueur to Belle Plaine	90
(2) Belle Plaine to Chaska	79
(3) Chaska to Bloomington Ferry bridge	70
(4) Bloomington Ferry bridge to Ft. Snelling SP	78
(5) Respondent's residence within 10 to 25 miles of preceding 4 segments	67

The specific activities respondents participate in are similar to what is found in MN state parks (Reference 6), and may well be similar for most large nature-based parks and refuges (Table 7). Hiking/walking and sightseeing, coupled with observational/learning activities (“visiting historic/cultural sites,” “self-guided nature walk,” “nature/wildlife observation,” “looking at kiosks or visitor center exhibits”) are the leading activities. These are followed by picnicking, biking (other than mountain biking), fishing and nature/wildlife photography. Mountain biking is a less common activity than other types of biking. Participation in winter-dependent activities is lower than in other activities. Cross-county skiing is the leading winter activity. Motorized activities are not all that common; 7 percent of respondents engage in snowmobiling and 1 percent in ATV riding.

This pattern of activities is largely shared among the five respondent regions. Only the more rural upstream region (region 1) from Le Sueur to Belle Plaine has some notable differences. Respondents in this region are more likely to hunt and fish in the MN River Valley area (25% to 30% higher participation than other regions); hunting and fishing are generally higher in rural populations than in urban populations (Reference 4). They are also more likely to use the area for nature/wildlife observation and sightseeing (25% to 30% higher participation than other regions). This region, as noted above, has higher overall participation in the area than other regions, and thus, most remaining activities are more frequently engaged in by respondents from region 1.

Table 7

In the last 12 months, did you participate in the following recreation activities in the MN River Valley area?
(excludes respondents who "never heard of the MN River Valley area before")

Recreation activity	Percent participating in activity	Percent participating in activity by frequency of participation in last 12 months:		
		1 to 5 times	6 to 10 times	11 or more times
Hiking or walking, including dog walking	45	34	6	5
Visiting historic/cultural sites	43	40	2	1
A self-guided nature walk	40	34	5	2
Sightseeing	38	30	6	3
Nature/wildlife observation, including birdwatching	35	28	4	3
Picnicking	31	29	2	0
Looking at kiosks or visitor center exhibits	30	28	2	0
Biking, other than mountain biking	20	16	3	2
Fishing, including boat, shore and ice fishing	17	14	2	1
Nature/wildlife photography	15	13	2	0
Mountain biking	13	10	2	2
Boating/canoeing (excluding fishing from a boat/canoe)	13	9	3	1
Swimming	13	10	2	1
Jogging or running	12	9	2	2
Cross-country skiing	9	9	0	0
Camping	9	8	1	1
Hunting	7	6	1	0
A naturalist-led program	7	7	0	0
Snowmobiling	7	3	1	2
In-line skating or roller skiing	5	3	1	0
Snowshoeing	4	4	0	0
Horseback riding	3	2	1	0
ATV riding	1	1	1	0
Dog sledding	1	1	0	0

BARRIERS TO THE RECREATION USE OF THE MN RIVER VALLEY AREA

Barriers to participation (whether further or any participation) are dependent on a number of factors. Two universal factors—commonly found in studies of this nature—are time, as reflected in the top-ranked barrier “I don’t have enough time to use the area as much as I would like”; and intervening opportunities, as reflected in the frequent indication of the barrier “there are other good places to do things closer to home” (Table 8).

Other leading factors depend on the level of awareness the respondent possesses of the area. For those with low awareness, lack of basic information is a barrier, as seen in the frequent indication of the barriers “I don’t know enough about the area” and “I don’t know how to get into the area.” As awareness of the MN River

Table 8

Barriers to the Use of the Minnesota River Valley Area
 (percent who 'strongly agree' or 'moderately agree' that the item is a reason for their lower use or the area; percents of 25 or more are in **bold type**)

