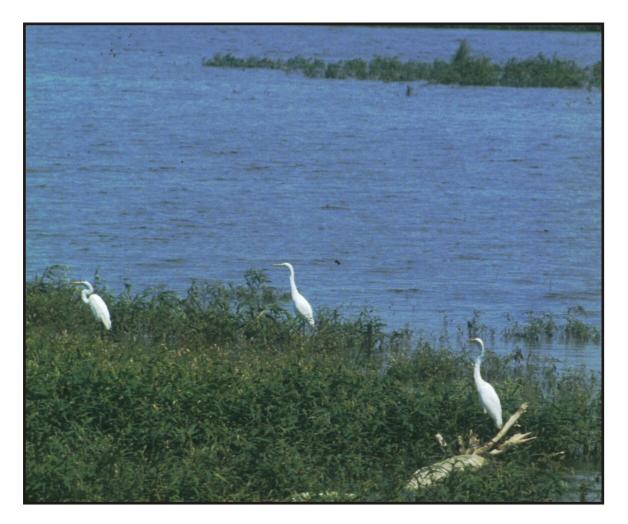
Habitat Needs Assessment for the Upper Mississippi River System

Public Involvement Report

October 2000





PUBLIC INVOLVEMENT ASPECTS OF THE UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM HABITAT NEEDS ASSESSMENT

Final

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Public involvement has been recognized as a vital part of the Habitat Needs Assessment (HNA) process of the Upper Mississippi River System (UMRS) Environmental Management Program (EMP). During this first HNA, several approaches were developed by a multiagency HNA Public Involvement Team to assess the public's understanding, values, and expectations regarding desired future habitat conditions for the Upper Mississippi River System (UMRS). These approaches, though by no means comprehensive, were considered to be the most practical and effective means of engaging the public in the initial HNA.

Information was collected from the public at two levels: institutions and the public at large. A compilation of mission statements and UMRS management plan objectives were reviewed to identify institutional priorities and activities related to river habitat. A series of 12 public meetings conducted in April and May 1999 and a series of 10 focus group meetings conducted in July and August 2000 were used to assess the general public's understanding, values, and expectations regarding desired future UMRS habitat conditions.

A search was conducted to obtain information from governmental and nongovernmental organizations with interests in and responsibilities for habitat management in the UMRS. The purpose of the search was to obtain documents that identify institutional intent with respect to UMRS habitat. The institutional intent was evaluated by examining the mission statements of agencies and organizations, the resources identified as being important or the target of management activities, and the statements in management plans about UMRS habitat.

The management plans and reports reviewed were from federal agencies, one tribal government, five state agencies, and not-for-profit organizations, including governmental coordinating organizations. The U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service have many existing plans for UMRS management. Although not all of these plans were reviewed, a representative set was examined. Points of inquiry included the scale at which the information was presented (local, pool, regional, systemwide), resources targeted for management or identified as important, and whether goals or objectives for habitat conditions were qualitative or quantitative. Thirty-three documents were evaluated.

Because many agencies and organizations have a systemwide focus or legal mandate, most information is presented at the systemwide scale. The majority of the information reviewed contained qualitative objectives. While quantitative objectives were rare, they did appear in several collaborative efforts undertaken with other groups. Generalized objectives for planning and management appeared more often than objectives for specific habitat types. Nearly all of the plans and reports directly addressed, or would impact by their recommended actions, resources such as endangered and threatened species, migratory birds, economically important fish species, and wetlands. Water quality improvement is a priority identified in most of the reviewed documents. Several reports address policy recommendations, principles for natural resources management, or points of coordination for multiple management objectives and agencies. Many plans and reports call for a comprehensive ecosystem approach and increased cooperation, given the multiple governmental jurisdictions with interrelated management responsibilities. Information regarding the importance of UMRS natural resources was gathered in separate exercises at the beginning and end of the HNA process. The first method of obtaining public views was through a structured group exercise held in conjunction with a series of public meetings. During April and May 1999, the National Audubon Society (Audubon) and Upper Mississippi River Conservation Commission (UMRCC) convened public meetings at 12 locations in the Upper Mississippi River basin. The U.S. Army Corps of Engineers participated in these meetings by leading the group exercise for the HNA. Nearly 300 people interested in the UMRS attended the 12 meetings. After presentations by the HNA team were made about the condition of the UMRS, the audience was asked to write down all their answers and ideas related to three questions: (1) What are the important natural resources in the Mississippi (or Illinois) River ecosystem? (2) What do you think are the problems and opportunities in the river ecosystem? (3) How will you recognize successful restoration of the river system?

Five main topics emerged as clear areas of interest in the future of the UMRS: (1) more fish and wildlife in general, (2) clean and abundant water, (3) reduction in sediment and siltation, (4) balance between the competing uses and users of the river, and (5) restoration of backwaters, side channels, and associated wetlands. Clean and plentiful water was a priority for human consumption, industrial processes, and aquatic conditions. Sedimentation was a concern because it jeopardizes backwater lakes, the navigation channel, recreational access to various areas, water quality, and riverbed conditions. Backwater lakes and associated wetlands were recognized as important for fish spawning/overwintering sites, for food sources during key periods for migratory waterfowl, and for critical connections to both terrestrial and deeper aquatic environments. In addition to expressing the desire to balance competing uses that affect resource quality, respondents also called attention to the benefit of having more citizen awareness and initiatives related to the river and the need to improve government agency coordination for consistent management and project completion.

Focus groups were the second method used to obtain public views of UMRS resources and the HNA process. This second round of public involvement was designed to capture the public's reaction to the products and approaches developed by the HNA technical team. During July and August 2000, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Upper Mississippi River Basin Association convened ten focus groups at seven locations in the UMRS. More than 700 people who had shown previous interest in river issues were invited to the focus groups. Various river interests were reflected in the 92 focus group participants, including perspectives from environmental groups, industrial and transportation groups, fishers and hunters, landowners, and river residents. An additional 50 people who could not attend the focus group sessions asked to be included in future public involvement activities. After a presentation on the HNA, a facilitated discussion was held on three points developed by the HNA public involvement team to get reactions from the public regarding HNA products to support improved future decision making. The three discussion points were (1) to gauge public reaction to details of the HNA process, (2) to capture public perspectives of desired future habitat conditions, and (3) to capture perspectives and preferences for future public involvement in the HNA/EMP process.

The focus group meetings engendered a variety of discussions on both technical and administrative HNA topics. Participants generally thought the HNA was a good beginning to

river resource management in the UMRS. The concept of using habitat classifications to frame river management issues was acceptable to the majority of participants; they were generally comfortable that the specified habitat classifications chosen by the HNA developers were workable/useful. However, participants wanted more definition of those habitats, and many participants felt that more factors needed to be considered, such as water quality and the impacts of dynamic river processes on what were perceived to be static habitat classifications. While focus group participants tended to think of river issues at a local level, the majority agreed that a broader scale was necessary for planning, at least at the system level if not at the watershed level. Participants also generally accepted the use of presettlement river system conditions as a reference point, although concerns were raised about the compatibility of older data sources and the utility of incorporating in the planning process a river condition that could never again be replicated. Administrative æpects of the HNA that participants found particularly important were further development of the HNA, multiagency cooperation, and continued public involvement in and access to the HNA.

The future river conditions participants desired generally reflected the five themes from the Audubon/UMRCC public meetings: increased fish and wildlife, clean water, sediment control, balance between the competing uses and users of the river, and restoration of backwaters, side channels, and associated wetlands. A "multiuse" river was the most frequently expressed desired condition. Two conflicting, overarching desired conditions were expressed: a return to more naturally variable conditions and a stabilization of existing conditions. Other desirable river conditions expressed included a sustainable, natural river ecosystem and increased biodiversity.

Most participants felt strongly that a diverse public should be continually involved in river management programs. They noted that more effort should be made to engage the public by educating them on river issues, especially on how the river affects them personally, and instilling in them a sense of ownership in river management processes, such as through involvement in the entire planning process, direct feedback on individual input at meetings, and development of a training program for laypeople to learn to collect river data. Other specific ideas included developing an interactive web site through which the public could submit data and opinions and through which the HNA tool could be used by the public, holding educational public meetings followed by focus groups to get feedback on management decisions, and developing a hierarchical public meeting setup where representatives of local/pool planning meetings would attend reach or system meetings.

This first round of public involvement in the UMRS HNA yielded valuable insights into the interests and expectations that institutions and the public have for river habitat. In general, the findings indicate that the HNA is headed in the right direction. The themes developed from these public and institutional perspectives will provide important launching points for future planning and management activities in the UMRS.

Several themes were common in all of the public involvement activities. The fact that these ideas arose in more than one context indicates their potential importance to river planning and management activities. These common themes include use of habitats to describe the river,

recognition of the need to manage the river on both small and large scales, similar desired future river conditions, and importance of public involvement and interagency cooperation.

The findings from the public meetings, institutional document analysis, and focus groups indicate that there are many opportunities to develop a successful planning and management program for the UMRS. Several of these points can be further developed through a natural resource management perspective, including aspects of public and institutional involvement. The potential divisiveness of competing river uses and jurisdictional fragmentation provide challenges to integrated management of the UMRS. For needed management activities to be accomplished, federal leadership in coordinating a systemwide river management system should continue.

I. INTRODUCTION

Public involvement has been recognized as a vital part of the Habitat Needs Assessment (HNA) process of the Upper Mississippi River System (UMRS) Environmental Management Program (EMP). During this first HNA, several approaches were developed by a multiagency HNA public involvement team (comprising the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the Upper Mississippi River Basin Association, the U.S. Geological Survey, and the five Upper Mississippi states) to assess the public's understanding, values, and expectations regarding desired future habitat conditions for the UMRS. These approaches, though by no means comprehensive, were considered to be the most practical and effective means of engaging the public in the initial HNA.

There are three bases for describing the significance of environmental resources in the Corps planning processes: technical, institutional, and public.¹ Technical significance is based on scientific or technical knowledge or judgment of critical resource characteristics. Institutional significance is based on acknowledgment of the resource in laws, adopted plans, and other policy statements of public agencies, tribes, or private groups. Public significance is based on recognition of the importance of the resource by some segment of the general public. These three bases of significance were used in the UMRS HNA. The institutional and public significance components are the focus of this report. Technical significance is detailed in the HNA technical team's report.

Much of the significance protocol developed in the Corps to date has focused on identifying the significance of resources as a whole. A general population survey in 1996 documented that the UMRS is a significant resource to the vast majority of the residents in the five UMRS states.² The survey also documented strong support for environmental issues in the UMRS, such as water quality improvement and habitat improvement, although UMRS environmental issues were not deemed to be society's most important concern. The importance of commercial and recreational river uses were documented as well. However, the survey fell short of specifying desired future conditions at a useful level of detail. The significance of the UMRS as a whole is not in question; thus, a more detailed notion of the components of resource significance of resources within the UMRS in a way that contributes to developing the "desired future conditions" for the UMRS.

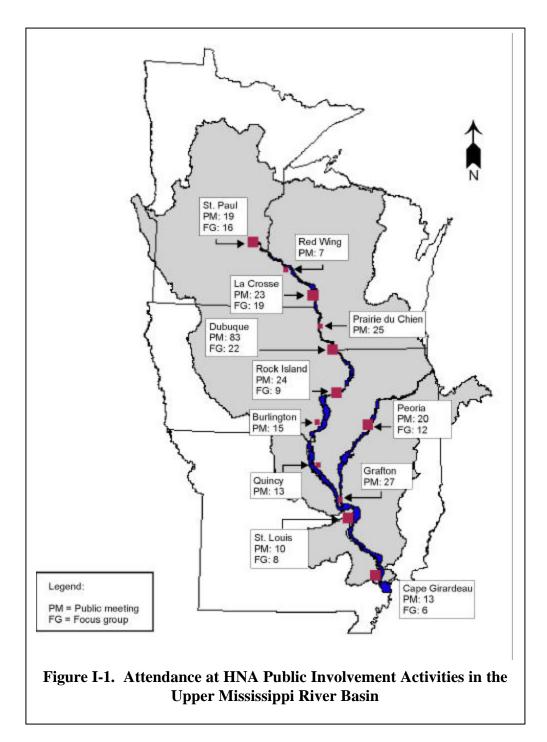
The majority of the HNA effort focused on developing data and desired future conditions within the technical/scientific component. These efforts are described in the technical team's HNA report. The public involvement component of the HNA described in this report was conducted as a complementary activity designed to ascertain aspects of desired future conditions from the public and institutional perspectives. A compilation of mission statements and UMRS management plan objectives were reviewed to identify institutional priorities and activities

¹ Apogee Research Inc. *Resource Significance Protocol for Environmental Project Planning*. IWR Report 97-R-4, U.S. Army Corps of Engineers, Water Resource Center, Alexandria, VA. 1997.

² U.S. Army Corps of Engineers. *Report to Congress: An Evaluation of the Upper Mississippi River System Environmental Management Program.* U.S. Army Corps of Engineers, Rock Island District, Rock Island, IL. 1997.

related to river habitat. A series of 12 public meetings conducted in April and May 1999 and a series of 10 focus groups conducted in July and August 2000 were used to assess the general public's understanding, values, and expectations regarding desired future UMRS habitat conditions. More than 300 people participated in the public involvement opportunities throughout the UMRS (Figure I-1).

The purpose of this report is to describe the three UMRS EMP HNA public involvement activities and highlight opportunities for improving future public involvement and river



management efforts in the UMRS. This report is organized into six chapters. Chapters II, III, and IV summarize the approach and results of the public meetings, institutional document analysis, and focus groups, respectively. More detailed reports on each of the three public involvement activities are contained in the appendices to this report. The reader is strongly encouraged to more closely examine the results of the public meetings, institutional document analysis, and focus groups in Appendices A, B, and C, respectively. The analysis and findings of the public involvement activities are presented in Chapter V. Chapter VI concludes the report with recommendations for improving future public involvement and river management efforts in the UMRS.

II. PUBLIC MEETINGS

The significance a natural resource has for the public is an important input to the Corps planning process. The UMRS in general was already identified as an important natural resource. The purpose of these public meetings was to develop a more detailed understanding of what resources in the UMRS the public finds significant.

APPROACH

The first method for collecting public views was through a structured group exercise held in conjunction with a series of public meetings. Twelve meetings sponsored by Audubon and the UMRCC were held at 12 locations in the UMRS during April and May 1999. A representative of the St. Paul District, U.S. Army Corps of Engineers, led the exercise during the "formal" part of the meeting on each occasion. The exercise was set up following procedures described in the Corps "Handbook for the Large Group Response Exercise."³ A slide presentation was used along with live facilitation. The exercise centered on asking people their opinions on the following three questions:

- What are the important natural resources in the Mississippi (Illinois) River ecosystem?
- What do you think are the problems and opportunities in the river ecosystem?
- How will you recognize successful restoration of the river ecosystem?

In the procedure, response sheets, clipboards, and pencils were provided for each member of the general public at the meeting. State and federal resource agency representatives were not invited to participate, since they had opportunities for input elsewhere in the HNA process. Representatives of local government and nonprofit organizations were invited to participate as they saw fit. After a brief introduction to the exercise, participants were asked to brainstorm and write responses to the three questions in three separate, three-minute time periods. Each question was projected on a screen during the time allotted to answer the respective questions. The facilitator gave brief introductions to each question, intending to clarify the intent. These are paraphrased below.

- <u>Question 1 introduction</u>: When we think of important resources nationally, we might think of bald eagles, the Grand Canyon, and I think the Mississippi River System would fall into this group too. For the river that <u>you</u> know, what are the most important resources in the river ecosystem?
- <u>Question 2 introduction</u>: Planners think of problems and opportunities as flip sides of the same coin. If there is a problem, this presents an opportunity to fix it. However, there

³ U.S. Army Corps of Engineers. *Handbook for the Large Group Response Exercise*. U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA. 1998.

may be opportunities not associated with problems, so feel free to write these down in ways most familiar to you.

• <u>Question 3 introduction</u>: Describing success can be tricky, so I want to give an example that has nothing to do with rivers to illustrate the many ways we can think of success. What makes a successful pizza? It could be the mix of ingredients, the flavor, the smell, the appearance, the texture; how well it goes with your favorite beverage; or it may depend on whom you are eating it with. Given that there can be many ways to measure success, what are some yardsticks or "report card" measures to judge successful habitat restoration?

After completing the brainstorming exercise, each participant was asked to review his or her responses to each question and select (by circling) the single most important answer to each question. Upon completion, the sheets and clipboards were handed in to the exercise organizers. To provide instant feedback to the group, the circled (most important) responses were read back to the group by spontaneously chosen agency representatives, then summarized briefly by the facilitator. Nearly 300 completed forms were collected at the meetings.

RESULTS SUMMARY

A complete listing of the "most important" responses given by participants (typed as written with only a few exceptions) and a summary of response categories are provided in Appendix A. Many perspectives were voiced at the meetings (Table II-1). Despite the emphasis on habitat restoration, many forms of river use or importance were represented in the responses. The majority of responses were general in nature, but there were also many highly specific responses (regarding a particular species, location, etc.).

Five main topics emerged as clear areas of interest in the future of the UMRS: (1) more fish and wildlife in general, (2) clean and abundant water, (3) reduction in sediment and siltation, (4) balance between the competing uses and users of the river, and (5) restoration of backwaters, side channels, and associated wetlands. Clean and plentiful water was a priority for human consumption, industrial processes, and aquatic conditions. Sedimentation was a concern because it jeopardizes backwater lakes, the navigation channel, recreational access to various areas, water quality, and riverbed conditions. Backwater lakes and associated wetlands were recognized as important for fish spawning/overwintering sites, for food sources during key periods for migratory waterfowl, and for critical connections to both terrestrial and deeper aquatic environments. In addition to expressing the desire to balance competing uses that affect resource quality, people also called attention to the benefit of having more citizen awareness and initiatives **r**lated to the river and the need to improve government agency coordination for consistent management and project completion.

TABLE II-1								
	RANGE OF PARTICIPANT RESPONSES TO PUBLIC MEETING QUESTIONS							
Public Meeting	Physical			Recreational	Human	Education/		
Question	Features	Habitat	Living Things	Use	Impacts/Value	Knowledge	Policy	Indicators
1. What are the important natural resources in the Mississippi (Illinois) River ecosystem?	 the water itself water quality backwaters (often linked to habitat value or recreational use) 	 fish and wildlife habitat spawning/ breeding areas migratory corridor 	 specific creatures population sizes population diversity 	 hunting and fishing boating aesthetics/ beauty 	 agricultural land transportation/ barges 	(no responses categorized)	(no responses categorized)	(no responses categorized)
2. What do you think are the problems and opportunities in the river ecosystem?	 pollution sedimentation fluctuating water levels constraints on natural river processes (levees, channels, structures) 	• habitat degradation/ restoration potential	more access, opportunities recreational conflicts (PWC's)	(no responses categorized)	 over- development (floodplain and watershed); over- engineering commerce has priority over the environment opportunity to boost U.S. trade potential litter 	 scientists lack adequate information general public lacks adequate knowledge 	 agency coordination/ performance funding polarized debate balanced use more enforcement public apathy 	(no responses categorized)
3. How will you recognize successful restoration of the river ecosystem?	 restore natural processes/ reclaim developed land water depths water quality less sedimentation restore islands 	 restore fish and wildlife habitat; more habitat migratory corridor increase refuge size 	 specific creatures and vegetation increased populations increased diversity 	 hunting and fishing boating aesthetics/ beauty/ enjoyment/awe 	 maintain commerce reduced development/ commercial use environment seen as important as economics less litter 	(no responses categorized)	 agency coordination/ performance set goals funding get rid of specific agencies balanced use 	 public notices improvement "sustainability" "never done"; continually assess reference conditions/ periods

III. INSTITUTIONS

There are a large number of institutions in the UMRS with goals and operations that can impact the river system in a variety of ways. It is important to the Corps natural resource planning process to discern what river resources these institutions identify as being significant. The purpose of this document analysis was to develop an understanding of the motives these institutions have in the UMRS.

APPROACH

A search was conducted to obtain information from a sample of the numerous governmental and nongovernmental organizations with interests in and responsibilities for habitat management in the UMRS. The purpose of the search was to obtain a sampling of documents that identify institutional intent with respect to UMRS habitat. The institutional intent was evaluated by examining the mission statements of agencies and organizations, resources identified as being important or the target of management activities, and statements in management plans about UMRS habitat.