	All respondents (percent)	---- Knowledge of outdoor recreation opportunities in the area? ----		
		Never heard of this area before (percent)	Didn't know very much (percent)	Knew a few things (percent)
I haven't used (or used more often) the MN River Valley area because . . .				
. . . I don't have enough time to use the area as much as I would like	57	29	48	78
. . . I don't know enough about the area	55	57	68	26
. . . there are other good places to do things closer to home	33	26	35	37
. . . I don't know how to get into the area	25	37	36	20
. . . the area is too developed	17	6	10	49
. . . signs that tell me about history/culture are lacking	16	11	11	29
. . . I'm not interested in doing the activities that are available in the area	14	23	15	6
. . . signs that tell me about nature/wildlife are lacking	13	10	9	18
. . . the area is too noisy	12	6	12	12
. . . the fishing is poor	10	5	8	13
. . . I don't feel safe when I go into the area	9	7	6	26
. . . the area is too crowded	8	8	5	21
. . . I already use the area enough	8	4	4	13
. . . there are not enough things to do in the area	7	5	7	6
. . . the area is not accessible for people with disabilities	6	2	6	31
. . . the scenery is poor in the area	6	5	8	14
. . . the trails are of poor quality	6	4	4	7
. . . I don't like the other people I encounter in the area	4	4	0	6
. . . I don't have transportation to get to the area	3	7	2	3
. . . I don't like the recreation activities I encounter in the area	3	4	4	4

Valley area rises, the barriers change and begin to reflect characteristics of the area that affect the quality of one's experience in using the area. For respondents who "knew a lot" about the area, the barriers of "the area is too developed" and "the area is too noisy" stand out. Also standing out for respondents with higher awareness are safety concerns, signage concerns, and concerns about accessibility for people with disabilities.

Barriers are widely shared across regions, with some notable differences for the more rural upstream region (region 1) from Le Sueur to Belle Plaine. For this latter region, barriers having to do with the lack of development of the area are more frequently indicated (lack of signs about history/culture and nature/wildlife, lack of things to do in the area, not enough trails), while the barriers having to do with knowledge of the area and intervening opportunities are less frequently indicated. As noted above, awareness and use of the area are higher for respondents from region 1.

Across genders the barriers differ very little. This same conclusion applies to age classes, except for the oldest respondent class (aged 65+). For those aged 65 or older, the barrier of time is less important, while two barrier are more frequently indicated: "I'm not interested in doing the activities that are available in the area" and "the area is not accessible for people with disabilities."

CONDITIONS AND TRENDS IN THE MN RIVER VALLEY AREA

Respondents who had at least some knowledge of the area were asked their perceptions of conditions and trends in the part of the area with which they were most familiar. Even with these "knowledge" qualifications for respondents, many did not feel confident in judging conditions or trends, as evidenced by the high percentage of "don't know" responses (Table 9). The least confidence was expressed for items that require the perspective of a knowledgeable participant (e.g., fishing and hunting) and the most confidence for items that are more easily accessible to a wider group (e.g., scenic beauty). Respondents in the more rural upstream regions (region 1, mostly, but also region 2) feel more confident in expressing their opinions about conditions and trends in the MN River Valley area. This is especially true for fish and wildlife related items, and general natural resource items. Participation in hunting and fishing are highest in the upstream regions.

Table 9

Conditions and Trends in the Minnesota River Valley Area

(respondents answered for the Valley segment with which they are most familiar; respondents were excluded if they had "never heard of the MN River Valley area before")

----- Rating of current condition -----

CURRENT CONDITIONS	poor (percent)	fair (percent)	good (percent)	excellent (percent)	don't know (percent)	Total (percent)
Resource items						
Scenic beauty	1	11	48	29	12	100
Overall quality of natural resources	1	20	39	6	35	100
Fish and wildlife populations and habitat	1	20	33	5	42	100
Water quality	16	28	15	2	39	100
Opportunity items						
Opportunities to recreate/exercise outdoors	2	15	35	23	25	100
Opportunities to learn about history	4	14	35	17	30	100
Opportunities to learn about nature	3	16	38	14	30	100
Opportunities to fish	5	19	21	5	51	100
Opportunities to hunt	12	12	12	2	62	100

----- Trend in condition over last 10 years -----

TRENDS IN CONDITIONS	worsened (percent)	stayed about the same (percent)	improved (percent)	don't know (percent)	Total (percent)
Resource items					
Scenic beauty	5	46	22	28	100
Overall quality of natural resources	7	33	12	48	100
Fish and wildlife populations and habitat	7	23	12	58	100
Water quality	14	26	8	53	100
Opportunity items					
Opportunities to recreate/exercise outdoors	4	24	31	42	100
Opportunities to learn about history	2	33	19	47	100
Opportunities to learn about nature	1	33	19	47	100
Opportunities to fish	6	27	5	63	100
Opportunities to hunt	9	20	3	68	100

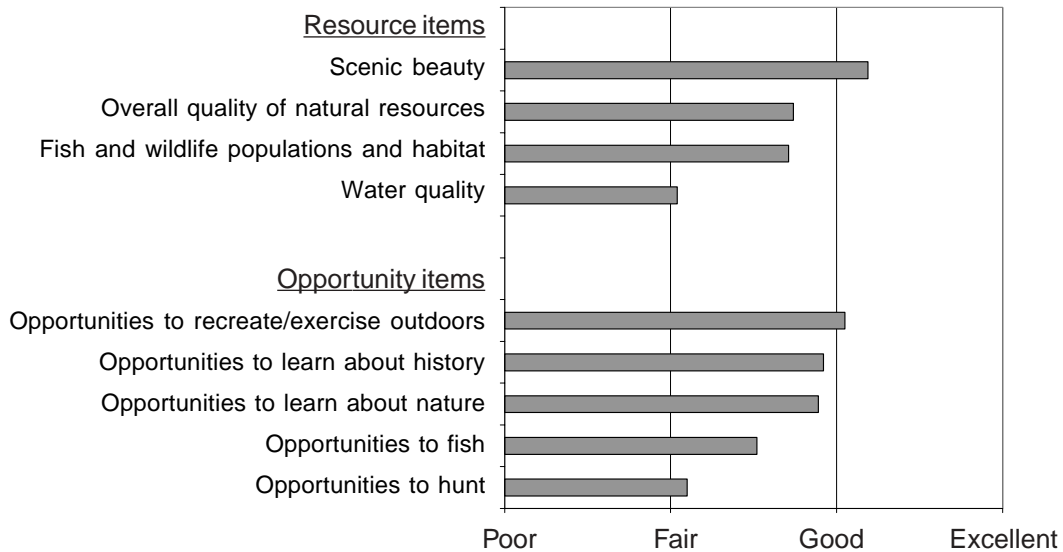
For respondents who felt confident in expressing an opinion, “scenic beauty” was judged of highest quality among the resource items, and was, on average, judged just above “good” (Figure 3). The “overall quality of natural resources” and “fish and wildlife populations and habitat” were judged between “fair” and “good,” while “water quality” was judged the lowest at “fair.” Trends over the last 10 years for these resource items were all judged near “stayed about the same,” with water quality skewed slightly toward “worsened” and the others skewed slightly toward “improved.”

For the opportunity items, the condition of items related to recreation/exercise and to learning were rated near “good,” while items related to fishing and hunting

Figure 3

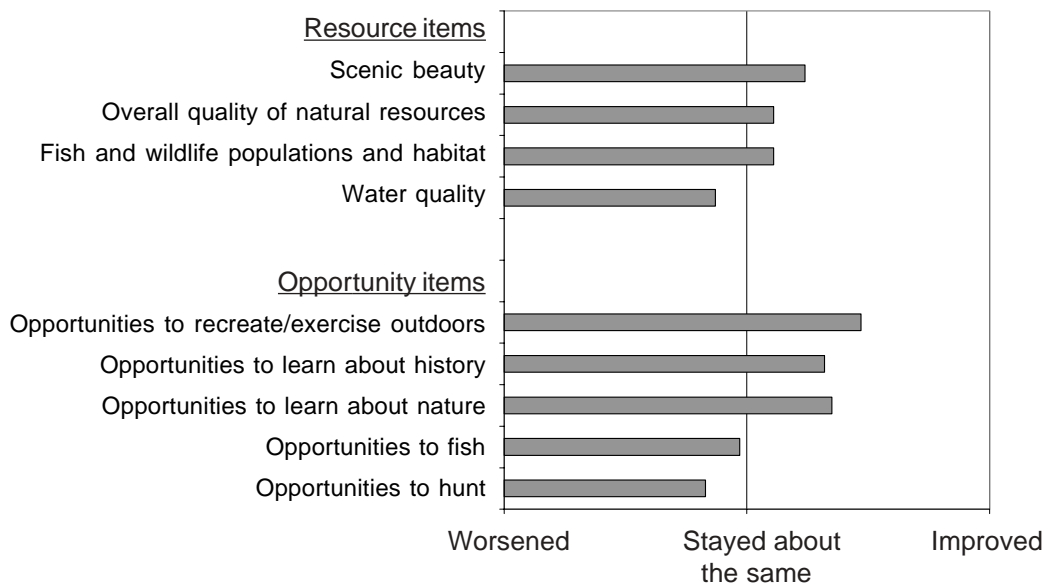
How do you rate the current condition of each of the following items for the segment you are most familiar with in the MN River Valley area?