Management plans and reports were reviewed from federal agencies, one tribal government, state agencies, not-for-profit organizations, and governmental coordinating organizations. A list of these documents is shown in Table III-1. The U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service have many existing plans for UMRS management. Although not all of these plans were reviewed, a representative set was examined. Points of inquiry included the scale at which the information was presented (local, pool, regional, systemwide), resources targeted for management or identified as important, and whether goals or objectives for habitat conditions were qualitative or quantitative. Thirty-three documents were evaluated. A full list of these documents and their analyses are presented in Appendix B.

RESULTS SUMMARY

Because many agencies and organizations have a systemwide focus or legal mandate, most information is presented at the systemwide scale. The majority of the information reviewed contained qualitative objectives. While quantitative objectives were rare, they did appear in several collaborative efforts undertaken with other groups.⁴ Generalized objectives for planning and management appeared more often than objectives for specific habitat types. Nearly all of the plans and reports directly addressed, or would impact by their recommended actions, resources such as endangered and threatened species, migratory birds, economically important fish species,

⁴ E.g., *North American Waterfowl Plan* – Upper Mississippi River and Great Lakes Region Joint Venture Implementation Plan; *A River That Works and a Working River* – Upper Mississippi River Conservation Committee and National Audubon Society; *Headwater to Backwaters* – The Conservation Fund.

and wetlands. Water quality improvement is a priority identified in most of the reviewed documents. Several reports address policy recommendations, principles for natural resources management, or points of coordination. For example:

- I. Embrace the duality of managing the UMRS for both navigation and wildlife habitat by:
 - a) Calling for establishing explicit parity between management for habitat and management for navigation (separate, prior congressional actions call for parity, others set habitat as secondary);
 - b) Recommending that, even on small scales and with intermittent distribution, pursuit of all opportunities to temporarily enable more of the river's "parts" to interact in ways mimicking natural systems is regarded as beneficial to resilient species and the river ecosystem (e.g., side channel and backwater connectivity, removing nonessential obstacles to floodplain continuity, seed island creation, flood pulses and small-scale drawdowns).
- II. Directing the U.S. Army Corps of Engineers to turn over to the U.S. Fish and Wildlife Service all lands for habitat management that are not essential for navigation-related management;
- III. Integrating economic development and environmental restoration;
- IV. Improving interstate coordination and cooperation in water quality and fisheries management;
- V. Utilizing the Upper Mississippi River Basin Association as the primary clearinghouse for state coordination;
- VI. Working toward the goals of the North American Waterfowl Plan.

Many plans and reports call for a comprehensive ecosystem approach and increased cooperation, given the multiple governmental jurisdictions with interrelated management responsibilities.

TABLE III-1							
DOCUMENTS ANALYZED FOR INSTITUTIONAL INTENT							
TitleDateAuthoring Organization							
A River That Works and a Working River	January 2000	Upper Mississippi River Conservation Committee, National Audubon Society					
Headwaters to Backwaters	January 2000	The Conservation Fund					
Refuge at the Crossroads	1999	The Izaak Walton League					
Water Resources of the Prairie Island Indian Reservation, Minnesota, 1994-97	1999	U.S. Geological Survey					
Upper Mississippi River 9-foot Channel Project, Ch. Mgt. Program, Definite Project Report/EA Pool 5	July 1999	U.S. Army Corps of Engineers, St. Paul District					
Mark Twain National Wildlife Refuge Comprehensive Conservation Plan Update	Summer 1999	U.S. Fish and Wildlife Service					
Endangered/Threatened Species and Wetland Resources for Prairie Island Indian Community	April 1999	Biological Services, Inc.					
Bird Fauna of the Prairie Island Indian	April 1999	Biological Services, Inc.					
Prairie Island Indian Community Fishery Resources Affected by Lock and Dam 3 and Channel Maintenance, Mississippi River	March 1999	Prairie Island Indian Community, Minnesota					
A Plan for Illinois Fisheries Resources FY'99- FY'03	February 1999	Illinois Department of Natural Resources					
North American Waterfowl Management Plan	1998	Upper Mississippi River and Great Lakes Region Joint Venture Implementation Plan					
The Restoration of Natural River Processes: Preliminary Steps for Sustaining the Ecological Health of Upper Mississippi River	April 6, 1998	Minnesota Department of Natural Resources					
Ten Policy Statements	adopted 1995- 1997	Mississippi River Basin Alliance					
Integrated Management Plan for the Illinois River Watershed and Technical Report	January 1997	Office of Lt. Governor, State of Illinois					
The Mississippi River in the Upper Midwest: Its Economy, Ecology, and Management	1996	The McKnight Foundation					
Channel Maintenance Management Plan	1996	U.S. Army Corps of Engineers, St. Paul District					
The Great River Flyway: The Management Strategy for Migratory Birds on the Upper Mississippi River	1996	National Biological Service and U.S. Fish and Wildlife Service					
Comprehensive Management Plan, Mississippi National River and Recreation Area	1995	Mississippi River Coordinating Commission and National Park Service					
Forging a New Framework for the Future: A Report to the Governors on State and Federal Management of the Upper Mississippi River	August 1995	Upper Mississippi River Basin Association					
Floodplain Management Assessment of the Upper Mississippi River and Lower Missouri Rivers and Tributaries	June 1995	U.S. Army Corps of Engineers					
"The Galloway Report," Science for Floodplain Mgt. into the 21st Century	June 1995	Scientific Assessment and Strategy Team					

TABLE III-1 (Continued)					
DOCUMENTS ANALYZED FOR INSTITUTIONAL INTENT					
Title	Date	Authoring Organization			
Sustaining the Ecological Integrity of Large	1994	Environmental Management Technical			
Floodplain Rivers		Center			
Restoring the Big River	19947	Izaak Walton League, NRDC			
Mississippi River Operational Management Plan	1996	U.S. Army Corps of Engineers, St. Paul District			
Upper Mississippi River Fisheries Plan 1994-	September	Upper Mississippi River Conservation			
2003	1993	Committee–Fish Technical Section			
Facing the Threat: An Ecosystem Management	1996	Upper Mississippi River Conservation			
Strategy for the Upper Mississippi River		Committee			
Mississippi Headwaters Management Plan	July 1992	Mississippi Headwaters Board			
A Strategic Plan for Managing the Mississippi	August 1992	Wisconsin Department of Natural			
River into the Next Century		Resources			
Big River Fisheries Ten Year Strategic Plan	1991	Missouri Department of Conservation			
Mississippi Interstate Cooperative Resource Agreement (MICRA) Activity Prioritization, Final Report	June 1992	U.S. Fish and Wildlife Service			
Mississippi River Recreational Fisheries Draft Status Report "Interjurisdictional Fisheries Initiative"	June 1991	American Fisheries Society			
Upper Mississippi River-Master Plan for Public	September	U.S. Army Corps of Engineers, St. Paul			
Use Development & Resource Management– Part III	1998	District			

Note: The full analysis of these documents is included in Appendix B.

Previous public meetings provided a picture of the UMRS resources that the public finds significant. This public resource significance is important for Corps planning activities. The purpose of these focus group sessions was to further develop this picture of resource significance.

APPROACH

Focus groups were the second method used to obtain public views of UMRS resources and the HNA process. The full results of these focus groups are presented in Appendix C. This second round of public input was designed to capture the public's reaction to the products and approaches developed by the HNA technical team. During July and August 2000, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Upper Mississippi River Basin Association convened ten focus groups at seven locations in the Upper Mississippi River basin. More than 700 people who had shown previous interest in river issues were invited to the focus groups. Various river interests were reflected in the 92 focus group participants, including perspectives from environmental groups, industrial and transportation groups, fishers and hunters, landowners, and river residents. An additional 50 people who could not attend the focus group sessions asked to be included in future public involvement opportunities. After a presentation on the HNA, a facilitated discussion was held on three points developed by the HNA public involvement team to get reactions from the public regarding HNA products in order to support improved future decision making. The three discussion points were (1) to gauge public reaction to details of the HNA process, (2) to capture public perspectives of desired future habitat conditions, and (3) to capture perspectives and preferences for future public involvement in the HNA/EMP process.

RESULTS SUMMARY

The focus groups engendered a variety of discussions on both technical and value-driven river management topics. Table IV-1 presents the range of general topics discussed. Participants generally thought the HNA was a good beginning to river resource management in the UMRS. The concept of using habitat classifications to frame river management issues was acceptable to the majority of participants; they were generally comfortable that the specified habitat conditions chosen by the HNA developers were workable/useful. However, participants wanted more definition of those habitats, and many participants felt that more factors needed to be considered, such as water quality and the impacts of dynamic river processes on what were perceived to be static habitat classifications. While focus group participants tended to think of river issues at a local level, the majority agreed that a broader scale was necessary for planning, at least at the system level if not at the watershed level. Participants also generally accepted the use of presettlement river system conditions as a reference point, although concerns were raised about

TABLE IV-1
GENERAL TOPICS DISCUSSED BY FOCUS GROUP PARTICIPANTS
Focus Group Participant Reaction to the HNA Product
Central Technical Issues
Use of Habitat as Basis of Management Effort
• Scale of the HNA
• Data Used for the HNA
• Framework Based on Historic, Existing, Forecast, and Desired Future Conditions Important Administrative Issues
 Balance of Uses and Users
 Public Involvement
 Agency Involvement
 Application of the HNA to Future River Planning Efforts
Focus Group Participants' Desired Future Conditions
Balance of Uses and Users
Naturally Functioning River
Water Quality and Sedimentation
Increase in Diversity/Quantity of Wildlife
Control of Access, Recreation, and Transportation
Specific Habitats and Time Periods as Restoration Goals
Focus Group Participants' Recommendations for Future Public Involvement
Engaging the Public
• Education
Increasing Public Interest
Public Participants
Methods of Public Involvement
Data Collection
• Internet
Public Meetings
• Focus Groups
Pool/Reach Meetings
Individual Habitat Projects
Meeting Frequency

Note: Full discussion of these results is included in Appendix C.

the compatibility of older data sources and the utility of incorporating in the planning process a river condition that could never again be replicated. Administrative aspects of the HNA that participants found particularly important were further development of the HNA, multiagency cooperation, and continued public involvement in and access to the HNA. Many participants expressed confusion about the actual application and end result of the HNA.

The desired future conditions focus group participants described were as richly varied as the many interests and perspectives of the participants. However, one general theme was consistently and repeatedly offered: participants wanted to see a "multiuse river" managed with a goal of balance among competing uses and users. In general, focus group participants did not describe their desired future conditions in terms of specific habitat types. Rather, more general conditions were mentioned, including a more naturally flowing river, higher water quality with less sedimentation, and increases in the diversity and quantity of wildlife. Two conflicting, overarching desired conditions were expressed: a return to more naturally variable conditions and a stabilization of existing conditions.

Most participants felt strongly that a diverse public should be continually involved in river management programs. They noted that more effort should be made to engage the public by educating them on river issues, especially on how the river affects them personally, and instilling in them a sense of ownership in river management processes, such as through involvement in the entire planning process, direct feedback on individual input at meetings, and development of a training program for laypersons to learn to collect river data. Other specific ideas included developing an interactive web site through which the public could submit data and opinions and through which the HNA tool could be used by the public, holding educational public meetings followed by focus groups to get feedback on management decisions, and developing a hierarchical public meeting setup where representatives of local/pool planning meetings would attend reach or system meetings.

The level of technical experience the focus group participants possessed on river management issues and decision tools varied greatly. Thus, some participants felt that the presentation was too complex, while others wanted more technical detail. There was a common feeling that the presentation had been designed for a more "select, informed audience" rather than for the general public. Across the board, the participants stated that they would have liked to have received background information before the focus group so that they would have known what to expect and thus better contribute to the discussion. Desired background information included definition of acronyms and technical terms, legislative background of the HNA, project funding, and specific examples of progress, problems, and programs. Most participants noted that they did not have a clear concept of the outcome of the HNA process.

V. ANALYSIS AND FINDINGS

This first round of public involvement in the UMRS EMP HNA yielded valuable insights into the interests and expectations that institutions and the public have for river habitat. In general, the findings indicate that the HNA is headed in the right direction. The themes developed from these public and institutional perspectives can provide important launching points for future planning and management activities in the UMRS.

In the following discussions, it is necessary to keep in mind several points about the extent and applicability of the data presented from the institutions, public meetings, and focus groups. The interpretation of this information is constrained by the research design. The data from the institutions were derived from secondary sources of mainly larger institutions. Thus, direct interviews with these institutions, or surveys of smaller institutions, could yield different results. The data gathered from the public meetings and focus groups should not be interpreted as representing the opinions of the general public, although there was a broad range of river interests represented. The highly motivated individuals who attend such meetings have a tendency to provide opinions that fall on the extreme ends of the public opinion spectrum.

CROSS-ACTIVITY THEMES

There were several themes common to two or all of the public involvement activities. The fact that these ideas arose in more than one context points up their potential importance to river planning and management activities. These common themes included the use of habitats to describe the river, recognition of the need to manage the river on both small and large scales, similar desired future river conditions, and the importance of public involvement and interagency cooperation.

Habitat-Based Description of the River

The use of habitat classifications in planning efforts appears to have a sound basis. Both focus group and public meeting participants were able to communicate their desires for the river in terms of habitats. The fact that public meeting participants gave habitat-related responses is particularly interesting, since these groups had not been prompted with habitat types as had the focus group participants. Several institutional documents also reference particular habitat types such as wetlands or backwaters. It is significant that the public does conceive of the river in terms of habitats and not just in terms of river uses or particular species.

Scale of the HNA

It is apparent that the HNA's dual focus on both the broad, system-level scale and the smaller pool-level scale meshes well with public interests and expectations. The analysis of institutional documents reveals that most of the sampled institutions have goals and responsibilities at the system level. Participants in the public meetings and focus groups expressed values and expectations for the river system in terms of systemic issues. Several focus group participants even commented that the river system was not broad enough, that the river should be examined at the watershed level. The participants also were sensitive to local river issues, often more so than systemic issues. Several participants suggested a building-block approach to river management issues through successive meetings at the local or pool, reach, and system levels. The HNA's ability to address river management issues on both smaller and larger scales makes it applicable to a broad range of public interests.

Desired Future Conditions

The results of the public meeting and focus group public participation efforts paint a good picture of aspects of the river that are important to the public. While the public meetings did not directly address the question of desired future habitat conditions, the results of those meetings do validate responses provided during the focus group sessions. Both public participation activities revealed that participants generally wanted cleaner water, reduced sedimentation, higher quantity and diversity of wildlife, and restoration of natural river features. However, there were also participants who believed that human economic interests should take precedence in river management. These conflicting perspectives were addressed in another desired future condition expressed by many participants in the public meetings and focus groups, who wanted something beyond the scope of the HNA: balanced management of the river among competing uses and users. The public importance of water quality and a multiuse river has been documented previously. The institutional analysis drew out similar river condition goals, including improved water quality, increased wildlife populations, and cooperation between navigation and wildlife interests in river management.

Public Involvement

Participants in both the public meetings and focus groups stressed the importance of including the public in river management and planning programs. Public meeting participants noted that they wanted to see higher levels of citizen awareness and more initiatives that directly involve the public. Focus group participants debated the level of involvement the general public should have in technical management issues, but noted that the public should be involved as much as possible. Focus group participants stated that they were willing to be involved in river management issues as long as they felt their input was valuable. Many suggestions for public involvement efforts were provided in the focus group sessions. Participants wanted feedback on their efforts, such as through newsletters or public meetings, to see the impact their participation

would have on the river. They also wanted more education on river issues to increase public interest and the level of involvement in river issues. Many focus group participants felt that a broad range of public participation opportunities should be offered, including web sites, public meetings, focus groups, data collection efforts, pool/reach-level meetings, and involvement in individual project planning teams.

Interagency Cooperation

All three of the public involvement activities highlighted the need for improved agency cooperation for management of the UMRS. Public meeting participants felt that there needed to be improved government agency coordination for consistent management and project completion. Several institutional documents called for improved coordination among UMRS states and among governmental jurisdictions with interrelated management responsibilities. Many focus group participants were pleased to see the Corps working with other agencies on the HNA and expressed the desire to see continued and expanded cooperation in the future.

OTHER IMPORTANT FINDINGS

Variation in Participants' Technical Orientation

The focus groups also provided a picture of the level of understanding the public has of the HNA and where they think it should be improved in the future. However, the levels of technical orientation toward river issues and experience with the river varied among focus group participants. Many of the focus group participants were conversant with the HNA, river ecology, and management issues. These participants provided suggestions on future refinements to the HNA with technical specificity. Other participants had more experiential understanding of river issues and so provided suggestions for improvement based on their personal values. This variation adds another level of complexity to the focus group results and makes them more difficult to generalize.

Suggested Improvements to the HNA

Focus group participants made recommendations for improvement to the HNA tool, including consideration of habitat and water quality and dynamic river and ecosystem processes. Many participants felt that the HNA would not be very useful without deeper consideration of habitat quality and process factors. Again, these recommendations were influenced by the level of understanding the participants had of the HNA and river processes from their own experience and from the brief technical presentation. Most focus group participants seemed to perceive the use of habitat classifications as another type of land use classification. Many focus group participants stated that they did not have a clear concept of the goals and actual application of the

HNA tool. They expected to see an action plan for the river system and were not sure how the HNA would lead to actual improvements in the system.

VI. RECOMMENDATIONS

The findings from the public meetings, institutional document analysis, and focus groups indicate that there are many opportunities to develop a successful planning and management program for the UMRS. Several of these points can be further developed through a natural resource management perspective, including aspects of public and institutional involvement. The potential divisiveness of competing river uses and jurisdictional fragmentation provide challenges to integrated management of the UMRS. For needed management activities to be accomplished, federal leadership in coordinating a systemwide river management system should continue.

CONTINUED PUBLIC INVOLVEMENT

The public should be continually involved in future EMP and HNA efforts. First, the members of the public are the ultimate stakeholders in the river system and should be given the opportunity to participate in its management. Second, the public is a valuable resource, not only in terms of providing opinions and suggestions on aspects of river management but also in terms of providing raw data through "citizen scientist" programs. In order to effectively incorporate public involvement efforts into the EMP and HNA, a public involvement plan must be developed.

Educate on Relevant Issues

While past efforts to involve the public in river issues through educational programs have had inconsistent results, public education should remain a part of public involvement plans. These educational efforts should be targeted to the interests of the public, such as those characterized by the focus group participants. They wanted b know about river issues that impacted them personally, in terms they could understand, and to learn about specific progress and problems in river system, including legislative and budgetary information. Informing the general public about the river, its problems, management efforts, and successes can enhance public participation in several respects. First, education can increase the number of citizens involved in river management activities. If people do not know there is a problem, they cannot be interested in helping to solve it. However, arousing public interest in river issues may still be challenging, as previous studies have shown that the public does not perceive UMRS environmental issues to be one of society's most important concerns. Second, education can enhance the level at which the public can contribute to river management discussions. The more people know about river processes, the more effectively they can communicate with the resource managers. Third, education can help resolve larger issues of competing resource use. Many of the attendees of the public meetings and focus groups wished to see a balance between competing uses and users in the river system. If the members of the public have a solid

understanding of the ecology and economics of the river, they can better understand what tradeoffs must be made in order to accomplish their desired future conditions for the UMRS.

Cultivate Trust and Ownership

Cultivating and maintaining a high level of public trust and ownership in the EMP and HNA are also important to public involvement efforts. The key to engaging the public is to maintain open lines of communication among resource managers, institutions, and the general public. Public participants should receive feedback on their efforts. The goal is to reduce the perception that public involvement remains an afterthought or is only given cursory attention to fulfill requirements. The public should be provided regular updates and frequent opportunities to submit their input. Interactive web sites, surveys, or public meetings could be used to verify that key messages regarding river management issues are reaching the intended audience. To maintain public trust and support, events and activities that may negatively impact river resources should be honestly reported, but positive actions and outcomes important to maintaining a healthy river should be broadcast as well. For example, as several focus group participants pointed out, many people believe that water quality in the UMRS continues to decline, when in fact the quality of the water has been improving.

Involve a Variety of Interests

Members of the general public are interested in and capable of being involved in varying levels of participation in the UMRS. Thus, it will be very important to future public involvement efforts to provide opportunities for public participation tailored to the abilities and interests of a variety of citizens. The focus group participants called for a range of public involvement approaches, from public meetings to data collection efforts. Public outreach efforts for the UMRS should address not only varying experience levels but also varying interests and expectations. To avoid alienating certain segments of the public and to ground habitat planning in reality, economic uses of the river should be integrated into the EMP in some manner. Otherwise, the EMP may not have the full support of the public, and business interests may be aligned against it instead of demonstrating a willingness to cooperate. The success of public actions through the Clean Water Act and other similar legislative mandates can be used to exemplify the types of changes that may be accomplished when the public partners with federal, state, and local agencies.

INSTITUTIONAL INVOLVEMENT

The institutional analysis confirmed a significant amount of interest in the UMRS by a range of organizations. The operating objectives and strategies of the organizations studied showed a high degree of alignment with the intent of the HNA and EMP. The scope of institutional involvement should be broadened to engage the hundreds of grassroots, community-

based, nonprofit organizations that have an interest in the UMRS, as well as municipal governments of towns and cities located along the river and other organizations. Representatives of these organizations should be engaged directly, if possible, in order to more specifically define desired future habitat conditions for their respective organizations.

Resource for Public Outreach

Additionally, these organizations can provide a valuable resource for public education and outreach programs, especially through a pool-level planning program. Meetings of the Upper Mississippi River Basin Alliance and the National Heritage River communities are examples of forums where large numbers of institutional representatives could be engaged efficiently and effectively. Internet-based methods could also be devised to collect information from groups and individuals.

Interagency Coordination

In addition to the involvement of a wider variety of institutions in UMRS planning initiatives, there should be more coordination among these entities. Although systems have been established for coordination, there is room for improvement to achieve site-specific management planning in the context of regional and ecosystem processes. The HNA/EMP would benefit from organizations compiling more quantitative goals and objectives for their local, pool, or systemwide responsibilities in the Upper Mississippi River System, in consultation with organizations sharing related responsibilities.

POOL-LEVEL PLANNING PROCESS

Another element of future public involvement efforts in the UMRS should be an investigation into the feasibility of developing a pool-level planning process. If pool-level meetings can occur on a regular schedule to discuss and act on local problems and opportunities, a broad and sustained public involvement can be achieved. This would be a forum where various perspectives, site-specific plans, regional plans, and desired future habitat conditions could have ongoing consideration on a scale that is complex, yet manageable. While there is awareness that planning efforts need to take place on a broader scale, people generally relate to local-level issues that impact them personally. It should be determined if a pool-level planning process can be developed rapidly from existing institutions and resources. The development of such a planning process would be another step toward the coordinated rehabilitation of habitat in the UMRS, another step toward the physical action that many people involved with the river want to see.

APPENDIX A

RESULTS OF PUBLIC MEETINGS ON THE UPPER MISSISSIPPI RIVER SYSTEM

Part I

SUMMARY RESULTS OF PUBLIC MEETINGS ON THE UPPER MISSISSIPPI RIVER SYSTEM

SUMMARY RESULTS OF PUBLIC MEETINGS ON THE UPPER MISSISSIPPI RIVER SYSTEM

During April and May 1999, the National Audubon Society and Upper Mississippi River Conservation Commission (Audubon/UMRCC) convened public meetings at 12 locations in the Upper Mississippi River basin. A total of nearly 300 people interested in the Upper Mississippi River System attended one of the twelve meetings; locations and attendance were as follows: Cape Girardeau, MO (13); St. Louis, MO (10); Burlington, IA (15); Quincy, IL (13); Rock Island, IL (24); Dubuque, IA (83); Prairie du Chien, WI (25); La Crosse, WI (23); Red Wing, MN (7); Peoria, IL (20); Grafton, IL (27); South St. Paul, MN (19).

After presentations were made about the condition of the Upper Mississippi River System, the audience was asked to write down all their answers and ideas to these three questions:

- I: What are the important natural resources in the Mississippi (or Illinois) River ecosystem?
- II: What do you think are the problems and opportunities in the river ecosystem?
- III: How will you recognize successful restoration of the river ecosystem?

Then each person was asked to circle on what they thought was their single most important idea under each of these three questions. The papers were turned in (279 total) and the meeting leader read the circled items aloud (without naming the person who had written it). These answers are summarized in categories after this discussion. A few clarifications about this information are that some people represented organizations but their answers were counted the same as for an individual; government agency employees did not participate in providing written answers; and answers to questions do not all add to 279 because everyone didn't answer every question. Five main topics were clear areas of interest in the future of the Upper Mississippi River System:

- More fish and wildlife in general (habitat diversity, species diversity, and abundance),
- Clean and abundant water,
- Reduction of sediment and siltation,
- Balance between the competing uses and users of the river, and
- Restoration of backwaters, side channels, and associated wetlands.

Clean and plentiful water was a priority for human consumption, industrial processes, and aquatic conditions. Sedimentation was a concern because it jeopardizes backwater lakes, the navigation channel, recreational access to various areas, water quality, and river bed conditions. Backwater lakes and associated wetlands are important as fish spawning/overwintering sites, food sources during key periods for migratory waterfowl, and backwaters can provide critical connections to both terrestrial and deeper aquatic environments. In addition to recognizing the need to balance competing uses that affect resource quality, people also called attention to the benefit of having more citizen awareness and initiatives related to the river, and the need to improve government agency coordination for consistent management and project completion. The five main areas of public interest are similar to the main objectives of government agencies with management responsibilities in the Upper Mississippi River System. Within the five areas, there appeared to be slight regional variations in how people expressed their views, varying with the quality of habitat in their area or how much access they had to recreation. Recently, but not as part of this project, a telephone survey was conducted in part to determine if there are regional differences in public interests throughout the river system. That survey didn't find differences and the meetings described here were not focused on regional differences. Whether or not there are such differences might be worth further exploration because it could influence specific habitat projects in the future. Also, more specific public input would be beneficial to the Environmental Management Program Habitat Needs Assessment effort.

QUESTION I: WHAT ARE THE MOST IMPORTANT RESOURCES?

(Responses are listed below by topic, followed by social/human issues (SOCIAL) and specifically named species (SPECIES OF PUBLIC CONCERN). The Miscellaneous group includes two or fewer responses on unrelated topics. If no number follows some statements, those are single, related responses).

Habitat for—and diversity—of fish and wildlife species (79). Water supply/quality (38). Restoring adequate backwaters and associated wetlands (34). International flyway/migratory species/waterfowl habitat (24). Fish and fish habitat (13). The river itself/natural scenic beauty (6). River running freely, more wilderness character (5). Miscellaneous (8).

SOCIAL: River serves so many different purposes/uses (13). Vital transportation corridor (7). Recreation generally (6).

SPECIES OF PUBLIC CONCERN:

Refuge for bald eagles. Bottomland hardwoods/species that use b.h. forests: raptors, prothonotary warblers, redshouldered hawks, pileated woodpeckers (2). Endemic species: paddlefish, cerulean warblers, bald eagles. Mussel diversity (2). _____

QUESTION II: WHAT ARE THE PROBLEMS AND OPPORTUNITIES?

(Responses related to opportunities are grouped into the categories of desirable restoration activities (RESTORATION), types of habitat proposed for protection (HABITAT PROTECTION), and societal/human issues (SOCIAL). Responses related to problems are shown in a list of various topics as well as SOCIAL. "Miscellaneous" includes 1-2 responses on unrelated topics. If no number follows some statements, those are single, related responses).

OPPORTUNITIES

RESTORATION:

Restore industrial brownfields in floodplain for nature. Restore natural curves as much as possible. More filter strips (2). Forest/floodplain restoration for sediment control and habitat. Provide food and habitat for migratory waterfowl. Recreate marshes in some agricultural floodplains. Reverse some of the past damages. Focus on areas with high ecological restoration potential. Targeted rehabilitation for swans and migratory species. More rehabilitation work in impounded areas. Habitat protection: large rare habitats, undisturbed areas, dead-end sloughs (3). Miscellaneous (7).

SOCIAL:

Need for more public education, awareness (12).

PROBLEMS

Sediment, siltation (61). Lock and dam system, water level management for navigation, barge traffic (32). Pollution- point source and nonpoint source (31). Habitat loss/reduction in diversity (12). Levees (9). Current condition of backwaters (8). Flooding (5). Miscellaneous (5).

SOCIAL:

Managing river system for competing purposes, users (31). Lack of agency coordination, consistent focus & management, project completion. Lack of planning, adequate information (3). Too much development (3). -----

QUESTION III: WHAT WOULD SUCCESS LOOK LIKE?

(Responses are grouped into categories trending generally from the general to more specific: overall environmental conditions (CONDITIONS), trends in populations of species (POPULATIONS), social/human issues (SOCIAL), types of habitat desired (HABITAT), and specifically named species (SPECIES OF PUBLIC CONCERN). "Miscellaneous" includes 1-2 responses on unrelated topics. If no number follows a statement in a category, it represents one).

CONDITIONS:

Cleaner water (31). Reduced siltation/sediment (15). Sustainable ecosystem (13). More habitat restoration generally (8). Success is not achievable, always changing (4). Miscellaneous (21).

POPULATIONS: All populations stable or increasing (40). Increased waterfowl (9). Increased fish (4). Miscellaneous (5).

SOCIAL:

Balanced uses and management of the system (42). More citizen action, awareness, community initiatives (11). Trash-free river banks/visually clean (5). Same or reduced level of navigation activity, or removal of navigation/lock and dam system (6).

HABITAT:

Restored backwaters and side channels: more of them, deeper, more access to them, more connection of them with the river, protection by silt-deflecting levee (26). More natural river/floodplain: allowing meanders, oxbows, river connection to backwaters (10). Habitat restored to the quantities that existed before creation of the navigation system, such as forested wetlands, mussel beds, channel backwaters, islands (3). More bottomland forests and marshes/wetlands (3). Miscellaneous (10).

SPECIES OF PUBLIC CONCERN:

More eagles.

Prothonotary warbler, great blue heron, sustained by new tree growth in floodplain (La Crosse).

Increase algal diversity, especially diatoms. Indicator species such as cerulean warbler and red-shouldered hawk (So. St. Paul). Return of large tundra swans to Weaver Bottoms (Red Wing). Better run of sturgeon.

Part II

RAW RESULTS OF PUBLIC MEETINGS ON THE UPPER MISSISSIPPI RIVER SYSTEM

Location	ID#	Response: question 1
Cape Girardeau	1	agriculture/woodlands/variable wetland systems/transport/drainage/ variable habitat: not mutually exclusive
Cape Girardeau	2	clean water
Cape Girardeau	23	River is vital transportation corridor for Missouri
Cape Girardeau	4	agricultural crops
Cape Girardeau	5	wetlands
Cape Girardeau	6	navigation
Cape Girardeau	0 7	not circled
Cape Girardeau	8	not circled
Cape Girardeau	9	livelihood: a location with resources and qualities that allows one to perpetuate family life
Cape Girardeau	10	tourism
Cape Girardeau	11	diversity of individual ideas
Cape Girardeau	12	habitat for large number of species
Cape Girardeau	13	missing
St. Louis	14	natural riverine ecosystem
St. Louis	15	diversity of species and habitat
St. Louis	16	above all the river must support human life and economic
		development. Second to this, as much ecological support as possible
St. Louis	17	wetland habitats
St. Louis	18	water
St. Louis	19	international flyway backbone
St. Louis	20	water supply and quality
St. Louis	21	the life in the system, and the people
St. Louis	22	water quality - drinking
St. Louis	23	water for drinking
Burlington	24	adequate backwater depths for fishing, boating, hunting
Burlington	25	water for recreation and drinking
Burlington	26	not circled
Burlington	27	the backwater for fishing-boating and wildlife
Burlington	28	backwater sloughs/ponds
Burlington	29	wildlife habitat for fish, ducks, geese, eagles
Burlington	30	In pool 19 there are a lot of isolated sloughs that connect to the
		river system
Burlington	31	soil conservation
Burlington	32	Backwater's fill cleaned out, so all creeks and streams can reach the riverso they don't flood
Burlington	33	Healthy populations of bottomland bird species: red shouldered
Burlington	34	hawks, pileated woodpecker, prothovetary warblers silt removal

Location	ID#	Response: question 1
Burlington	35	not circled
Burlington	36	Varying levels of water structure (depth, turbidity) that sustain
C		diversified life from vertebrae to mammals
Burlington	37	Scenery bluff
Burlington	38	fish and wildlife habitat diversity
Quincy	39	healthy backwater
Quincy	40	habitat for native species - terrestrial, aquatic
Quincy	41	mode of transportation
Quincy	42	wildlife habitat - supports many types of life
Quincy	43	overall (?) of a healthy system - plants, animals and marine life
Quincy	44	fish and wildlife
Quincy	45	hardwood forests (swamp) and marshes
Quincy	46	drinking water
Quincy	47	ducks, geese, fish (commercial and game fish), songbirds, other wildlife
Quincy	48	provide fertile soils - excellent bottomland farming
Quincy	49	fishing and hunting and wildlife and habitat for same
Quincy	50	water that we process and drink
Quincy	51	refuge for the bald eagles
Rock Island	52	parks - palisades M., Pikes Peak (?), all other existing parks, public lands
Rock Island	53	fishery - recreational and commercial
Rock Island	54	to supply transportation
Rock Island	55	fish
Rock Island	56	wetlands
Rock Island	57	plants, vegetation
Rock Island	58	waterfowl breeding, resting, migrating
Rock Island	59	native plant and animal species
Rock Island	60	the water itself
Rock Island	61	restoring the backwater habitat and water table
Rock Island	62	holistic health of the river
Rock Island	63	variety of wetland types
Rock Island	64	migratory waterfowl
Rock Island	65	water quality (nutrients, turbidity)
Rock Island	66	bird habitat and migratory corridor
Rock Island	67	breeding grounds
Rock Island	68	habitat for wildlife
Rock Island	69	water
Rock Island	70	floodplains
Rock Island	71	try to keep it more in the natural state slow down developments
Rock Island	72	migratory birds (passerines, waterfowl, shorebirds, raptors)
Rock Island	73	habitat for fish, mussels, avian populations migratory and breeding
Rock Island	74	letting the river ecosystem revert back to its natural state, removing
		ag. Dikes and other unnatural levees

Location	ID#	Response: question 1
Rock Island	75	wildlife and fish
Dubuque	75 76	running freely without human interference
-	70	
Dubuque	//	the entire UMR system and all of the associated habitats and wildlife
Dubuque	78	watersheds entering the miss in pool 13
Dubuque	79	waterfowl
Dubuque	80	water itself
Dubuque	81	fish (sportfish most important) and animals, birds (waterfowl most important) (paraphrased)
Dubuque	82	the particles of foodstuff that sustains the life of plants and animals
Dubuque	83	urban sprawl
Dubuque	84	wildlife and waterfowl
Dubuque	85	plants, fish, wildlife
Dubuque	86	water quality, watershed health
Dubuque	87	fish
Dubuque	88	habitats
Dubuque	89	wildlife: fish, birds, plants
Dubuque	90	fish breeding areas
Dubuque	91	sustain areas for natural plant and animal life
Dubuque	92	That the river is so big and diverse is good
Dubuque	93	spawning/nesting areas for fish/birds/reptiles/insects
Dubuque	94	ecological resources - natural fauna - preserving what animals and plants that still exist in the river system
Dubuque	95	the quality of the water itself capable of supporting a diversity of plant and animal species
Dubuque	96	animal, plant diversity
Dubuque	97	endemic species: paddlefish, centean warblers, bald eagles, wood ducks
Dubuque	98	waterfowl; wildlife
Dubuque	99	migratory waterfowl, eagles, herons, flyway
Dubuque	100	there are people that love to fish (in Mud Lake) but there is no water, therefore no fish
Dubuque	101	integrity/connectivity of smaller ecosystems with corridors
Dubuque	102	fish spawn
Dubuque	103	lead use from old shot and lead sinkers
Dubuque	104	water quality
Dubuque	105	wildlife
Dubuque	106	fish and wildlife habitat
Dubuque	107	fish
Dubuque	108	vegetation
Dubuque	109	water quality
Dubuque	110	flora and fauna
Dubuque	111	intact bio habitat for all life forms
Dubuque	112	fishing, recreation, natural beauty of the river itself

Location	ID#	Response: question 1
	110	
Dubuque	113	fish and wildlife
Dubuque	114	viable wildlife populations
Dubuque	115	full flow backwaters are necessary
Dubuque	116	mussel diversity
Dubuque	117	finding the greatest balance between (recreation) and the ecosystem
Dubuque	118	economic success through barge transportation
Dubuque	119	source of drinking water
Dubuque	120	the fish
Dubuque	121	almost everything that is different from the Missouri River - islands, water clarity, slow current, etc
Dubuque	122	the water itself; the native species
Dubuque	123	water
Dubuque	124	harbors, side channels, backwaters
Dubuque	125	When those who utilize the river for whatever purpose complain
	120	the river no longer serves them efficiently I believe they must
		modify their operations or equipment and not negatively change
		river parameters
Dubuque	126	we need healthy fish and wildlife and to get that we need clean
	120	water
Dubuque	127	restore or create backwater
Dubuque	128	aquatic wildlife
Dubuque	129	all wildlife habitat
Dubuque	130	none circled
Dubuque	131	migratory bird corridor
Dubuque	132	fishing
Dubuque	133	not have the water level change so much or so often
Dubuque	134	large contiguous blocks of backwater and adjacent habitats i.e.
Dubuque	135	savanna army depot excellent for boating
1		e
Dubuque Dubuque	136 137	fish and wildlife the river itself
-		
Dubuque	138 139	recreational boating
Dubuque	139	free access (free of charge for recreational boaters)
Dubuque	140	nonpolluted
Dubuque	141	the recreation that goes on around Dubuque fish and wildlife
Dubuque		
Dubuque	143	fish habitat
Dubuque	144	wildlife diverse wildlife
Dubuque	145	
Dubuque	146 147	fish fish and wildlife
Dubuque	147	fish and wildlife
Dubuque	148	fish and wildlife i.e. bald eagles and other birds
Dubuque	149	good backwaters without silting in each year

Location	ID#	Response: question 1
Dubuque	150	fishing
Dubuque	151	maintain its recreational value
Dubuque	152	continuous flow, backwaters
Dubuque	153	pleasure
Dubuque	154	homes for animals
Dubuque	155	blufftops preserved
Dubuque	156	viable habitat for wildlife and plants
Dubuque	157	multiple use possibilities
Dubuque	158	food for wildlife
Prairie du Chien	201	backwaters must remain as is or be kept to a balance with nature
Prairie du Chien	202	moving grain, fertilizer
Prairie du Chien	203	restore specific backwater depths to provide lost habitat; place materialto create new islands
Prairie du Chien	204	water quality - wildlife
Prairie du Chien	204	backwater lakes deep enough to sustain a good fish population
Prairie du Chien	203	wetlands/floodplains; waterlife and plant life; clean fishable,
Traine du Cillen	200	swimmable water
Prairie du Chien	207	keeping it clean of chemicals (industry and farm); clean up destroyed habitat
Prairie du Chien	208	its wilderness character
Prairie du Chien	209	wildlife - fish habitats
Prairie du Chien	210	water quality
Prairie du Chien	211	fish populations/wildlife populations
Prairie du Chien	212	waterflow and habitat for as many species of animal, fish, plants
		and insects as possible. 1940-50 conditions
Prairie du Chien	213	I am a corn growerI'm thinking of agriculture and how important the river system is to our livelihood and our markets
Prairie du Chien	214	wetlands and associated backwater habitats
Prairie du Chien	215	the use of the river/bottomland for nurturing animals and plants
Prairie du Chien	216	varied habitats
Prairie du Chien	217	diversity of habitats (highly diverse is better)
Prairie du Chien	218	its overall habitat diversity
Prairie du Chien	219	fish, wildlife, plants, diversity
Prairie du Chien	220	bottomland hardwoods
Prairie du Chien	221	diversity of habitats
Prairie du Chien	222	water quality
Prairie du Chien	223	groundwater
Prairie du Chien	224	fish populations are low and need the support of hatcheries to replenish their numbers
Prairie du Chien	225	diversity of habitats - remnants of habitats - lack of prairie
La Crosse	225	the river itself
La Crosse	220	mussel communities - fish resources
La Crosse	227	potable water source
La C10350	220	pomore water source