(chart displays mean response; excludes respondents who "never heard of the MN River Valley area before")



Over the last 10 years, have the following items worsened, stayed about the same, or improved for the segment you are most familiar with in the MN River Valley area?

(chart displays mean response; excludes respondents who "never heard of the MN River Valley area before")



were rated lower, between “good” and “fair.” Perceived trends over the last 10 years for both fishing and hunting are close to “stayed about the same,” but skewed slightly toward “worsened.” For the other items related to recreation/exercise and learning, the trends are skewed toward “improved.”

This pattern of trend responses is widely shared among the different regions, but the current condition responses vary by region, most noticeably for the more rural upstream regions (region 1, especially, and region 2) from Le Sueur to Chaska. In these latter regions, respondents perceive the overall quality of natural resources and water quality to be in poorer condition. They also judge as poorer the items concerning opportunities to recreate/exercise outdoors and to learn about history and nature, perhaps reflecting the lack of developed facilities in their areas. Fish and wildlife populations are viewed about the same in all regions, as is scenic beauty and opportunities to fish. Opportunities to hunt are rated higher in region 1 from Le Sueur to Belle Plaine, which has the highest participation in hunting.

Associated with their perceptions of conditions and trends, respondents were queried about their views of how aggressively water quality and wildlife habitat had been protected in the area: was the degree of protection about right, too aggressive, or not aggressive enough? Only respondents who had at least some knowledge of the area were queried about this. Irrespective of this “knowledge” qualification, about half of the respondents did not feel confident in expressing an opinion and responded “don’t know” (Table 10). For the half that felt confident in giving an opinion, the responses were mainly “not aggressive enough,” followed by “about right.” Few respondents thought these protection efforts were “too aggressive.”

Table 10

Perception of Aggressiveness of Resource Protection Efforts
(excludes respondents who "never heard of the MN River Valley area before")

	----- Percent indicating response -----				Total
	Too aggressive	About right	Not aggressive enough	Don't know	
Have recent efforts to protect water quality in the MN River Valley area been too aggressive, not aggressive enough, or about right?	1	14	37	48	100
Have recent efforts to protect wildlife habitat in the MN River Valley area been too aggressive, not aggressive enough, or about right?	3	22	26	49	100

IDEAS FOR FUTURE MANAGEMENT OF THE MN RIVER VALLEY AREA

A primary purpose for this study was to ascertain public opinion on the future management of the MN River Valley area. To accomplish this, respondents who had at least some awareness of the area were asked whether they agree or disagree with a series of statements about the management of the area over the next 25 years. The statements were designed to incorporate a wide variety of potential uses of the area and options for managing the uses. These statements have been organized into three groups, with one group containing statements with which respondents mainly agree, another containing statements with which respondents mainly disagree, and a third containing statements with which respondents are on the fence. It is noteworthy that most respondents felt confident in expressing opinions about their future preferences, as demonstrated by the low frequency of “don’t know” responses (Table 11).

The statements with which respondents mainly agreed concerned the increase of efforts to preserve fish and wildlife habitat, and expanded efforts to provide outdoor recreation and learning opportunities. In addition, respondents mainly agreed that government purchases of private land for fish and wildlife habitat and outdoor recreation should be increased.

Respondents were ambivalent about the possibility of future management successfully balancing the needs of a wide range of uses, including fish and wildlife, recreation, commerce/industry and other private land development. More respondents agreed than disagreed with this possibility, but a majority did not agree. Similarly, respondents were ambivalent about the idea of managing more for the benefit of fish and wildlife and less for the benefit of outdoor recreators. It would appear that respondents want a balance between resource preservation and recreation use, a balance that is always a challenge to achieve for nature-based park and refuge managers.

Respondents mostly disagreed with the idea that business uses of the area should be promoted for the jobs and income they would produce. Respondents also did not agree that providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area. Nearly half (47%) “strongly disagreed” with the appropriateness of motorized recreation uses in the area.