Location	ID#	Response: question 1
	220	maintain vagatation and babitat for fish and wildlife to sustain
La Crosse	229	maintain vegetation and habitat for fish and wildlife to sustain populations
La Crosse	230	healthy water in the river - non-polluted etc.
La Crosse	231	species diversity, primary production, structural integrity
La Crosse	232	availability to: fish, hunt, hike, bird & animal viewing, camping, boating, swim, dive
La Crosse	233	backwaters
La Crosse	234	water surface - upon which barges and boats move, ducks swim
La Crosse	235	wildlife/habitat/water quality/homes, businesses, supporting infrastructure/people
La Crosse	236	native plants and animals
La Crosse	237	natural scenic beauty - limited upland development
La Crosse	238	birds - especially wading birds, shore birds, species using
LO	220	bottomland hardwood forests, raptors
La Crosse	239	fish and wildlife habitat
La Crosse	240	current in backwater areas sufficient to remove sediments and cause meandering
La Crosse	241	diverse ecosystems
La Crosse	242	abundant bird life
La Crosse	243	varied and healthy habitat types to support variety of birds, fish and animals
La Crosse	244	limited avenue of transportation, commerce and recreation. That limit should be identified by a population ecologist and a poet
La Crosse	245	the river itself - a diverse ecological treasure, a valuable navigation artery
La Crosse	246	healthy environment for: birds, animals, plants, fish
La Crosse	247	healthy habitat for birds - migratory & resident - and animals
La Crosse	248	wildlife (local) and fisheries resource
Red Wing	249	Recreation: boating, swimming, scenic parks
Red Wing	250	natural scenic beauty - bluffs, islands, bird life
Red Wing	251	birds and their migration needs
Red Wing	252	none circled
Red Wing	253	wetlands, including backwater sloughs and marshes
Red Wing	254	boating
Red Wing	255	the refuge itself which provides habitat for the hundreds of
		species of migrating and resident birds, furbearers, amphibians and all the other fauna which are members of the ecosystem
Peoria	256	Fresh water
Peoria	257	wildlife on islands (deer, turkey)
Peoria	258	islands from dredge of river bottom
Peoria	259	clean water
Peoria	260	waterfowl
Peoria	261	protect the wooded bluffs - maintain the oak, hickory, sedonna,
1.00110	201	prairie on uplands, bluffs

Location	ID#	Response: question 1
Peoria	262	the river water
Peoria	263	water quality for plants and animals
Peoria	264	source of clean water
Peoria	265	habitat for fish, etc.
Peoria	266	wildlife
Peoria	267	wildlife habitat - refuge areas
Peoria	268	fish
Peoria	269	bottomland trees, aquatic plants and animals
Peoria	270	public water supply
Peoria	271	backwater wildlife areas - restoration of pond lilies and moss
Peoria	272	fish - many species - some only in big rivers
Peoria	273	hunting and fishing opportunities
Peoria	274	wildlife habitat including fisheries
Peoria	275	resources are pure water and no pollution and places safe for
		animals and birds
Grafton	276	backwater wetlands
Grafton	277	waterfowl habitat
Grafton	278	migrating waterfowl
Grafton	279	migrating waterfowl
Grafton	280	migrating waterfowl
Grafton	281	migrating waterfowl
Grafton	282	backwater wetlands
Grafton	283	major flyway for migratory waterfowl
Grafton	284	waterfowl
Grafton	285	waterfowl
Grafton	286	the diversity of species on the river and how they use it
Grafton	287	fish and wildlife
Grafton	288	wildlife habitat
Grafton	289	critters
Grafton	290	waterfowl
Grafton	291	sport - hunting and fishing
Grafton	292	different habitats for different species
Grafton	293	open space, preferably publicly owned and not levied off from the
		river
Grafton	294	wetlands
Grafton	295	native plants and animals
Grafton	296	how the pools grow and deteriorate
Grafton	297	room for backwaters
Grafton	298	migratory waterfowl - back wetlands that support several of above
	-	(species)
Grafton	299	migrating waterfowl and birds
Grafton	300	ducks
Grafton	301	backwater wetlands, migrating waterfowl
Grafton	302	backwater wetlands

Location	ID#	Response: question 1
So. St. Paul	303	wildlife habitat
So. St. Paul	304	floodplains
So. St. Paul	305	diverse wildlife habitat
So. St. Paul	306	the backwaters
So. St. Paul	307	tributaries touching every part of the basin providing connectvity
So. St. Paul	308	drinking water quality
So. St. Paul	309	migration corridor - terrestrial, aquatic - for life cycle; corridor to
		repopulate after disaster
So. St. Paul	310	diversity of habitat, supporting great diversity of biota
So. St. Paul	311	good water supply - local and downstream
So. St. Paul	312	area for outdoor recreation in natural setting with my family (close
		to home)
So. St. Paul	313	provides food for animals and humans
So. St. Paul	314	bluffs, beaches, flats
So. St. Paul	315	biodiversity
So. St. Paul	316	clean water
So. St. Paul	317	native american cultural places - plants and animals
So. St. Paul	318	healthy populating native species wildlife and plant (fish, birds,
		etc) = biodiversity
So. St. Paul	319	backwaters - quiet marshes - bird habitats - channel for eagle
		fishing; other for nesting
So. St. Paul	320	low sediment loads
So. St. Paul	321	clean water

Location	ID#	Response: question 2
Cape Girardeau	1	perception of different system users as being in absolute opposition
Cape Girardeau	2	Corps of Engineers overcontainment (problem)/wetlands formation
•		(opportunity)
Cape Girardeau	3	Mississippi interpretation can contribute to increased tourist
		activity
Cape Girardeau	4	Trying to turn back the clock to an ecosystem that did not have to
		support as many people
Cape Girardeau	5	pollution and sedimentation
Cape Girardeau	6	ever increasing flood crests
Cape Girardeau	7	need to balance many demands on rivers and in an effective and
		economic manner
Cape Girardeau	8	not circled
Cape Girardeau	9	lack of a comprehensive plan (problem)/dollars already spent on
	10	the river can be redirected (opportunity)
Cape Girardeau	10	river not dredged often enough
Cape Girardeau	11	Government control (problem) Let individuals and communities
0 0 1	10	run their own lives (opportunity)
Cape Girardeau	12	balancing ecological and economic values
Cape Girardeau St. Louis	13	too much water
St. Louis	14	Industry's desire to make the river one long navigational ditch and the Cornel interest in supporting this
St. Louis	15	the Corps' interest in supporting this river traffic, locks and dams (problem)
St. Louis	15	misinformation - lack of good scientific data supporting many
St. Louis	10	environmental demands
St. Louis	17	over-engineering - locks and dams, etc.
St. Louis	18	improve water quality (opportunity)
St. Louis	19	locals still want to raise levees
St. Louis	20	navigation needs interfering with habitat (problem)/acquire more
	20	land for habitat restoration (opportunity)
St. Louis	21	convert levees to un-leveed system as acceptable
St. Louis	22	more education
St. Louis	23	too many levees; too many barges
Burlington	24	backwaters need (to be) restored to their original depths by
C		dredging
Burlington	25	pollution of water
Burlington	26	look at other ways to ship grain and other farm products
Burlington	27	the river and backwater filling in
Burlington	28	siltation
Burlington	29	lack of finances to dredge out private sloughs and clean up along
		shorelines
Burlington	30	sloughs have filled up over the years with sediment from
	21	flooding of the Miss. River
Burlington	31	upland sediment (see original - photocopy unclear)

Location	ID#	Response: question 2
Burlington	32	backwater sediment cleaned out, channel cleaned out to a 9 ft.
8		channel instead of raising the river
Burlington	33	primarily viewed as transportation corridor over wildlife corridor
Burlington	34	silting/watershed
Burlington	35	backwaters filling (paraphrased)
Burlington	36	lack of education of man and the changes of the river and how he has an impact on it. Policing of it also
Burlington	37	need of recreational areas adjacent to the river
Burlington	38	continue the Environmental Management Program by the Corps, USFWS, & ILDNR
Quincy	39	siltation, siltation, siltation
Quincy	40	constrained river
Quincy	41	navigation interest - improve US trade
Quincy	42	filling-in of river wipes out habitat
Quincy	43	agriculture which puts sediment into the river system
Quincy	44	sedimentation
Quincy	45	reduction of population of resident / extinction?
Quincy	46	ag. Chemicals
Quincy	47	excessive siltation
Quincy	48	public-private opportunity: protect private property rights by
		encouraging habitat by incentives versus regulation: public-private relationships are the most cost effective
Quincy	49	How much longer do you think cities, businesses and industries are going to put up with being flooded out protecting dirt and the floodplain with levees?
Quincy	50	pollution is one of the major problems
Quincy	51	pollution
Rock Island	52	(so) environmental laws and enforcement are not swayed by politics or who is in office - set acceptable standard
Rock Island	53	could be maintained as a navigation and wildlife corridor
Rock Island	54	pollution
Rock Island	55	farm chemicals
Rock Island	56	great opportunity for public education
Rock Island	57	the barge traffic is destroying the river banks
Rock Island	58	flooding due to levees that take away our wetlands in place of ag.
		Ground that we subsidize elsewhere not to plant
Rock Island	59	opportunity to protect remaining undisturbed habitat
Rock Island	60	food for fish
Rock Island	61	remove the wing dams and let the sediment move through the area
		and clean out the sludge
Rock Island	62	barges' effect too great
Rock Island	63	siltation
Rock Island	64	(problem): navigation, the building of wing dams (elevation) to divert more water towards the channel

Location	ID#	Response: question 2
Rock Island	65	black topping and paving of large areas (malls) which do not allow
		water to seep into the ground
Rock Island	66 (7	could get rid of some corn and re-create marshes
Rock Island	67	loss of habitat
Rock Island	68 60	pollution
Rock Island	69	commercial ventures take precedence over private landowners' property
Rock Island	70	problem: levees
Rock Island	71	reverse some of the damages that have been done
Rock Island	72	overall habitat loss due to human-induced impacts (residential, commercial, recreational, industrial, agricultural)
Rock Island	73	problem: navigation structures, man-made structures
Rock Island	74	banning further development of floodplains
Rock Island	75	herbicides and pesticides from farmland run-off
Dubuque	76	There is still quite a bit of unharmed habitat in the upper Miss.
		Perhaps taking out some or all locks
Dubuque	77	water quality
Dubuque	78	controlling silt delivery in tributaries
Dubuque	79	siltation
Dubuque	80	pollution of water
Dubuque	81	the problems are siltation, pollution (chemical), excessive barge/large boat traffic. River bluffs, inland streams need to be protected from overdevelopment and poor farming practices
Dubuque	82	the channeling of the river is at a max
Dubuque	83	reduced water flow outside of channel
Dubuque	84	siltation
Dubuque	85	heavy farming and development (homes) on the bluffs and banks
Dubuque	86	siltation
Dubuque	87	big problem is the loss of backwater - place for fish in winter
Dubuque	88	high ecological restoration potential
Dubuque	89	public education: focus on lawmakers for required funding; alternative solutions for enlarging dams; more public meetings
Dubuque	90	stop contamination of riverindustry pollution, barge pollution and damage
Dubuque	91	transportation use without limits could destroy river for other uses by man, animals, plant life
Dubuque	92	save dead end sloughs
Dubuque	93	sedimentation
Dubuque	94	too much barge traffic, creating sediment
Dubuque	95	problem is siltation from croplands from tributaries
Dubuque	96	agricultural and industrial runoff
Dubuque	97	agricultural runoff
Dubuque	98	control more forcibly both point and general effluent sources
<u> </u>	20	before pollution increases

Location	ID#	Response: question 2
Dubuque	99	(opportunity) leadership of UMRCC, National Audubon, Americas River
Dubuque	100	Not enough fishing in Mud Lake. It needs to be dredged
Dubuque	101	overuse by commercial, recreational in some reaches
Dubuque	102	big problem is the loss of backwater - place for fish in winter
Dubuque	103	delivering fish to the habitat
Dubuque	104	economics outweighing environment
Dubuque	105	silting in of backwaters
Dubuque	106	sedimentation
Dubuque	107	backwaters are becoming less existent, effecting spawning areas
Dubuque	108	too much sedimentation, backwaters are silted in
Dubuque	109	sedimentation
Dubuque	110	degradation of habitat by lock and dam system and river traffic (barges)
Dubuque	111	change agricultural base to maximize local growth, processing and consumption
Dubuque	112	barge traffic; too many dams; natural beauty; wildlife
Dubuque	113	barge traffic number 1 problem
Dubuque	114	restriction of water flowinto side channels and backwaters is
1		killing the river ecosystem
Dubuque	115	major problem is the Corps of Engineers
Dubuque	116	decrease sediment input into system
Dubuque	117	turbidity
Dubuque	118	pollution of the river, thus harming the species present
Dubuque	119	good source for developing energy
Dubuque	120	the careless contribution of pollution by farmers and individuals
Dubuque	121	farming practices as it is now
Dubuque	122	missing
Dubuque	123	filling with silt - erosion control of agricultural land
Dubuque	124	side channels and backwaters silting in
Dubuque	125	commodity shippers would rather modify the "national park" river than their equipment/practices
Dubuque	126	we need to monitor our small streams because I think a lot of the pollution comes from there
Dubuque	127	we could restore of improve areas of siltation and provide better habitat for all species on the Mississippi River
Dubuque	128	Too much river fluctuation by the lock and dams (too quickly)
Dubuque	128	(paraphrase) too much runoff/sediment - fund small (landowner)
Dubuque	147	wetland improvement - use some of barge traffic profit
Dubuque	130	build spillway at dam 11 put more water in low pool backwaters,
Dubuque	130	also bring back islands that are not there anymore
Dubuque	131	(problem) river managed for barge traffic
Dubuque	131	problems: PWC's (personal water craft); opportunity: recreation
Dubuque	134	problems. I we s (personal water eran), opportunity. recreation

Location ID# R	Response: question 2
Dubuque 133 fi	ind out some way of slowing down ag. Waste into the river and its
	ranches
1 1	rob: loss of water level control; opp: protecting large, rare
	abitats (I.e. SAD)
-	educe oil spillage
1	edimentation in certain areas
1	ommercial ventures, big organizations "for profit" are destroying vhat's irreplaceable here
Dubuque 138 se	edimentation filling backwaters
Dubuque 139 lo	oss of sandy beaches for recreation and camping
1	bo much noise in these noise sensitive areas (loud boats and PWC's)
	Dirty - you go in the river and by the end of the summer your suit s a different color from all the pollution
	on-point source pollution
	iltation - we need dredging
A	ack of diversity; opp: island restoration
-	iltation of backwaters
1	edimentation
	oss of fish and wildlife habitat
-	hallow backwaters
Dubuque 149 k	eep big money out!
Dubuque 150 la	and erosion (streams, islands, etc.)
Dubuque 151 o	veruse of barge traffic to ship grain
Dubuque 152 to	oo much effort on barge and transportation
Dubuque 153 n	ot enough control on the violators (spill control)
Dubuque 154 h	uman activities: pesticides/garbage/waste from boats
1	his part of the river is moderately impacted - let's fix it before it's vorse
Dubuque 156 d	redge spoils, siltation, eroding of banks, siltation of backwaters, lepletion of resources
	rob: nature people and developers fight; opp: find a way to
r r	naximize the resource
1	ontamination of water
	emove DNR and Corps of Engineers rights to issue permits
	illing bottom
	op heavy agency rules
	ack of good wetland away from the channel to filter crud
	ducation definitely needed to public as well as Congress
	low up the dams and put the subsidy money into railroads for ear-round shipping of grain for better basis
Prairie du Chien 207 v	volunteer program expansion
-	roblem of beach removal and vegetation overgrowth - correct the) problem

Location	ID#	Response: question 2
Prairie du Chien	209	balancing recreational and industrial use of river with natural balance
Prairie du Chien	210	silting
Prairie du Chien	211	sedimentation of backwaters and loss of habitat for fish/wildlife speciesdredging backwater areas
Prairie du Chien	212	eliminate habitat problems and closely watch to be sure commercial aspect continues without harming recreation uses
Prairie du Chien	213	the biggest problem is to keep everybody happy
Prairie du Chien	214	siltation and sedimentation of backwaters
Prairie du Chien	215	main problem - human impact on river - too much recreational horsepower and too much commercial traffic
Prairie du Chien	216	loss of habitat
Prairie du Chien	217	tardiness of public response to degradation of river system
Prairie du Chien	218	industrial and agricultural pollution
Prairie du Chien	219	not enough public awareness of impact on river
Prairie du Chien	220	awaken the public to the river problems and misuse or overuse
Prairie du Chien	221	public apathy
Prairie du Chien	222	we need to do a better job of controlling erosion and pollution from chemicals and fertilizers
Prairie du Chien	223	tourism
Prairie du Chien	224	we need to get more of the recreational users of the river to get involved with the health of the river through actions of user fees. Legislators bordering the river need to be involved
Prairie du Chien	225	controlling sedimentation - connections between upland and rivermove toward grass based ag. In most erodible uplands
La Crosse	226	lock of program funds and personnel
La Crosse	227	water levels kept artificially high
La Crosse	228	problems: barge traffic
La Crosse	229	opportunity: more rehabilitation work in impounded areas
La Crosse	230	opportunity: a lot of economic success is available but at expense of loss of natural habitat etc
La Crosse	231	problems: locks and dams, river training structures, use of the river that benefits the navigation system and harms the river's ecosystem
La Crosse	232	siltation, sewage and chemical runoff
La Crosse	233	we are treating the resource as a river when it is not; it is a series of pools part of which are a river
La Crosse	234	"radicals" on both sides - be it waterways journal or earth first
La Crosse	235	problems: Corps of Engineers
La Crosse	236	opportunities: EMP
La Crosse	237	riparian/bluffland development impacts watershed wetland loss and floodplain conversion
La Crosse	238	habitat loss - aquatic habitat & terrestrial habitats (especially grassland areas)

Location	ID#	Response: question 2
La Crosse	239	dual purpose - commercial vs. public recreation - past management primarily ignored ecosystem in favor of commercial entities
La Crosse	240	problem: eliminate barge traffic and use rail instead
La Crosse	241	habitat degradation; silt and runoff problems
La Crosse	242	barge traffic should pay true costs - public pays for degradation caused by river transportation
La Crosse	243	problem: replacement of varied habitat (braided streams) with lakes/open water
La Crosse	244	the biggest problem is commerce - farming and shipping - which appear to be unlimited in demand for shipping. To turn this problem into an opportunity, population trends and maximum limits of people in the watershed should be rationally estimated.
La Crosse	245	challenge: balanced use - using science and technology to restore/maintain the natural river
La Crosse	246	opportunities: having various agencies working together on common goals
La Crosse	247	problem - poor habitat which continues to become poorer; opportunity to improve the health of the habitat
La Crosse	248	sedimentation and filling in of backwaters - provide habitat by rehabilitation of backwaters
Red Wing	249	There are businesses that pose potential environmental problems along the waterway
Red Wing	250	overboating
Red Wing	251	lack of seasonal and cyclic water level variations
Red Wing	252	problems: diverse opinions, unbalanced ecosystems, limited recreational use, realistic goals
Red Wing	253	the overemphasis by the Corps of Engineers in managing the river for commercial navigation to the detriment of ecological recreational and cultural values
Red Wing	254	contaminated water
Red Wing	255	(paraphrase): small, targeted rehab to improve habitat for swans and other migratory birds
Peoria	256	silt and sedimentation clogging navigable channels and killing natural habitat
Peoria	257	increased barge traffic - siltation
Peoria	258	land erosion into river!!!
Peoria	259	sediment
Peoria	260	if its once natural curves have been eliminated, to restore those as much as possible
Peoria	261	loss of native vegetation, poor light penetration of river restricted plant aquatic growth, food for fish
Peoria	262	soil erosion and siltation
Peoria	263	siltation from urban and agricultural impacts
Peoria	264	lessen runoff from farm fields and livestock areas

Location	ID#	Response: question 2
Peoria	265	siltation and erosion
Peoria	265	development which restricts the natural flooding of the river
Peoria	260 267	erosion control / siltation problems
Peoria	268	silt buildup - causes flooding, dirty water
Peoria	268	1 0 1
reona	209	(problem): flood damage to man-made structures; (opportunity): cheap land for development of wildlife refuges
Peoria	270	control of runoff
Peoria	271	we need to do experiments in how sediment flows in streams and how to trap this sediment before it enters our rivers
Peoria	272	need ways to prevent soil erosion in watershed
Peoria	273	the problems are the garbage and junk on the Illinois River banks
Peoria	274	damage to natural habitat re wildlife (including wetlands)
Peoria	275	we must get more folks involved
Grafton	276	lack of funds to complete current EMP programs
Grafton	277	complete EMP projects as were originally planned. Waterfowl
Orarion	2	habitat as primary.
Grafton	278	complete Batchtown, Calhoun Pt. And Swan Lake EMPs
Grafton	279	Solution: EMP, habitat restoration, properly managing areas that
Granton	21)	are already in existence
Grafton	280	Complete our local EMP projects as planned
Grafton	281	Plans not being carried out - projects for habitat
Grafton	282	Agencies that make plans and then change them in the middle of projects
Grafton	283	Problems: excessive siltation Opps: Expand wetlands and backwater areas for waterfowl enhancement and use
Grafton	284	more filter strips
Grafton	285	The filter strips and the buffer zones are a great program
Grafton	285	A lack of coordination between state and federal agencies to help
Granon	280	manage the river
Grafton	287	habitat plans that never happen or move too slow to do any good
Grafton	288	loss of wildlife habitat
Grafton	289	problems: levees
Grafton	290	provide food and habitat for migratory waterfowl
Grafton	291	politics
Grafton	292	opp: forest/prairie restoration for sediment control and diverse
Grafton	293	habitat prob: levees (river is isolated from floodplain) opp: set them back from the river
Grafton	294	ACOE - get rid of them
Grafton	294 295	Loss of natural floodplain due to levees and other structures
Grafton		-
Utation	296	opps: the width of the river and the channel that flows in between the river
Grafton	297	the Corps does NOT respond to the environmental public, but to barges and big industry

Location	ID#	Response: question 2
Grafton	298	lack of cooperation from Corps of Engineers or them not fulfilling
		projects or promises
Grafton	299	COE makes plans for backwater and will change them citing not enough money or some other reasons - then if they do start a project they never finish it right
Grafton	300	water control
Grafton	301	Corps of Engineers that makes habitat restoration plans gain public consent, and then changes the plan and ruins the project
Grafton	302	prob: poor to no communications between state and federal river agencies; opp: maintaining refuges (for) what they were originally designed for: habitat for migrating waterfowl and other species of wildlife
So. St. Paul	303	prob: flooded conditions changing the forest composition; opp: get birders involved in breeding bird surveys
So. St. Paul	304	increased sediment delivery and fertilizer runoff due to agriculture; increased turbidity
So. St. Paul	305	sedimentation
So. St. Paul	306	sedimentation - restore the backwaters, restore the natural flood pulse
So. St. Paul	307	loss of habitat to development
So. St. Paul	308	lack of understanding of ecological limits, functions
So. St. Paul	309	uneducated human population about the role and importance of the Mississippi River ecosystem(s)
So. St. Paul	310	problems: somewhat permanent structures to benefit one form of migration (lock & dam system) has dramatically altered physical characteristics and flow regimes
So. St. Paul	311	water quality - sediment transport/loss of land downstream
So. St. Paul	312	old industrial brownfields on riverside/floodplain that could be reclaimed for nature
So. St. Paul	313	prob: economics tend to override long term concerns
So. St. Paul	314	impact of people and desires for playgrounds
So. St. Paul	315	the lock and dam navigation system and its operation and management is severely destructive to the healthy river
So. St. Paul	316	to have a beautiful Mississippi River System with the least amount of impact on the people who live along the river (i.e. bank erosion, current speed)
So. St. Paul	317	opp: MNRRA to better land use to protect river; opportunity to fund restoration for private land owners
So. St. Paul	318	probs: dirty water, runoff from cities and fields polluting system
So. St. Paul	319	People's ignorance of what is happening on the river - figuring ways to excite citizens
So. St. Paul	320	excessive sedimentation from upland and streambank erosion
So. St. Paul	321	too heavy use - people, commercial, recreation

Location	ID#	Response: question 3
Cape Girardeau	1	why not dream (satisfying all user needs - paraphrased)
Cape Girardeau	2	where commerce and a clean environment can and MUST coexist
Cape Girardeau	3	when a balance is achieved between recreational use, planned
		development, and improved wildlife habitat
Cape Girardeau	4	people using the river for economic purposes and still being scenic
Cape Girardeau	5	increased wetland restoration and more trees in bottomlands
Cape Girardeau	6	more wildlife
Cape Girardeau	7	compromise (in terms of total river system) due to great variety of demands on resources
Cape Girardeau	8	habitat that is capable of redeveloping & succeeding itself, where people are not restrictedmaintaining area for their benefit, not gov't control
Cape Girardeau	9	coexistence of multiple uses without degradation of water air and habitat conditions (including human use)
Cape Girardeau	10	maintaining a level for a number of years - the level to be decided
1		upon by the public
Cape Girardeau	11	It is always successful and forever changing (paraphrase: accept it
-		for what it is)
Cape Girardeau	12	Healthier species
Cape Girardeau	13	no data
St. Louis	14	River and floodplain restoration: allow the river to return to its natural activities - creating oxbows, side channels, etc.
St. Louis	15	not circled
St. Louis	16	sensible environmental mitigation as a possible tradeoff for navigation or other economic uses
St. Louis	17	more wetlands preserved
St. Louis	18	decrease flooding/stormwater
St. Louis	19	habitat developed to restore populations to pre 1940's
St. Louis	20	being shown by scientists that declining trends are turning around
St. Louis	21	re-building to a more natural river
St. Louis	22	when the species return - flora and fauna - in great numbers
St. Louis	23	not circled
Burlington	24	adequate water depths for boat travel at normal river stages for recreation and access to cabins, etc.
Burlington	25	water is cleaner
Burlington	26	when the levees are gone and we can fish and hunt where corn is now growing
Burlington	27	(monitor) to see how the nature and people would be using the restoration
Burlington	28	agreement of conflicting uses
Burlington	29	not circled
Burlington	30	it will take a lot of mechanical restoration to bring pool 19 back to being a great place to fish and hunt
Burlington	31	upland protection (see original to complete)

Location	ID#	Response: question 3
Burlington	32	creeks and streams will have cleaned themselves out by themselves
D 11		by having a place to go (backwaters won't fill up)
Burlington	33	double amount of floodplain in natural state with no human development (including agriculture)
Burlington	34	water depth (reduced silting - ed.)
Burlington	35	support: water life; bird life; recreational users; transportation. Not polluted.
Burlington	36	success first comes with sustaining the current level of the ecosystem
Burlington	37	never done - requires continual assessing
Burlington	38	deeper water in the backwaters
Quincy	39	GOOD populations of game fish (bass, bluegill, etc)
Quincy	40	It would mimic pre 9-foot channel quantities of specific habitats - forested wetland, mussel beds, channel backwater etc.
Quincy	41	navigation interest - improve US trade
Quincy	42	populations of species that are no longer in decline (at least stable) if not growing
Quincy	43	Species and their response to activities in the system
Quincy	44	when the Corps of Engineers is somewhere else
Quincy	45	Increase in acreage of bottomland forests and marshes (wet areas)
Quincy	46	quality of water
Quincy	47	abundant clean, deep backwater habitat with large populations of fish and wildlife
Quincy	48	improvements to all three primary uses: growth in river transportation; additional flood protection (being able to pass standard project flood without economic damage); increase in the water quality and sedimentation rates and increases in the numbers in most species (>485 species)
Quincy	49	public to be able to utilize for all aspects of hunting, fishing, trapping, boating etc.
Quincy	50	the water will be cleaner without particles. More animals will live there
Quincy	51	the visual appearance of the river, clean, trash-free banks
Rock Island	52	graph monitors move to the right - the ones that were shown on the slide
Rock Island	53	species numbers are maintained
Rock Island	54	if we can maintain the species of animals and plants
Rock Island	55	when fish can thrive in the water
Rock Island	56	when the river rewards all who walk along it
Rock Island	57	the plants and vegetation will be thick on the banks
Rock Island	58	recreation opportunities restored through dredging of backwater channels
Rock Island	59	protects and promotes the life cycle of native plant and animal species

Location	ID#	Response: question 3
Rock Island	60	restoration for public use
Rock Island	61	restoration for public use having brush piles and old trees move throughout the area without
ROCK ISland	01	
De als Island	(0)	having a major flood. Seeing a better run of sturgeon
Rock Island	62	don't increase barge traffic
Rock Island	63	improved water quality
Rock Island	64	when the birds, fishes and mussels return
Rock Island	65	increase in species - immatures, nests, adults
Rock Island	66	more species of plants, birds, and fish and more numbers of each
Rock Island	67	clear water
Rock Island	68	increases in certain species of fish and other aquatic life
Rock Island	69	good balance between nature and man - everyone benefits everything
Rock Island	70	Success is generally not a case of one side winning and another
		losing, but rather of compromise and balancebut who are the
		visionaries to know what long term success is?
Rock Island	71	I don't feel it will ever be complete and it must be an ongoing
		project. If we get to where it is felt that it is a success it will then
		be forgotten about
Rock Island	72	healthy and sustainable ecosystems including viable and
		sustainable populations of species
Rock Island	73	for river to function as it did without navigation structures levees
		and increased siltation is ideal
Rock Island	74	when a choice of healthy ecosystems overrule floodplain and
		economic development
Rock Island	75	cleaner water
Dubuque	76	Decreased barge traffic
Dubuque	77	The more the river is allowed to be a natural free-flowing system
		the better
Dubuque	78	when I can fly over the mouth of a given tributary and not see
2 40 4440	10	the stark light brown silt plume trailing off into the first
		downstream mile of the Miss.
Dubuque	79	a river bottom with more than one level
Dubuque	80	water clarity and purity
Dubuque	81	When you find the population of waterfowl/sportfishes increasing
Dubuque	01	to previous levels
Dubuque	82	when we don't see the tan silt flowing into the river at entering
Dubuque	02	streams
Dubuque	83	increase of diversity and amount of wildlife present
Dubuque	83 84	amount and kind of waterfowl using flyway
-	84 85	
Dubuque		less development
Dubuque	86 87	deeper backwaters better backwaters for fish
Dubuque	87	better backwaters for fish
Dubuque	88	increase instances of listed habitats

Location	ID#	Response: question 3
Dubuque	89	well defined metrics that show a trend for long term improvement in a wide range scope of elements
Dubuque	90	no increase in (or less) barge traffic or have barges pay taxes for the upkeep of the channels
Dubuque	91	slowing or stopping further degradation of water quality and of flood plain areas
Dubuque	92	A diverse place for recreators, employment, and wildlife
Dubuque	93	recovery of fish/bird/reptile/insect populations
Dubuque	94	unpolluted water, able to sustain large populations of animals and plants, diversity in the fauna
Dubuque	95	clean water with a diversity of plants and wildlife void of chemical contamination
Dubuque	96	increase in diversity of plant and animal species
Dubuque	97	increased species diversity in any given area
Dubuque	98	when other groups come to the Miss to learn how it was done
Dubuque	99	dissolve or eliminate the hypoxia zone in the Gulf of Mexico
Dubuque	100	Fix these "side channels" up - dredge them out, do that for our
		children and grandchildren and thereafter
Dubuque	101	sustaining a Bioregional economy
Dubuque	102	see the river like it was when I was 15 years old
Dubuque	103	(partial) creek flowwhich is a natural way the sediment will flow instead of settling in backwaters
Dubuque	104	more people will enjoy the river because of the quality of the water
Dubuque	105	silting in of some areas slows down or is eliminated
Dubuque	106	increase in waterfowl
Dubuque	107	back waters for spawning beds also these back waters would once again attract the fishermen that they once did
Dubuque	108	shallow areas have a firm bottom and lots of diverse vegetation, both in backwaters and the main channel
Dubuque	109	diversity of species
Dubuque	110	Indicators! e.g. water quality, diversity of flora and fauna
Dubuque	111	gradual decline of barge shipping
Dubuque	112	clear water, access to backwaters, healthy wildlife and a strong fishery
Dubuque	113	water clarity year round
Dubuque	114	no need to manipulate habitat to maintain wildlife populations
Dubuque	115	More fishing opportunities in backwaters and more beaches for the taxpaying public
Dubuque	116	increase algae diversity, esp. diatoms
Dubuque	117	restore (cure from bad) we should be on an even par and then look for improvements
Dubuque	118	If residents along the river notice the change and remark on its improved quality
Dubuque	119	clarity of river (able to see the fish in the water)

Location	ID#	Response: question 3
Dubuque	120	when there is less crap floating in it
Dubuque	120	more waterfowl, fish; better water quality
Dubuque	121	missing
Dubuque	122	go out to watch eagles - the more there are the more successful
Dubuque	123	when it looks like it did in 1937
-	124	
Dubuque		by the degree of restoration of eco-features damage or destroyed in 50 years
Dubuque	126	with cleaner water we should have more and healthier fish
Dubuque	127	the river maintained with a balance for wildlife fish and recreation, the scale not pre-weighted for barges only
Dubuque	128	the actual experience of seeing the river produce life through plants and wildlife, fish
Dubuque	129	improving the water quality so as to positively impact the habitat for all species - human, animal, agricultural - while maintaining the beauty and aesthetic quality of our Great Natural Resource
Dubuque	130	more water into the backwaters
Dubuque	131	flood plain restoration (no more devastating floods such as '93)
Dubuque	132	going back to earlier maps and how they were
Dubuque	133	so 90 to 95 percent of the above things are fixed
		(fishing/wildlife/plants; less water fluctuation; stop bank erosion;
		slow down ag. Runoff)
Dubuque	134	conservation of large, mature forest/prairie
Dubuque	135	more fish species
Dubuque	136	more access to backwaters
Dubuque	137	navigable (to small boats) the silting (likely to silt more) & silted backwaters
Dubuque	138	future generation can enjoy the river for boating, fishing, camping, co-mingle with nature
Dubuque	139	clean water - see the bottom in 3 feet of water
Dubuque	140	the Corps should work on reducing sediment
Dubuque	141	Faces of people, after you tell the m you were in the river, weren't saying "OH GROSS - how could you swim in that?"
Dubuque	142	cleanliness of water
Dubuque	143	better access to more of the backwaters for fishing and hunting
		through dredging
Dubuque	144	ability of the river to recover itself - less intervention. Future will not require restoration activity or not so quickly. Biodiversity - high amount of
Dubuque	145	return abundance of wildlife (animals, plant)
Dubuque	146	islands
Dubuque	147	restore island and backwater to better sustain a healthy environment for fish and wildlife
Dubuque	148	have more islands and deeper backwaters
Dubuque	149	peaceful fishing and recreation
1	-	

Location	ID#	Response: question 3
~ .		
Dubuque	150	more areas restored
Dubuque	151	commitment from Corps in working with public on projects they desire to have done
Dubuque	152	more dredging, direct flow of water and good flow through backwaters
Dubuque	153	when there is barge traffic, fishermen, swimmers, bird watchers, pleasure craft on the river at the same time AND no one is complaining about the other
Dubuque	154	the diversity of the ecosystem
Dubuque	155	ecology counts as much as transportation
Dubuque	156	visible thriving bird and fish and amphibian populations
Dubuque	157	when all sides feel proud of our river and are confident of the future
Dubuque	158	number of people making use of the river
Prairie du Chien	201	Seeing the end of DNR's and Corps of Engineers right to permitfill or change the river flood basin. Permits are issued without regard to the ecosystem
Prairie du Chien	202	How boats move
Prairie du Chien	202	very little visual success noted on mainstem; very limited visual
	205	backwater restorations
Prairie du Chien	204	strong healthy - high numbers - diversity of native plants and wildlife
Prairie du Chien	205	communication to me and the public - "what projects are taking place for restoration"
Prairie du Chien	206	when the main channel and sloughs return to a sand bottom, instead of the present mud, and all indicator species are thriving, then restoration is successful
Prairie du Chien	207	animal, fish, plant populations - quality, quantities or little loss of established species, successful (reintroduction??) of some that have been lost
Prairie du Chien	208	maintaining the "wildness" of the river - its historic value - river is on historic land-waterscape
Prairie du Chien	209	cleaner water - swimmable/fishable (recreation)
Prairie du Chien	210	restore vegetation
Prairie du Chien	211	increase of fish/wildlife populations; increase water quality i.e.
		clarity/purity; certain aquatic vegetation flourishes in cleaner water conditions
Prairie du Chien	212	everyone using the river is completely satisfied with their use and also satisfied with everyone else's use of the resource (nobody said it was going to be easy)
Prairie du Chien	213	when all of the things we have along the river are working together and keep it so we can have something we can be proud of
Prairie du Chien	214	increased waterfowl nesting opportunities and populations

Location	ID#	Response: question 3
Prairie du Chien	215	the water should look clean - no garbage; the biodiversity would be high (many species of birds, bugs, reptiles, mammals, plants and fish)
Prairie du Chien	216	less siltation in the backwaters
Prairie du Chien	217	species diversity and habitat diversity as compared to pre-white settlement
Prairie du Chien	218	if agricultural interests find ways to reduce silt loads that wash into the river
Prairie du Chien	219	abundant fish, wildlife and plants
Prairie du Chien	220	a public that understands, is concerned about and acts to protect the natural resources of the river by a) changing their lifestyle; b)taking part in efforts to protect the river; c) being active politically on the river's behalf
Prairie du Chien	221	image of natural wonder (NOT tool or creation of man - playground)
Prairie du Chien	222	fish are considered safe to eat
Prairie du Chien	223	\$\$ spent on habitat
Prairie du Chien	224	closer cooperation with all agencies involved with river management
Prairie du Chien	225	being able to catch diverse species of fish and feel comfortable in eating some
La Crosse	226	balance of multi-use of river - recreational, commercial, environmental
La Crosse	227	need a variety of things (expansion of living range of endangered species; increased aquatic vegetation; less hypoxic zone in Gulf of Mexico, etc.)
La Crosse	228	restoration of wildlife habitat
La Crosse	229	increase the size of the refuge (the management of refuge lands seems to work well)
La Crosse	230	seeing healthy environment & large numbers of wildlife, or a balance of habitat to animals being sustained
La Crosse	231	sustainability of plants, animals, and physical structures
La Crosse	232	acceptance and compatibility of a variety of uses: recreation, commerce, hunting, fishing, bird watching, boating, swimming
La Crosse	233	restored natural diversity
La Crosse	234	in some cases - like any ultimate compromise - it will probably not totally please anyone
La Crosse	235	managed close to original wild state
La Crosse	236	the number of species stays the same
La Crosse	237	area of historic floodplain connected to river, experiencing natural inundation cycle
La Crosse	238	create more habitat - more grassland habitat (not phallons) - more prairie like; more sand bars - not dredge piles, not recreation sites but areas where establishment, feeding, and reproduction

Location	ID#	Response: question 3
	220	quantity of quateinship nonvilations of flore and found
La Crosse La Crosse	239	quantity of sustainable populations of flora and fauna
La Crosse	240	how to measure success: habitat between the bluffs - % wetland, % forest, etc.
La Crosse	241	to document new tree growth in the river floodplain to sustain colonial nesters (prothonatory warbler, g.b. heron, etc)
La Crosse	242	scientists/planners should set goals based on these (stupid) exercises and announce when they are reached
La Crosse	243	removal of locks and dams
La Crosse	244	locally, there would be more shallow braided sloughs/channels off main channel
La Crosse	245	healthy natural river has to take priority over navigation, I think - having said this I don't really know the economic ramifications
La Crosse	246	re-establishment of habitats as determined by animal and fish species (plus nesting/spawning) increase
La Crosse	247	more migratory and resident birds
La Crosse	248	the quantity and quality of the wildlife and fisheries resource -
		improvement as a result of the rehabilitation project(s)
Red Wing	249	a resource that would not only be available to Red Wing citizens
-		for recreational purposes, but also untouched (virtually) by everyday life
Red Wing	250	beauty unchanged or changed for better - more natural versus buildings
Red Wing	251	return of large numbers of Tundra Swans to Weaver Bottoms
Red Wing	252	when there is proper education and shared goals and objectives
Red Wing	253	When there is a holistic, watershed (I.e. river basin) approach to managing the river ecosystem than a "band-aid" treatment to restore degraded fish and wildlife habitat
Red Wing	254	commercial shipping: lower cost at store; less repair to highways; rail and river work together
Red Wing	255	In our small world success would be the rehabilitation of the
0		Buffalo river, Riecks' Lake swan habitat so that there was a continued use by the swans and a continued use by the thousands
		of visitors who come to view them
Peoria	256	return of wildlife and habitat to previous levels (pre-dating degradation period)
Peoria	257	siltation stops or is controlled
Peoria	258	fall off sailboard and not feel silt underfoot!!!
Peoria	259	clean water
Peoria	260	clean smelling
Peoria	261	the return of the Illinois as a flyway for ducks, geese, and other bird species
Peoria	262	great reduction of silt and turbidity
Peoria	263	stabilized river bottom - less need for dredging as siltation reduced to point where river can maintain its channel