Table 11

Ideas for future management of the Minnesota River Valley Area Over the Next 25 Years
(excludes respondents who "never heard of the MN River Valley area before")

	mean 'agree/disagree' response	Percent indicating response to item					total
		strongly disagree (=1)	moderately disagree (=2)	neither agree nor disagree (=3)	moderately agree (=4)	strongly agree (=5)	
Ideas with which respondents mostly agreed							
● Efforts to preserve fish and wildlife habitat in the area should be increased.	4.1	3	3	11	39	35	9
● Opportunities to learn about nature in the area should be expanded.	3.9	1	4	17	47	22	9
● Opportunities to learn about history in the area should be expanded.	3.9	1	4	24	43	20	9
● Opportunities to view wildlife in the area should be expanded.	3.8	4	5	17	44	23	8
● Opportunities to recreate/exercise in the area should be expanded.	3.8	3	10	15	36	24	13
● Purchases of private land in the area by government for fish and wildlife habitat and outdoor recreation should be increased.	3.7	7	8	15	32	26	12
● Opportunities to learn about American Indian sites, history and culture in the area should be expanded.	3.7	5	7	22	35	22	9
Ideas respondents were ambivalent about							
● It is possible for future management of the area to successfully balance the needs of different uses: fish and wildlife, recreation, commerce/industry, and other private land development.	3.4	9	14	15	30	18	15
● The area should be managed more for the benefit of fish and wildlife and less for the benefit of outdoor recreators such as hikers, bikers and anglers.	3.2	9	17	24	25	15	9
Ideas with which respondents mostly disagreed							
● Business uses of the area should be promoted for the jobs and income they would produce.	2.2	32	23	22	9	4	11
● Providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area.	2.1	47	18	7	11	8	9

The pattern of responses to these future management statements is widely shared across the regions. The two upstream regions from Le Sueur to Chaska (regions 1 and 2) disagree less with the appropriateness of motorized recreation uses, but respondents still disagree more than they agree with this statement. Similarly for region 1 respondents, disagreement is less with the promotion of business uses of the area for jobs and income, but respondents still disagree as much as they agree with this statement.

TRUST IN ORGANIZATIONS TO MAKE SOUND RECOMMENDATIONS CONCERNING THE FUTURE OF THE MN RIVER VALLEY AREA

Coupled with the ideas for future management of the area are the organizations respondents trust to make sound recommendations about this future. The organizations most trusted are a combination of federal agencies (National Park Service, Fish and Wildlife Service), a state agency (MN Department of Natural Resources) and some non-government organizations (The Nature Conservancy, Audubon Society, Friends of the MN Valley)(see Table 12). These are organizations with a resource-protection mission that is usually accompanied by a recreation-use mission, a combination of missions that seems consistent with the

Table 12

How much do you trust each of the following groups to make sound recommendations concerning the future of the MN River Valley area?

(excludes respondents who "never heard of the MN River Valley area before")

Group	mean 'trust' response	----- Percent indicating response -----					Total
		Do not trust (=1)	Trust slightly (=2)	Trust moderately (=3)	Trust greatly (=4)	Don't know	
National Park Service	3.0	4	13	44	24	16	100
The Nature Conservancy	3.0	6	13	29	25	28	100
MN Department of Natural Resources	3.0	6	13	45	24	13	100
US Fish and Wildlife Service	3.0	4	13	46	17	21	100
Audubon Society	3.0	8	16	27	30	20	100
Friends of the Minnesota Valley	2.9	4	14	30	17	34	100
Soil and Water Conservation districts	2.7	6	24	38	9	25	100
Citizen advisory groups	2.5	8	24	27	9	32	100
Watershed districts	2.5	6	27	28	6	35	100
US Army Corps of Engineers	2.4	17	20	31	8	23	100
County governments	2.0	24	35	17	2	22	100
Township governments	1.9	27	31	14	3	25	100
City governments	1.8	32	34	12	3	20	100
MN State Legislature	1.7	41	36	10	1	13	100
Metropolitan Council	1.7	37	35	9	0	19	100

most-preferred future management ideas for the area. The Nature Conservancy and Friends of the MN Valley have lower public recognition (higher “don’t know” responses). Local government, the MN State Legislature and the Metropolitan Council have the lowest trust ratings.

Organizational trust is shared widely across the five regions, and there are no outstanding differences to be noted.

MOUNTAIN BIKING

A number of people involved in this study wanted a more detailed examination of mountain biking and mountain bikers. There were enough returns in the survey from mountain bikers (73 surveys) to give a general description of this activity, but there are not enough returns to break mountain bikers down further into subgroups.