Location	ID#	Response: question 3		
Peoria	264	clean water		
Peoria	265	reduction of silt		
Peoria	265	removal of trash and old equipment		
Peoria	200 267			
Peoria	267	absence of further degradation		
		clean water		
Peoria	269	species diversity		
Peoria	270	less sediment deposited		
Peoria	271	when pond lilies and moss return to our rivers and lakes		
Peoria	272	population of native species are stable or increasing and non- natives are diminishing		
Peoria	273	when the river is cleaned up and the junk barges are removed from the river		
Peoria	274	preserve, restore, and manage wildlife habitat including wetlands		
Peoria	275	when nature wins over destruction.		
Grafton	276	better water quality		
Grafton	277	when refuges reach their intended goals of supporting wildlife		
Grafton	278	return of the fall migratory flights to our hunting areas and refuges		
Grafton	279	increased usage by migrating birds (waterfowl)		
Grafton	280	backwater wetlands protected with silt deflecting levee		
Grafton	281	complete EMP projects - many in this area		
Grafton	282	clean water		
Grafton	283	completion of current and future EMP projects		
Grafton	284	complete EMP projects		
Grafton	285	complete the 3 EMP projects (Batchtown, Calhoun Point, Swan Lake)		
Grafton	286	The return of abundance of wildlife in the area and the opportunity to hunt them		
Grafton	287	manage refuges to provide food and habitat and to provide fishing and hunting and other recreational activities		
Grafton	288	increase in number of variety of wildlife plants and animals		
Grafton	289	missing		
Grafton	290	my kids will be hunting the same area I do now, 25 years from		
		now		
Grafton	291	good hunting and fishing, increased populations		
Grafton	292	measure of increased diversity in habitat and species that can be maintained without human constant intervention		
Grafton	293	allowing side channels and backwaters to receive flow - NOT		
Grafton	294	levying them off from the river return to natural condition		
Grafton	295 206	Biological survey of indicator species		
Grafton	296	maintaining how the river runs		
Grafton	297	control over excessive farm fertilizer		
Grafton	298	waterfowl numbers up and holding more than quick departure from our areas which occur because of lack of habitat		

Location	ID#	D# Response: question 3		
Grafton	299	reduce pool level fluctuations (3 or more feet at a time)		
Grafton	300	prospering of waterfowl with good conditions		
Grafton	301	clean water reduced silt loads reduced pool level fluctuation		
Grafton	302	increased harvest of waterfowl		
So. St. Paul	303	healthy, stable populations of birds and other wildlife		
So. St. Paul	304	healthy economy thriving on the river's resources due to a sustainability between environmental aspects and the economy		
So. St. Paul	305	rich biota		
So. St. Paul	306	when the Corps of Engineers gives as much consideration and funds (or more) to ecological concerns as it does to barge traffic		
So. St. Paul	307	ecological values are accounted for (on balance sheet) - full cost accounting		
So. St. Paul	308	sustainable use		
So. St. Paul	309	healthy indicator species (cerulean warbler, red shouldered hawk)		
So. St. Paul	310	may not be able to characterize an endpoint, only keep moving in direction of greater diversity among fish, birds, vegetation, insects, others while keeping an eye on restoring ecosystem niches for		
~ ~ ~ .		species known to have inhabited the basin pre-settlement		
So. St. Paul	311	improvement of water quality to "acceptable" level		
So. St. Paul	312	I could swim in it		
So. St. Paul	313	water clean enough to swim and fish in		
So. St. Paul	314	more habitat "installed" by public planners which is conducive to wildlife		
So. St. Paul	315	river navigation system and its O & M is subservient/secondary to healthy ecosystem functioning		
So. St. Paul	316	trying to make everyone as happy as possible - a true balancing act but being practical., Get rid of some of the governmental red tape!		
So. St. Paul	317	comm(unity?) will plan land use to care for habitat; owners will remove docks		
So. St. Paul	318	all appropriate species do (in fact, not just theory) return.		
So. St. Paul	319	more citizens vitally interested in the health of the river - meetings		
		like this one overflowing		
So. St. Paul	320	high levels of dissolved oxygen to support aquatic life		
So. St. Paul	321	it will be inviting to look at, smell, and touch		

APPENDIX B

DOCUMENT ANALYSIS OF INSTITUTIONAL INTENT FOR FUTURE HABITAT CONDITIONS IN THE UMRS

SUMMARY OF REVIEW OF TARGET RESOURCES AND FUTURE HABITAT CONDITIONS

A search was conducted to obtain information from governmental and non-government organizations with interests in and responsibilities for habitat management in the Upper Mississippi River System (UMRS). The purpose of the search was to obtain documents that identify institutional intent with respect to UMRS habitat. The institutional intent was evaluated by examining the mission statements of agencies and organizations, resources identified as being important or as the target of management activities, and statements in management plans about UMRS habitat.

Management plans and reports were reviewed from federal agencies (U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Department of the Interior), one tribal government (Prairie Island Indian Community), state agencies (Illinois, Iowa, Minnesota, Missouri, Wisconsin), and not-for-profit organizations, including governmental coordinating organizations (such as National Audubon Society, Mississippi River Basin Alliance, Upper Mississippi River Basin Association, The McKnight Foundation, The Conservation Fund, The Izaak Walton League, Upper Mississippi River Conservation Committee, Mississippi River Coordinating Commission, Mississippi Headwater Board, American Fisheries Society). The US Army Corps of Engineers and US Fish and Wildlife Service have many existing plans for UMRS management. Not all of these plans were reviewed, but a representative set were examined. Points of inquiry included the scale at which the information was presented (local, pool, regional, systemwide), resources targeted for management or identified as important, and whether goals or objectives for habitat conditions were qualitative.

Because many agencies and organizations have a systemwide focus or legal mandate, most information is presented at the systemwide scale. The majority of the information reviewed contained qualitative objectives. While quantitative objectives were rare, they did appear in several collaborative efforts undertaken with other groups (e.g., "North American Waterfowl Plan- Upper Mississippi River & Great Lakes Region Joint Venture Implementation Plan," "U.S. Fish and Wildlife Service;" "A River That Works and a Working River," Upper Mississippi River Conservation Committee & National Audubon Society; "Headwater to Backwaters," The Conservation Fund). Generalized objectives for planning and management appeared much more often than objectives for specific habitat types.

Nearly all of the plans and reports directly addressed, or would impact by their recommended actions, resources such as endangered and threatened species, migratory birds, economically important fish species, and wetlands. Water quality improvement is a priority identified in most of the plans and statements of intent that were reviewed. Several reports speak to policy recommendations, principles for natural resources management, or points of coordination. For example:

- I. Embrace the duality of managing the UMRS for both navigation and wildlife habitat by:
 - a) Calling for establishing explicit parity between management for habitat and management for navigation (separate, prior Congressional actions call for parity, others set habitat as secondary);
 - b) Recommending that, even on small scales and with intermittent distribution, pursuit of all opportunities to temporarily enable more of the river's "parts" to interact in ways mimicking natural systems is regarded as beneficial to resilient species and the river ecosystem (e.g., side channel and backwater connectivity, removing nonessential obstacles to floodplain continuity, seed island creation, flood pulses and small-scale drawdowns).
- II. Directing the US Army Corps of Engineers to turn over to the US Fish and Wildlife Service all lands for habitat management that are not essential for navigation-related management.
- III. Integrating economic development and environmental restoration;
- IV. Improving interstate coordination and cooperation in water quality and fisheries management;
- V. Utilizing the Upper Mississippi River Basin Association as the primary clearinghouse for state coordination;
- VI. Working toward the goals of the North American Waterfowl Plan.

Many plans and reports call for a comprehensive ecosystem approach and increased cooperation, given the multiple governmental jurisdictions with interrelated management responsibilities. Although systems have been established for coordination, there is room for improvement to achieve site specific management planning in the context of regional and ecosystem processes. Habitat Needs Assessments for the Environmental Management Program would benefit from organizations compiling more quantitative goals and objectives for their local, pool, or systemwide responsibilities in the Upper Mississippi River System, in consultation with organizations sharing related responsibilities. Readers of this report are encouraged to inform the US Fish and Wildlife Service and US Army Corps of Engineer HNA contact persons about information recommended for consideration in the future evaluation of institutional intent and objectives for future habitat conditions.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis		Management Objectives
1	A River That Works and a Working	To promote the preservation and wise utilization of	•	Improve water quality for all uses;
	River (Jan. 2000), Upper Mississippi	the natural and recreation resources of the UMRS	٠	Reduce erosion and sediment impacts;
	River Conservation Committee, National Audubon Society	and to formulate policies, plans and programs for conducting cooperative studies.	•	Return natural floodplain to allow channel meanders and habitat diversity;
	Scale: Systemwide Objectives: Qualitative and Quantitative Dan McGuinness, Upper Mississippi	To restore the Upper Mississippi and its watershed as a place where people prosper and birds, fish and wildlife thrive, in a healthy environment.	•	Provide seasonal flood pulse effect and periodic low flows to improve nutrient base, plant growth and succession; Enable connectivity of backwaters to main channel; Provide opening of side channels, create islands, shoal
	River Campaign, 26 East Exchange St., Suite 215, St. Paul. MN 55101	Describe the critical elements of a strategy for operation and maintenance of the natural resources of the Upper Mississippi River System (UMRS) and its navigable tributaries. 9 objectives, with leadership and program responsibilities, are proposed.	•	and sandbar habitat; Manage channel maintenance and disposal to support ecosystem objectives; Sever the pathway for exotics into and spread with the UMRS; Provide native fish passages at dams.
2	Headwaters to Backwaters (January 2000), The Conservation Fund Scale: Systemwide Objectives: Qualitative and Quantitative Peg Kohring, The Conservation Fund, 53 W. Jackson Blvd. #1332, Chicago, 60604	TCF is dedicated to preserving America's land legacy by acquiring and protecting open space, wildlife habitat, and historic sites throughout the nation. The Fund also assists partners in business, government, and the nonprofit sector with projects that integrate economic development with environmental protection. A coordinated program of river corridor protection, sustainable development, and environmental education activities.	•	48 projects centered on river corridor protection, sustainable economic development and public education identified by 40 nonprofit and governmental agencies; Add 300,000 acres to the region's national forests, parks and refuges, state parks, 762 conserved miles along the Great River Road, and many locally managed areas; Establish 56 miles of new trails, and 11 new river education programs; Total projected costs exceed \$100 million.
3	Refuge at the Crossroads (1999), The Izaak Walton League Scale: Systemwide Objectives: Qualitative Izaak Walton League of America, Midwest Office, 1619 Dayton Ave., Suite 202, St. Paul, MN	To conserve, maintain, protect and restore the soil, forest, water and other natural resources of the United States and other lands; to promote means and opportunities for the education of the public with respect to such resources and their enjoyment and wholesome utilization. Congressional changes needed to reverse ecosystem degradation.	•	Fully fund operation and maintenance of the Upper Mississippi River National Wildlife and Fish Refuge (UMRNWF); Restore the UMRNWF Refuge to ecological health and protect against future decline; Establish parity between needs of UMRNWF Refuge and the commercial barge industry; Direct Corps of Engineers to convey all nonessential lands to the Fish and Wildlife Service for inclusion in the UMRNWF Refuge.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
4	Water Resources of the Prairie Island Indian Reservation, Minnesota, 1994-97 (1999), U.S. Geological Survey Scale: Localized Objectives: Qualitative U.S. Geological Survey, WRD, 2280 Woodale Dr., Mounds View, MN 55112	USGS: Initially charged with "classification of public lands, and the examination of geological structure and mineral resources" Charge has expanded to respond to requests for scientific information from the public and private sectors to enable them to carry out their land and resource management responsibilities. Refer to history of the Prairie Island Indian Nation at www.prairieisland.org	Need to remedy water quality problems at Prairie Island, north of Red Wing, MN. Concern in the Prairie Island Indian Community prompted studies which showed bacteria and nitrates most notable.
5	Upper Mississippi River 9-foot Channel Project, Ch. Mgt. Program, Definite Project Report/EA Pool 5 (July 1999), St. Paul District, Corps of Engineers Scale: Pool Objectives: Qualitative and Quantitative Department of the Army, St. Paul District, Corps of Engineers, Army Corps of Engineers Centre, 190 Fifth St. East, St. Paul, MN 55101	Provide quality, responsive engineering services to the nation, including planning, designing and building and operating water resources and other civil works projects (which includes navigation, flood control, environmental protection, and disaster response).	 To address channel maintenance, navigation, and environmental problems in Pool 5: selected wing dam modifications, bank stabilizations, and a rock sill are proposed. To improve fish and wildlife habitat and reduce channel maintenance costs: construction of five small islands in lower pool is proposed.
6	Mark Twain National Wildlife Refuge Comprehensive Conservation Plan Update (Summer 1999), U.S. Fish and Wildlife Service Scale: Localized Objectives: Qualitative Mark Twain National Wildlife Refuge, 1704 N 24th St., Quincy, IL 62301	Working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people. Major responsibilities are migratory birds, endangered species, freshwater and anadromous fish, the national Wildlife Refuge system, wetlands, conserving habitat, environmental contaminants. Draft goals of Comprehensive Conservation Plan (CCP) pursuant to National Wildlife Refuge System Improvement Act.	 Protect and enhance migratory birds and their habitats; the quality of existing wildlife habitat; fisheries resources especially species of special concern, Restore former wetlands, forests and prairies; Protect, enhance, and restore the natural diversity of wildlife and their habitats within the Area of Ecological Concern; Enhance floodplain function and mimic historical water level fluctuations; Identify and reduce the impacts of sedimentation and other water quality factors on fish and wildlife resources; Enhance public outreach and education; strengthen partnerships with other agencies and organizations;

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
7	Endangered/Threatened Species and Wetland Resources for Prairie Island Indian Community (April 1999), Biological Services, Inc. Scale: Localized Objectives: Qualitative Biological Services, Inc., 106 N.	History of the Prairie Island Indian Community: www.prairieisland.org Species loss likely; increase in open water, wetlands	 improve funding and staffing to effectively achieve goals. Initiate wetland monitoring program to track future changes. Consider reestablishing wild rice in selected wetland areas. Consider a multiple species consultation with the USFWS.
8	Main, Chamberlain, SD 57325 Bird Fauna of the Prairie Island Indian Community (April 1999) Scale: Localized Objectives: Qualitative Biological Services, Inc., 106 N. Main, Chamberlain, SD 57325	History of the Prairie Island Indian Community: www.prairieisland.org 66% of bird species lost	Provide Corps of Engineers with a list of bird population mitigation activities, to improve nesting and feeding habitats, that will assist the Tribe with improving bird habitats and bird populations.
9	Prairie Island Indian Community Fishery Resources Affected By Lock and Dam 3 and Channel Maintenance, Mississippi River (March 1999), Prairie Island Indian Community, Minnesota Scale: Localized Objectives: Qualitative Biological Services, Inc., 106 N. Main, Chamberlain, SD 57325	History of the Prairie Island Indian Community: www.prairieisland.org Harm and benefit to fisheries due to many systemwide alterations.	 Avoid further channelization and conversion of existing backwater lakes to eutrophic conditions. Maintain connections to the river for North Lake and Sturgeon Lake, with adequate flows to maintain a more desirable assemblage of sport and commercial fish. Corps to continue to search for ways to balance sediment movement in and out of the pool, with beneficial uses for dredged material.
10	A Plan for Illinois Fisheries Resources FY'99-FY'03 (February 1999), Illinois Department of Natural Resources	To promote an understanding and appreciation of natural resources and to work with the people of Illinois to protect and manage Illinois' resources to ensure a high quality of life for present and future generations.	 Maintain the supply of quality angling days for walleye, sauger, northern pike, trout. Increase the supply of quality angling opportunities for striped bass. Maintain the quantity and quality of fishing opportunities for largemouth bass, smallmouth bass, spotted bass,
	Scale: State	Fisheries management includes protecting habitat	catfish. panfish.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
	Objectives: Quantitative Division of Fisheries, Illinois Department of Natural Resources, 524 S. Second St. Springfield, IL 62701-1787	through coordination with other agencies, habitat improvement, fish stocking, watershed management, and regulating the sport and commercial fisheries.	 catfish, panfish. Increase sport fishing for underutilized fish (carp, buffalo, and drum). Maintain species diversity and abundance of other fish. Maintain the species diversity, abundance of reptile, mussel, crayfish, and amphibians. Maintain current level of frog and turtle sport harvest, commercial mussel harvest.
11	North American Waterfowl Management Plan (1998), Upper Mississippi River & Great Lakes Region Joint Venture Implementation Plan Scale: Systemwide Objectives: Qualitative, Quantitative John Fisher, USFWS, Route 1, Box 166, Shepherd Grade Rd., Sheperdstown, VA 25443	The mission of the NAWMP is to restore duck populations to the levels of the 1970s. In a ten-state area, five states of the UMR are involved to fulfill a (relatively new) mid-migration objective of including critical feeding and resting areas during migration.	Protection, enhancement, and restoration of breeding habitats is the highest priority. Habitat protection and development outside principal breeding areas is the second priority. Explicit recognition of migration habitats is the third priority. Targeted increases: Mississippi/Rock rivers: 16,092 acres; Illinois River: 11,143 acres; Minnesota, Wisconsin and Missouri: qualitative objectives in certain areas; Contact Joint Venture Coordinator for progress reports on each area at http://northamerican.fws.gov/jvdir.html
12	The Restoration of Natural River Processes: Preliminary Steps for Sustaining the Ecological Health of Upper Mississippi River (April 6, 1998), Minnesota Department of Natural Resources Scale: Systemwide Objectives: Qualitative Mike Davis, Minnesota Department of Natural Resources	"We will work with people to manage the state's diverse natural resources for a sustainable quality of life." <i>This document describes what can be done to restore or maintain natural river processes within the constraints placed on the Mississippi by the 9- Foot Channel Project.</i>	 Restore floodplain connectivity to all 33 UMRS pools and lower tributary reaches by inventorying opportunities and obstacles and obtaining state and federal funds to support a revolving account to underwrite restoration costs; Manipulate water levels at all 33 UMRS locks and dams to more closely simulate pre-impoundment hydrology, without impacting commercial or recreational navigation; Promote the growth and maintenance of islands, deltas and side channels at every opportunity in all 33 UMRS pools to reestablish the river's topographic diversity. Document includes a matrix to aid in evaluation of sites in terms of floodplain dynamic processes, with ranking of +/- 10 points for whether a project enables or arrests processes.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
13	Ten Policy Statements (adopted 1995-1997), Mississippi River Basin Alliance Scale: Systemwide Objectives: Qualitative <u>www.mrba.org</u>	To protect and restore the ecological, economic, cultural, historic and recreational resources in the basin and to eliminate barriers of race, class and economic status that divide us in the quest to achieve these purposes. Focus areas for the 130 member organizations of MRBA are sustainable agriculture, wetland restoration, water quality and toxics, and navigation.	 At www.mrba.org/alliance/policy/index.html policy papers on these topics are available: Agricultural Policy, Atchafalaya Basin, The Dead Zone, Environmental Justice, Environmental Toxics, Navigation, Superfund, Water Quality, Wetlands, Zero Discharge. Highlights of objectives are: Improve recovery process for threatened and endangered species; Create and fund citizen board to work with government to create integrated plan for pollution reduction; Direct flood control policy toward wetland restoration in the floodway for flood storage; Complete mitigation planning and funding for navigation projects before undertaking future projects.
14	Integrated Management plan for the Illinois River Watershed and Technical Report (January 1997), Office of Lt. Governor, State of Illinois Scale: State (approx. half of land area); Objectives: Qualitative and Quantitative Office of Lt. Governor Wood 214 State House Springfield, IL 62706	A naturally diverse and productive Illinois River Valley that is sustained by natural ecological processes and managed to provide for compatible social and economic activities. <i>34 recommendations addressing the river corridor,</i> <i>soil and water movement, agricultural practices,</i> <i>economic development, local action, and</i> <i>education.</i>	 Healthy levels of abundance, distribution, and diversity of plants and animals; Restoration of highly-eroded streams: 1% by 2000; 10% by 2010; In all stream segments attain water quality standards and, every 10 years, a 10% improvement in the Index for Biotic Integrity; Reduce river's deviation from the natural hydrograph (volume, depth, duration); For floods with 2-5 year frequencies, reduce peak flows to the river by 2-3 percent. A viable economy that enhances the ecological value of the watershed; A measurable reduction in sediment entering Illinois River and its tributaries.
15	The Mississippi River in the Upper Midwest: Its Economy, Ecology, and Management (1996), The McKnight Foundation Scale: Systemwide Objectives: Qualitative The McKnight Foundation, 600 TCF	To maintain and, where necessary, restore a healthy and sustainable environment in the Mississippi River basin. To provide a more concrete framework for efforts to sustain and <i>enhance the environment and</i> <i>economy of the Upper Mississippi.</i>	 Increase public awareness of resources and involvement in river and watershed management; Create opportunities for direct involvement in river protection, management to build commitment; Set regional goals and objectives, beginning with most critical reaches; Build on environment-economy links; Explore new ways to maintain and enhance commercial navigation while protecting the river's economic vitality;

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives Tower, 121 S. Eighth St.,	Mission Main Emphasis	Management Objectives
	Minneapolis, MN 55402		 Continue incentives that reward environmentally beneficial business and farm practices; Nurture and expand local watershed management
			initiatives;
			 The region's natural resource management and economic development agencies should monitor vital signs of environmental and economic health.
16	Channel Maintenance Management Plan (1996)	Provide quality, responsive engineering services to the nation, including planning, designing and	Maintain the Upper Mississippi River 9-Foot Channel Navigation waterway through dredging. Dredging and
	Scale: Minneapolis, MN to	building and operating water resources and other civil works projects (which includes navigation,	placement should be timely, cost-effective, involve sound engineering practices and established environmental
	Guttenberg, IA Objectives: Qualitative, Quantitative	flood control, environmental protection, and disaster response).	standards. Detailed plans include specific objectives for placement sites.
	Department of the Army, St. Paul District, Corps of Engineers, 190 Fifth St. East, St. Paul, MN 55101		
17	The Great River Flyway: The Management Strategy for Migratory Birds on the Upper Mississippi River (1996), NBS, EMTC, USFWS	Coordinate US Department of the Interior (US Fish and Wildlife Service and National Biological Service) and 5 state agencies. A systemwide, integrated ecological approach to	• The Management Strategy discussed is an ecosystem approach to management, under consideration by the US Fish and Wildlife Service (Region 3), the National Biological Service, US Army Corps of Engineers, and the states of IL, OA, MN, MO, and WI.
	Scale: Regional (40-mile wide band from Cairo, IL to Twin Cities, MN); Objectives: Qualitative	ensure that habitat quality and availability on the Upper Mississippi River corridor are sufficient to support and enhance optimum populations of migratory birds.	The approach integrates physical and biological processes, species present, and land cover at various scales in developing management objectives and actions.
	National Biological Service, Environmental Mgt. Technical Center, Onalaska, WI 54650		Restoration and maintenance of natural riverine dynamics at multiple spatial and temporal scales is an integral element of large river ecosystem management.
18	Strategic Plan for Illinois Fisheries Resources: FY'96-FY'00 Working Document (October 1995), Illinois Department of Natural Resources, Division of Fisheries	To promote an understanding and appreciation of natural resources and to work with the people of Illinois to protect and manage Illinois' resources to ensure a high quality of life for present and future generations.	 Increase the supply of quality sport fishing opportunities to a total of 9.55 million angling days annually by 2000. Maintain the commercial harvest at about 3.7 million pound of rough fish and 1 million pounds of catfish annually through 2000.
	Scale: Statewide Objectives: Quantitative	Current demand for stream fishing exceeds the supply by about 12%.	Report includes qualitative objectives and strategies for these species: trout, walleye, sauger, northern pike, muskellunge, striped bass, hybrid striped bass, largemouth

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives Illinois Department of Natural Resources, Division of Fisheries, 524 S. Second St., Springfield, IL 62701- 1787	Mission Main Emphasis	Management Objectives muskellunge, striped bass, hybrid striped bass, largemouth bass, smallmouth and spotted bass, catfish, panfish, underutilized fish and other fish.
19	Comprehensive Management Plan, Mississippi National River and Recreation Area (1995), Mississippi River Coordinating Commission and National Park Service Scale: Regional Objectives: Qualitative US Department of the Interior, National Park Service, Denver Service Center, NPS D-9	To assist federal, state, and local authorities in the development and implementation of an integrated resource management plan for that portion of the Mississippi River and adjacent lands generally within the St. Paul-Minneapolis Metropolitan Area. (Balance and coordinate resource protection, visitor use, and sustainable development.)	 Balance and integrate sustainable use and resource preservation; Preserve and restore natural appearance of shorelines and bluffs; protect habitat; monitor effects of barge fleeting; Provide a continuous linear open space and trail where practical; acquire sensitive areas and emphasize resource protection; Balance resource protection and use; Increase pollution reduction efforts; Protect cultural and economic resources; facilitate and coordinate research.
20	Forging a New Framework for the Future: A Report to the Governors on State and Federal Management of the Upper Mississippi River (August 1995) Scale: Systemwide Objectives: Qualitative Upper Mississippi River Basin Association, 415 Hamm Building, 408 St. Peter St., St. Paul, MN 55102	An instrumentality of the states of IL, IA, MN, MO, and WI, to provide a mechanism for communication, cooperation and coordination on matters related to water resource planning and management in the Upper Mississippi River system. Assess the current management framework, explore institutional alternatives, and chart a course for change.	 Governors, UMRBA, non-voting Federal Liaison Members execute collaboration documents; UMRBA primary clearinghouse and reporter; Basin states set specific principles for river system management, for endorsement by Governors, embracing: sustainability of river environment and economic resources, comprehensive ecosystem management, integration of environmental and economic decision-making, and a recognition of the relationship between the river system and its watersheds.
21	Floodplain Management Assessment of the Upper Mississippi River and Lower Missouri Rivers and Tributaries (June 1995), U.S. Army Corps of Engineers Scale: Systemwide	Provide quality, responsive engineering services to the nation, including planning, designing and building and operating water resources and other civil works projects (which includes navigation, flood control, environmental protection, and disaster response). Authorized by Congress (1993), prepared by five	Compare costs of implementing array of policies and structural/nonstructural measures regarding flood insurance, floodplain regulation, flood hazard mitigation, disaster assistance, wetland restoration, and agricultural support policies. Hydraulic impacts must be evaluated systemically.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives Objectives: Qualitative (Not related to specific habitat mgt.) US Army Corps of Engineers	Mission Main Emphasis districts and three USACE divisions.	Management Objectives
22	"The Galloway Report," Science for Floodplain Mgt. into the 21st Century (June 1994), Scientific Assessment and Strategy Team Scale: Systemwide Objectives: Qualitative (Not related to specific habitat mgt.) US Army Corps of Engineers	To provide scientific advice and assistance to federal officials for making decisions regarding flood recovery in the UMR basin, particularly in relation to nonstructural and structural approaches.	Emphasis on mapping, data management, coordination and scientific analysis. The Upper Mississippi River Basin must be managed as an integrated system.
23	Sustaining the Ecological Integrity of Large Floodplain Rivers (1994), Environmental Management Technical Center Scale: Systemwide Objectives: Qualitative EMTC, 575 Lester Ave., Onalaska, WI 54650	International conference convened for scientists and natural resource managers to discuss the world's large rivers, processes that control their structure and function, ecological integrity, and how that integrity has been impacted by human activities. Document referenced here resulted from workshop that focused on applying the ecological integrity principles to the management of the UMRS.	 Connect main channel and floodplain at least seasonally to improve river integrity; Implement habitat improvements before conditions are criticalrivers and their fauna can recover rapidly; Freeing the river/floodplain in a series of patches could yield benefits; Any river impairment, no longer feasible, should be considered for removal.
24	Restoring the Big River (1994), Izaak Walton League, NRDC Scale: Systemwide Objectives: Qualitative	 IWL: To conserve, maintain, protect and restore the soil, forest, water and other natural resources of the United States and other lands; to promote means and opportunities for the education of the public with respect to such resources and their enjoyment and wholesome utilization. NRDC: To safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends. Use the federal Clean Water Act as a tool to restore the river. 	 Achieve special designation to focus national attention and coordinate watershed approach to protection and restoration; Increase runoff prevention and move toward enforceable programs; Improve point source pollution prevention and enforcement; Increase wetland/riparian protection/restoration, reduce losses; Expand citizen involvement in watershed planning/river monitoring; Improve water quality standards and coordination among states.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis		Management Objectives
25	Mississippi River Operational Management Plan (1993) Scale: Minneapolis, MN to Guttenberg, IA Objectives: Qualitative and Quantitative Department of the Army, St. Paul District, Corps of Engineers, Army Corps of Engineers Centre, 190 Fifth St. East, St. Paul, MN 55101	Provide quality, responsive engineering services to the nation, including planning, designing and building and operating water resources and other civil works projects (which includes navigation, flood control, environmental protection, and disaster response).	• • • •	Complete, maintain natural resources inventory of project lands and water areas; Perpetuate, improve floodplain forest for wildlife habitat, recreation, aesthetics, timber supply, pest control, and watershed protection; Support goals and objectives of the Upper Mississippi River National Wildlife and Fish Refuge (USFWS) and of the Gores Wildlife Management Area (Minnesota DNR). Maintain wetlands, protect endangered/threatened species, preserve unique/representative ecotypes; Maintain diverse productive, interspersed habitats for game/non-game fish and wildlife; Eliminate or reduce adverse impacts on water quality. Contribute to the goals of the North American Waterfowl Management Plan; Establish good working relationships with others.
26	Upper Mississippi River Fisheries Plan 1994-2003 (September 1993), Upper Mississippi River Conservation Committee - Fish Technical Section Scale: Systemwide Objectives: Qualitative 4469 48th Avenue Ct. Rock Island, IL 61201	To promote the preservation and wise utilization of the natural and recreation resources of the UMRS and to formulate policies, plans and programs for conducting cooperative studies. <i>Spills of toxic substances low concentrations of</i> <i>dissolved oxygen, high suspended sediment</i> <i>concentrations, and eutrophication are issues of</i> <i>concern.</i>	• • • • • • • •	Improve water quality; Increase the amount of suitable aquatic habitat; Improve ecologic integrity by restoring river's dynamic flow-regime; Maintain or improve biological diversity; Maintain and improve populations of native fish and mussels by slowing or eliminating the spread or introduction of exotic species; Maintain the characteristic elements and richness of the native fish fauna; Provide improved sport, commercial fisheries through unified state management strategies; Coordinate efforts to assure that fishery resources and aquatic habitats are restored to their original biological productivity and protected from future navigation impacts; No net habitat loss should be caused by river related development; Inform and educate the public on issues affecting the UMRS.

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis		Management Objectives
27	Facing the Threat: An Ecosystem Management Strategy for the Upper Mississippi River (1993), Upper Mississippi River Conservation Committee Scale: Systemwide Objectives: Qualitative Upper Mississippi River Conservation Committee Coordinator, 4469 48th Ave. Ct., Rock Island, IL 61201	To promote the preservation and wise utilization of the natural and recreation resources of the UMRS and to formulate policies, plans and programs for conducting cooperative studies. <i>A Call for Action: funding, lead agency, and</i> <i>appropriate legislative authority.</i>	•	Establish unified cooperative approach among federal agencies; Establish goals/objectives for river/ watershed to maintain the ecosystem; Develop traditional and experimental approaches for facility construction, resource manipulation, use regulations and public education, considering all river users; Revise how government agencies and public interact to develop and implement the strategy and create/empower one council of federal, state and private members; Secure federal/state funding.
28	Mississippi Headwaters Management Plan (July 1992), Mississippi Headwaters Board Scale: Regional Objectives: Qualitative Mississippi Headwaters Board, Cass County Courthouse, Walker, MN 56484	A joint powers board of the first eight counties on the river, organized to protect and preserve the natural cultural, scenic, scientific and recreational values of the river's first 400 miles. <i>Rules and principles guiding protection of first 400</i> <i>miles of river.</i>	•	Preserve and protect natural, cultural, scenic, scientific, recreational values; Protect privately-owned lands through local land use controls in unincorporated areas; Comprehensive plan guides protection of publicly owned lands; Model ordinance is minimum standard of protection for water resources; maintains nonregulatory water monitoring program.
29	A Strategic Plan for Managing the Mississippi River into the Next Century (August 1992), Wisconsin Department of Natural Resources Scale: Regional (St. Croix River mouth to Illinois border, including adjacent land/water.) Objectives:	To protect and enhance our natural resources, provide a healthy sustainable environment and full range of outdoor opportunities, ensure the right of all people to use and enjoy these resources, work with people to understand each other's views, carry out the public will, and consider the future and generations to follow. To protect and enhance the river environment and to promote responsible use of river resources.	Go • • •	bals and strategies to: Wisely manage biological resources; Balance commercial/recreational use; Allow compatible development; Achieve interstate water quality standards; Reduce sedimentation/resuspension; Enhance recreation, reduce user conflicts; Increase public involvement, education; Increase spill prevention, preparedness for responding.
30	Big River Fisheries Ten Year Strategic Plan (1991), Missouri Department of Conservation Scale: Statewide	To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; to provide opportunity for all citizens to use, enjoy, and learn about fish,	•	In Missouri, restore 3,000 acres on the unimpounded Miss. River and 2,000 acres on the Upper Miss. River pools by 2001; By 2001, attain water quality and quantity capable of supporting endemic aquatic communities, and without a

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
	Jefferson City, MO	forest and wildlife resources. Aquatic habitat loss is the most pressing issue associated with aquatic life.	 health advisory on human consumption of fish; Improve populations of native aquatic organisms, including federal or state protected; Increase public awareness and support of rivers; Assure that fish and wildlife values receive equal consideration in management decisions by other agencies and authorities.
31	Mississippi Interstate Cooperative Resource Agreement (MICRA) Activity Prioritization, Final Report (June 1992), U.S. Fish and Wildlife Service Scale: Systemwide Objectives: Qualitative Jerry L. Rasmussen, U.S. Fish and Wildlife Service, 608 E. Cherry, Columbia, MO 65201	Working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people. Major responsibilities are migratory birds, endangered species, freshwater and anadromous fish, the national Wildlife Refuge system, wetlands, conserving habitat.	 Develop formal framework, secure funding for basin-wide coordination; Periodically prioritize issues of concern in the Miss. river Basin to coordinate research; Improve coordination among fisheries resource management entities; Develop standardized methods for basinwide collection of fishery resource data; Coordinate fishery management programs to use ecosystem approach; Develop public information programs that support fishery resource management; Document the socio-economic value of fishery resources and related recreation; Preserve, protect and restore fishery habitats basin-wide; Develop compatible policies and interstate consensus on allocation of fishery resources; Develop protocols and polices for disease control, introduction of exotics, maintenance of genetic integrity, and maintenance/enhancement of indigenous species.
32	Mississippi River Recreational Fisheries Draft Status Report "Interjurisdictional Fisheries Initiative" (June 1991), American Fisheries Society Scale: Systemwide Objectives: Qualitative and Quantitative	To improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.	 Habitat concerns of 29 state fisheries departments: Pollution from nonpoint sources, heavy metals, toxics, contaminants; Physical destruction by entrainment, impingement and diversion; Habitat destruction by gravel mining, oil leaks, flow manipulation, bed degradation, navigation, shoreline development, hydroelectric plants, sedimentation, temperature and turbidity changes, impoundment, and draining;

	Title, Publication Date, Source, Scale, Qualitative or Quantitative Habitat Objectives	Mission Main Emphasis	Management Objectives
	Jerry L. Rasmussen, U.S. Fish and Wildlife Service, 608 E. Cherry, Columbia, MO 65201		 Disruption of fish habitats by blockage of migration by dams, flow manipulation changes; Competition from introduced species.
33	Upper Mississippi River - Master Plan for Public Use Development & Resource Management - Part III (Sept. 1998), US Army Corps of Engineers, St. Paul District	Provide quality, responsive engineering services to the nation, including planning, designing and building and operating water resources and other civil works projects (which includes navigation, flood control, environmental protection, and disaster response).	 Continue to work with the US Fish and Wildlife Service to define Federal management roles in the following areas: proposed changes in land use allocations; cooperative wildlife management decisions; management of Crops and FWS lands allocated for low density recreation;
	Scale: Systemwide U.S. Corps of Engineers, St. Paul District	Report contains 30 site-specific goals, seven goals that apply to all public access sites on Corps lands, and 11 goals pertaining to all Corps interests (of the 11, habitat-related items in next column).	 determination of dredged material placement sites. Coordinate development of master plan proposals with other Federal, State, and local agency programs in order to maximize multiple public use benefits and safety.

#	Objectives for Future Habitat Conditions	Target Resources
1	A River That Works and a Working River Improve water quality for all uses; Reduce erosion and sediment impacts; Return natural floodplain to allow channel meanders and habitat diversity; Provide seasonal flood pulse effect, periodic low flows to improve nutrient base, plant growth and succession; Enable connectivity of backwaters to main channel; Provide opening of side channels, create islands, shoal and sandbar habitat; Manage channel maintenance and disposal to support ecosystem objectives; Sever the pathway for exotics into and spread with the UMRS; Provide native fish passages at dams.	 Migratory flyway for 60% of all birds in North America; 260 fish species; 25% of those in North America; Critical habitat for 286 state-listed/candidate species, 36 federal-listed/candidates; 37 mussel species, 50 mammal species, 45 amphibian and reptile species; 12,000,000 visitor-days generating \$6.6 billion annually, employment for 143,000; Historical and cultural resources.
2	 Headwaters to Backwaters a. 48 projects centered on river corridor protection, sustainable economic development and public education identified by 40 nonprofit and governmental agencies (in MN, WI, IL, IA, MO); b. Add 300,000 acres to the region's national forests, parks and refuges, state parks, 762 conserved miles along the Great River Road, and many locally managed areas; c. Establish 56 miles of new trails, and 11 new river education programs; d. Total projected costs exceed \$100 million. 	 Endangered and threatened species; Migratory birds; Wildlife refuges Economically important sport, commercial fish St. Croix National Scenic Riverway Apple Blossom state and federal scenic byway Historical and cultural resources Recreational trails, open space, Educational facilities and materials
3	 Refuge at the Crossroads a. Fully fund operation and maintenance of the Upper Mississippi River National Wildlife and Fish Refuge; b. Restore the UMRNWF Refuge to ecological health and protect against future decline; c. Establish parity between needs of UMRNWF Refuge and the commercial barge industry and address barge fleeting; apply water management to improve habitat conditions; d. Direct Corps of Engineers to convey all nonessential lands to USFWS for inclusion in the UMRNWF Refuge. 	 200,000 acres in four states; Species counts: 200 birds, 50 mammals, 45 amphibians/reptiles, 100 fish; 3.5 million visitors annually, hunting/angling most predominant activities; 54% of land owned by Corps of Engineers; Refuge contributed to recovery of Canvasbacks;
4	<i>Water Resources of the Prairie Island Indian Reservation</i> Need to remedy water quality problems at Prairie Island, north of Red Wing, MN. Concern in the Prairie Island Indian Community prompted studies which showed that bacteria and nitrates were most notable.	 Endangered species and migratory birds; game animals and furbearers; Economically and tribally important fish; Over 150 tribes attended Native American Environmental Conference at PI, 1998; In 1996, US Public Health Service began assessment of health and health risks at PI; Treasure Island Resort and Casino.
5	Upper Mississippi River 9-foot Channel Project To solve channel maintenance, navigation, and environmental problems in Pool 5, selected wing dam modifications, bank stabilizations, and a rock sill are proposed. To improve fish and wildlife habitat and reduce channel maintenance costs, construction of five small islands in lower pool is proposed.	 Three federally-listed species; 31 species state protected in WI and/or MN; Migratory birds; Recreational, cultural resources .