Mountain biking is a medium-sized activity in the MN River Valley area; mountain bikers comprise 13 percent of all respondents who have at least some knowledge of the area (see Table 7 on page 17). In comparison, bikers other than mountain bikers comprise 20 percent of all respondents.

The mix of activities mountain bikers participate in is similar to others who participate in the area. As a group, mountain bikers are more active. They are more engaged in more activities in the area than others who are activity participants, but mountain bikers have basically the same large and small activities as other participants. A few differences are noteworthy, however. Mountain bikers are much more likely to be joggers/runners in the area (27% higher involvement than the general activity participant), and more likely to fish and boat (about 20% higher involvement). And they are about 10 to 15 percent more likely to be involved in nature/wildlife photography, biking other than mountain biking, snowmobiling, hiking/walking, snowshoeing, and taking a self-guided nature walk.

In terms of demographics, mountain bikers are distinctive. Of the 24 outdoor recreation activities included in the survey, mountain biking contains the youngest participants on average. It is also the sixth most male-dominated activity, following hunting, fishing, snowmobiling, ATVing and dog sledding.

As activity participants in the MN River Valley area, mountain bikers are more aware of the area than the general respondent, which includes both participants and non-participants. Mountain bikers get information about the area in basically the same ways as others, with a few notable differences (see Table 5 on page 15). Mountain bikers are more likely to use web sites for information (especially the MN DNR web site), as well as recreation opportunity maps and directories (including PRIM and activity guides), and the MN state park brochure.

The mountain-biker barriers to further participation in the area are similar to those who have higher awareness of the area (“knew a few things,” “knew a lot” on Table 8 on page 18). Lack of time is by far the top mountain-biker barrier (74% “moderately agree” or “strongly agree” that this is a barrier), followed by “I don’t know enough about the area” (33%), which is similar to others who have higher awareness. Lack of signage about history/culture (32%) and nature/wildlife (20%) are the next leading barriers, along with the area being too developed (25%). These are the only barriers indicated by 20 percent or more of mountain bikers. Intervening opportunities (other good places closer to home) is not a high-ranked mountain-biker barrier (15%), nor is noise in the area (9%), safety concerns (6%), accessibility for people with disabilities (4%), or trails of poor quality (9%).

Mountain bikers have a similar perception of current conditions and trends as other respondents, once their higher awareness of the MN River Valley area is accounted for (see Table 9 on page 20, and Figure 3 on page 21). As noted in the discussion of this topic, a large number of respondents did not feel confident in judging conditions and trends and responded “don’t know.” Mountain bikers were more confident and their “don’t know” responses were much less frequent. When only respondents who felt confident in responding are considered, mountain bikers and others have similar perceptions of current conditions and trends. This similarity extends to the perception of the current condition and trends in “opportunities to recreate/exercise outdoors,” the one item that is most closely associated with a specific activity such as mountain biking. In addition, mountain bikers are close to other respondents on their perceptions of aggressiveness of recent efforts to protect water quality and wildlife habitat, once the higher awareness of mountain bikers is accounted for as above (i.e., once “don’t know” responses are excluded) (see Table 10 on page 22).

The ideas for future management of the area do not differ greatly by whether the respondent is a mountain biker or not. The overall ordering of items from those they most to least agree with is similar for mountain bikers and other respondents, with a few notable differences (see Table 11 on page 24). Mountain bikers agree more than other respondents that “opportunities to recreate/exercise in the area should be expanded,” and this becomes their second highest agreement item, following everyone’s highest item of “efforts to preserve fish and wildlife habitat in the area should be increased.” Mountain bikers also agree more than other respondents on the two items that respondents overall agreed with least: “business uses of the area should be promoted for the jobs and income they produce” and “providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area.” These two items, however, remain at or near the bottom of items with which mountain bikers agree; the items comprise the least and third least agreed upon items for mountain bikers, with the least agreed upon item being the same as the item for all respondents: “providing for motorized recreation uses (e.g., snowmobiling, ATVing) is appropriate in the area.”

Mountain bikers and other respondents are closely aligned on the level of trust they have in organizations to make sound recommendations concerning the future of the MN River Valley (see Table 12 on page 25). Mountain bikers put slightly more trust than other respondents in all the U.S. organizations (National Park Service, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers), but the overall ordering of organizations from the most to the least trusted is nearly the same for mountain bikers and other respondents.

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