#	Objectives for Future Habitat Conditions		Target Resources	
6	Mark Twain National Wildlife Refuge Comprehensive Conservation Plan (draft)	•	migratory birds	
	a. Protect and enhance migratory birds and their habitats, the quality of existing wildlife habitat,	•	priority public uses of hunting, fishing, wildlife observation,	
	fisheries resources especially species of special concern;		photography, environmental education and interpretation.	
	b. Restore former wetlands, forests and prairies;	•	many wildlife species	
	c. Protect, enhance, and restore the natural diversity of wildlife and habitats in Area of Ecological			
	Concern;			
	d. Enhance floodplain function and mimic historical water level fluctuations;			
	e. Identify and reduce the impacts of sedimentation and other water quality factors on fish and			
	wildlife resources;			
	f. Enhance public outreach and education; strengthen partnerships with other agencies and			
	organizations; improve funding and staffing to effectively achieve goals; name changes for			
	clarification of refuges.			
7	Endangered/Threatened Species and Wetland Resources for Prairie Island Indian Community	•	endangered and threatened species	
	Although many variable and changing trends, increase in open water/wetlands; species loss likely.	•	migratory birds	
	 Initiate wetland monitoring program to track future changes. 	•	wetlands	
	Consider reestablishing wild rice in selected wetland areas.			
	 Consider a multiple species consultation with the USFWS. 			
8	Bird Fauna of the Prairie: Prairie Island Indian Community	•	endangered and threatened species	
	66% of bird species lost; Provide Corps of Engineers with a list of bird population mitigation activities,	•	migratory birds	
	to improve nesting and feeding habitats, that will assist the Tribe with improving bird habitats and bird			
	populations.			
9	Prairie Island Indian Community Fishery Resources Affected By Lock and Dam 3 and Channel	•	economically and tribally important fish	
	Maintenance	•	wetlands	
	Harm and benefit to fisheries due to many systemwide alterations.			
	• Avoid further channelization and conversion of existing backwater lakes to eutrophic conditions.			
	Maintain connections to the river for North Lake and Sturgeon Lake, with adequate flows to			
	maintain a more desirable assemblage of sport and commercial fish.			
	Corps to continue to search for ways to balance sediment movement in and out of the pool, with			
	beneficial uses for dredged material.			
10	A Plan for Illinois Fisheries Resources FY'99-FY'03	•	fishing is a priority public use	
	a. Maintain the supply of quality angling days for walleye, sauger, northern pike, trout.	•	economically significant sport and commercial fishery	
	b. Increase the supply of quality angling opportunities for striped bass.		resources	
	c. Maintain the quantity and quality of fishing opportunities for largemouth bass, smallmouth bass,			
	spotted bass, catfish, panfish.			
	d. Increase sport fishing for underutilized fish (carp, buffalo, and drum).			
	e. Maintain species diversity and abundance of other fish.			
	 f. Maintain the species diversity, abundance of reptile, mussel, crayfish, and amphibians. g. Maintain current level of frog and turtle sport harvest, commercial mussel harvest. 			
11			migroton (hirdo	
11	 North American Waterfowl Management Plan a. Protection, enhancement, and restoration of breeding habitats is the highest priority. 	•	migratory birds	
		•	priority public uses	
		•	wetland restoration	
	 c. Explicit recognition of migration habitats is the third priority. d. Targeted increases: Mississippi/Rock rivers: 16,092 acres; Illinois River: 11,143 acres; 			
	a. rangeted indicates. Initiality printed inters. 10,032 acres, initials (1961, 11,14) acres,	1		

#			Target Resources	
	e. Minnesota, Wisconsin and Missouri: qualitative objectives in certain areas;			
	f. Contact Joint Venture Coordinator for progress reports on each area at			
	g. http://northamerican.fws.gov/jvdir.html			
12	The Restoration of Natural River Processes: Preliminary Steps for Sustaining the Ecological	٠	migratory birds	
	Health of Upper Mississippi River	•	endangered species	
	 Restore floodplain connectivity to all 33 UMRS pools and lower tributary reaches by inventorying opportunities and obstacles and obtaining state and federal funds to support a revolving account to underwrite restoration costs; 	•	economically important sport and commercial fisheries	
	 Manipulate water levels at all 33 UMRS locks and dams to more closely simulate pre- impoundment hydrology, without impacting commercial or recreational navigation; 			
	c. Promote the growth and maintenance of islands, deltas and side channels at every opportunity in all 33 UMRS pools to reestablish the river's topographic diversity.			
10	Document includes a matrix to aid in evaluation of sites in terms of floodplain dynamic processes, with ranking of +/- 10 points for whether a project enables or arrests processes.			
13	Ten Policy Statements (adopted 1995-1997), Mississippi River Basin Alliance	•	migratory birds	
	At <u>www.mrba.org/alliance/policy/index.html</u> MRBA ten policy paper topics presented are Agricultural	•	wetlands	
	Policy, Atchafalaya Basin, The Dead Zone, Environmental Justice, Environmental Toxics, Navigation,	•	endangered and threatened species	
	Superfund, Water Quality, Wetlands, Zero Discharge. Highlights of objectives are:			
	Improve recovery process for threatened and endangered species;			
	Create and fund citizen board to work with government to create integrated plan for pollution			
	reduction; Direct files described a client tenend we then direct teneties in the files during for files distance as			
	Direct flood control policy toward wetland restoration in the floodway for flood storage;			
	Complete mitigation planning and funding for navigation projects before undertaking future			
	projects.		· · · ·	
14	Integrated Management plan for the Illinois River Watershed	•	endangered species	
	a. Healthy levels of abundance, distribution, and diversity of plants and animals;	٠	migratory birds	
	b. Restoration of highly-eroded streams: 1% by 2000; 10% by 2010;	٠	economically important sport and commercial fisheries	
	c. In all stream segments attain water quality standards and, every 10 years, a 10% improvement in the Index for Biotic Integrity;			
	d. Reduce river's deviation from the natural hydrograph (volume, depth, duration);			
	e. For floods with 2-5 year frequencies, reduce peak flows to the river by 2-3 percent.			
	f. A viable economy that enhances the ecological value of the watershed;			
	g. A measurable reduction in sediment entering Illinois River and its tributaries.			
15	The Mississippi River in the Upper Midwest: Its Economy, Ecology, and Management	٠	endangered species	
	a. Increase public awareness of resources and involvement in river and watershed management;	٠	migratory birds	
	b. Create opportunities for direct involvement in river protection, management to build commitment;	•	economically important sport and commercial fisheries	
	c. Set regional goals and objectives, beginning with most critical reaches;	•	priority public uses	
	d. Build on environment-economy links;			
	 Explore new ways to maintain and enhance commercial navigation while protecting the river's economic vitality; 			
	f. Continue incentives that reward environmentally beneficial business and farm practices;			
	 Nurture and expand local watershed management initiatives; 			
	h. The region's natural resource management and economic development agencies should monitor			

#	Objectives for Future Habitat Conditions	Target Resources	
	vital signs of environmental and economic health.		
16	Upper Mississippi River 9-Foot Channel Management Plan Maintain the Upper Mississippi River 9-Foot Channel Navigation waterway through dredging. Dredging and placement should be timely, cost-effective, involve sound engineering practices and established environmental standards. Detailed plans include specific objectives for placement sites.	 Aquatic and floodplain habitats Fish and wildlife Federal and state threatened/endangered species Cultural resources 	
17	 The Great River Flyway: The Management Strategy for Migratory Birds on the Upper Mississippi River a. The Management Strategy discussed is an ecosystem approach to management, under consideration by the US Fish and Wildlife Service (Region 3), the National Biological Service, US Army Corps of Engineers, and the states of IL, OA, MN, MO, and WI. b. The approach integrates physical and biological processes, species present, and land cover at various scales in developing management objectives and actions. c. Restoration and maintenance of natural riverine dynamics at multiple spatial and temporal scales is an integral element of large river ecosystem management. 	 migratory birds endangered species 	
18	 Strategic Plan for Illinois Fisheries Resources: FY'96-FY'00 Working Document a. Increase the supply of quality sport fishing opportunities to a total of 9.55 million angling days annually by 2000. b. Maintain the commercial harvest at about 3.7 million pound of rough fish and 1 million pounds of catfish annually through 2000. Report includes qualitative objectives and strategies for these species: trout, walleye, sauger, northern pike, muskellunge, striped bass, hybrid striped bass, largemouth bass, smallmouth and spotted bass, catfish, panfish, underutilized fish and other fish. 	 economically significant sport and commercial fisheries priority public use: fishing endangered species 	
19	 Comprehensive Management Plan, Mississippi National River and Recreation Area a. Balance and integrate sustainable use and resource preservation (at Miss. River Nat'l Recreation Area); b. Preserve and restore natural appearance of shorelines and bluffs; c. protect habitat; monitor effects of barge fleeting; d. Provide a continuous linear open space and trail where practical; acquire sensitive areas and emphasize resource protection; e. Balance resource protection and use; f. Increase pollution reduction efforts; g. Preserve biological diversity; h. Protect cultural and economic resources; facilitate and coordinate research. 	 endangered species migratory birds economically important sport and commercial fisheries priority public uses 	
20	 Forging a New Framework for the Future: A Report to the Governors on State and Federal Management of the Upper Mississippi River Governors, UMRBA, non-voting Federal Liaison Members execute collaboration documents; UMRBA primary clearinghouse and reporter; Basin states set specific principles for river system management, for endorsement by Governors, embracing: sustainability of river environment and economic resources, comprehensive ecosystem management, integration of environmental and economic decision-making, and a recognition of the relationship between the river system and its watersheds. 	 Forum for interagency coordination effects: endangered species migratory birds economically important sport and commercial fisheries priority public uses 	

#	Objectives for Future Habitat Conditions	Target Resources
21	Floodplain Management Assessment of the Upper Mississippi River and Lower Missouri Rivers	Wetlands
	and Tributaries	migratory waterfowl
	Compares costs of implementing array of policies and structural/nonstructural measures regarding	economically important fish resources
	flood insurance, floodplain regulation, flood hazard mitigation, disaster assistance, wetland restoration,	endangered and threatened species
	and agricultural support policies.	cultural resources
	Hydraulic impacts must be evaluated systemically.	
22	"The Galloway Report," Science for Floodplain Mgt. into the 21st Century	endangered and threatened species
	 Emphasis on mapping, data management, coordination and scientific analysis. 	wetlands
	The Upper Mississippi River Basin must be managed as an integrated system.	historical and cultural resources
		migratory birds
23	Sustaining the Ecological Integrity of Large Floodplain Rivers	endangered and threatened species
	Connect main channel and floodplain at least seasonally to improve river integrity;	wetlands
	• Implement habitat improvements before conditions are criticalrivers and their fauna can recover rapidly;	migratory birds
	 Freeing the river/floodplain in a series of patches could yield benefits; 	
	 Any river impairment, no longer feasible, should be considered for removal. 	
24	Restoring the Big River	endangered and threatened species
- ·	a. Achieve special designation to focus national attention and coordinate watershed approach to	 wetlands
	protection and restoration;	 historical and cultural resources
	b. Increase runoff prevention and move toward enforceable programs;	 migratory birds
	c. Improve point source pollution prevention and enforcement;	
	d. Increase wetland/riparian protection/restoration, reduce losses;	
	e. Expand citizen involvement in watershed planning/river monitoring;	
	f. Improve water quality standards and coordination among states.	
26	Upper Mississippi River Fisheries Plan, 1994-2003	endangered species
	a. Improve water quality;	economically important sport and commercial fisheries
	b. Increase the amount of suitable aquatic habitat;	priority public uses
	c. Improve ecologic integrity by restoring river's dynamic flow-regime;	
	d. Maintain or improve biological diversity;	
	e. Maintain and improve populations of native fish and mussels by slowing or eliminating the spread	
	or introduction of exotic species;	
	f. Maintain the characteristic elements and richness of the native fish fauna;	
	g. Provide improved sport, commercial fisheries through unified state management strategies;	
	h. Coordinate efforts to assure that fishery resources and aquatic habitats are restored to their original biological productivity and protocted from future paying tion impacts:	
	original biological productivity and protected from future navigation impacts; i. No net habitat loss should be caused by river related development;	
	 No net habitat loss should be caused by river related development; Inform and educate the public on issues affecting the UMRS. 	
27	Facing the Threat: An Ecosystem Management Strategy for the Upper Mississippi River	endangered species
21	a. Establish unified cooperative approach among federal agencies for the UMRS;	 migratory birds
	 b. Establish goals/objectives for river/ watershed to maintain the ecosystem; 	 economically important sport and commercial fisheries
	c. Develop traditional and experimental approaches for facility construction, resource manipulation,	 priority public uses
		· Phone have ases

#	Objectives for Future Habitat Conditions	Target Resources
	 use regulations and public education, considering all river users; d. Revise how government agencies and public interact to develop and implement the strategy and create/empower one council of federal, state and private members; e. Secure federal/state funding. 	
28	 Mississippi Headwaters Management Plan a. Preserve and protect natural, cultural, scenic, scientific, recreational values in Miss. Headwaters Area; b. Protect privately-owned lands through local land use controls in unincorporated areas; c. Comprehensive plan guides protection of publicly owned lands; d. Model ordinance is minimum standard of protection for water resources; maintains nonregulatory water monitoring program. 	 endangered species migratory birds economically important sport and commercial fisheries priority public uses
29	 A Strategic Plan for Managing the Mississippi River into the Next Century Goals and strategies to: a. Wisely manage biological resources; b. Balance commercial/recreational use; c. Allow compatible development; d. Achieve interstate water quality standards; e. Reduce sedimentation/resuspension; f. Enhance recreation, reduce user conflicts; g. Increase public involvement, education; h. Increase spill prevention, preparedness for responding. 	 endangered species migratory birds economically important sport and commercial fisheries priority public uses
30	 Big River Fisheries Ten Year Strategic Plan a. In Missouri, restore 3,000 acres on the unimpounded Miss. River and 2,000 acres on the Upper Miss. River pools by 2001; b. By 2001, attain water quality and quantity capable of supporting endemic aquatic communities, and without a health advisory on human consumption of fish; c. Improve populations of native aquatic organisms, including federal or state protected; d. Increase public awareness and support of rivers; e. Assure that fish and wildlife values receive equal consideration in management decisions by other agencies and authorities. 	 endangered species economically important sport and commercial fisheries priority public uses public health implications
31	 Mississippi Interstate Cooperative Resource Agreement a. Develop formal framework, secure funding for basin-wide coordination; b. Periodically prioritize issues of concern in the Miss. river Basin to coordinate research; c. Improve coordination among fisheries resource management entities; d. Develop standardized methods for basinwide collection of fishery resource data; e. Coordinate fishery management programs to use ecosystem approach; f. Develop public information programs that support fishery resource management; g. Document the socio-economic value of fishery resources and related recreation; h. Preserve, protect and restore fishery habitats basin-wide; i. Develop compatible policies and interstate consensus on allocation of fishery resources; j. Develop protocols and polices for disease control, introduction of exotics, maintenance of genetic integrity, and maintenance/enhancement of indigenous species. 	 endangered species economically important sport and commercial fisheries priority public uses

#	Objectives for Future Habitat Conditions	Target Resources
32	 Mississippi River Recreational Fisheries Draft Status Report "Interjurisdictional Fisheries Initiative" Habitat concerns of 29 state fisheries departments: a. Pollution from nonpoint sources, heavy metals, toxics, contaminants; b. Physical destruction by entrainment, impingement and diversion; c. Habitat destruction by gravel mining, oil leaks, flow manipulation, bed degradation, navigation, shoreline development, hydroelectric plants, sedimentation, temperature and turbidity changes, impoundment, and draining; d. Disruption of fish habitats by blockage of migration by dams, flow manipulation changes; e. Competition from introduced species. 	 endangered species economically important sport and commercial fisheries priority public uses
33	 Upper Mississippi River - Master Plan for Public Use Development & Resource Management - Part III a. Continue to work with the US Fish and Wildlife Service to define Federal management roles in the following areas: proposed changes in land use allocations; cooperative wildlife management decisions; management of Crops and FWS lands allocated for low density recreation; determination of dredged material placement sites. b. Coordinate development of master plan proposals with other Federal, State, and local agency programs in order to maximize multiple public use benefits and safety. 	 endangered species migratory birds economically important sport and commercial fisheries priority public uses

APPENDIX C

RESULTS OF UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM HABITAT NEEDS ASSESSMENT FOCUS GROUPS

RESULTS OF UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM HABITAT NEEDS ASSESSMENT FOCUS GROUPS

by

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A Report Submitted to:

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I. INTRODUCTION

Public involvement was recognized as a vital part of the Habitat Needs Assessment (HNA) process of the Upper Mississippi River System (UMRS) Environmental Management Program (EMP). During this first HNA, several approaches were developed by a multiagency HNA public involvement team (comprising the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the Upper Mississippi River Basin Association, the U.S. Geological Survey, and the five Upper Mississippi states) to assess the public's understanding, values, and expectations regarding desired future habitat conditions for the UMRS. These approaches, though by no means comprehensive, were considered to be the most practical and effective means of engaging the public in the initial HNA.

Information was collected from the public at two levels: institutions and the public at large. A compilation of mission statements and UMRS management plan objectives were reviewed to identify institutional priorities and activities related to river habitat. A series of 12 public meetings conducted in April and May 1999 (sponsored by the National Audubon Society and the Upper Mississippi River Conservation Commission) and a series of 10 focus groups conducted in July and August 2000 (sponsored by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the Upper Mississippi River Basin Association) were used to assess the general public's understanding, values, and expectations regarding desired future UMRS habitat conditions. The latter ten focus groups are the subject of this report.

This report is organized into six chapters. Chapter II reports how the focus groups were designed and implemented. Chapters III, IV, and V directly address the three goals of the focus groups, reaction to the HNA, desired future conditions, and public involvement preferences, respectively. Chapter VI describes participants' reaction to the overall focus group process. Chapter VII summarizes the main points raised by the focus group participants under each topic. These summaries are also the conclusions, as the focus group participants clearly expressed how they felt decision making may be improved in the UMRS.

The purpose of this report is to describe the outcome of these focus groups so that EMP/HNA planning team members may consider the following points in future decision making: public reaction to details of the HNA process, public perspectives of desired future habitat conditions, and perspectives and preferences for future public involvement.

II. FOCUS GROUP DESIGN, STRUCTURE, AND OUTCOME

FOCUS GROUP DESIGN

A focus group format was chosen because of its utility in eliciting open-ended responses to formulate future research questions and in eliciting reactions to a particular product for future

refinements. A consideration in the use of a focus group is that the more intimate setting may lead focus group participants to expect more direct results from their participation than they might expect from another type of meeting. A limitation to the use of focus groups is that the relatively small number of selected participants cannot be considered to represent the views of the public at large.

The goal for the focus group sessions was to get reactions from the public regarding HNA products to support improved decision making, more specifically to (1) gauge public reaction to details of the HNA process, (2) capture public perspectives of desired future habitat conditions, and (3) capture perspectives and preferences for future public involvement in the HNA/EMP process.

Ten focus group sessions were convened by invitation in seven cities along the Upper Mississippi and Illinois Rivers from July 26 to August 4, 2000 (Figure II-1). Sessions were held in selected locations along the river in order to elicit the opinions of people in different regions of the river system. Two sessions each were held in Dubuque, La Crosse, and St. Paul because of the strong interest in river issues in this region and the high turnout for previous

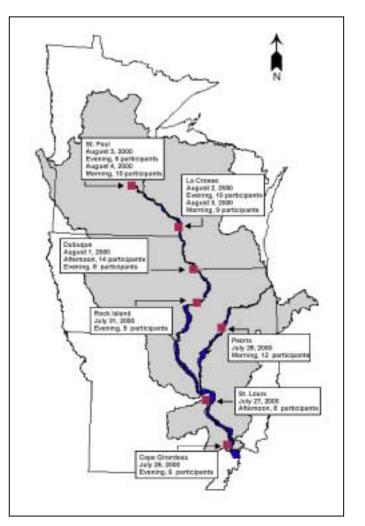


FIGURE II-1

FOCUS GROUP SESSIONS IN THE UPPER MISSISSIPPI RIVER SYSTEM

river meetings. Focus group times were scheduled during both daytime and evening hours to accommodate a diversity of participant schedules. The focus groups were scheduled to last three hours, including 30 to 40 minutes for a presentation on the HNA, with the remaining time for focus group discussion and breaks for the participants when necessary.

No less than eight and no more than twelve participants were desired at each focus group, as smaller groups tend to be dominated by one or two individuals and larger groups tend to reduce the level of participation of the group members.¹ While homogeneity among group participants' river interests was initially desired, the need to gather public input along the river system within a short time frame precluded the assembly of homogenous groups. Instead, mixed groups were assembled from persons who previously had expressed interest in river issues. The creation of homogenous groups is not a requirement for a successful focus group. More important is a "climate of mutual respect" and a group composition that "minimizes suspicion and open disagreement".²

As it turned out, the mixing of various interest groups within a single focus group did serve to minimize suspicion within the focus group participants, assuring them that an attempt was being made to obtain input from all river interests. Additionally, the heterogeneous groups represented a river resource management goal important to most of the participants: the cooperation of various river interests in developing management goals for the river system. Retrospectively, a more effective division for group assembly would have been between persons with higher and lower levels of technical orientation in river issues. While the mixing of participants with different levels of technical orientation did not generate open disagreement or appear to hinder group dynamics, more information pertinent to each orientation level could have been gleaned from the focus group sessions if sessions tailored to each orientation level had been held.

FOCUS GROUP INVITATION AND REGISTRATION

Mailing lists from the Upper Mississippi River Basin Association and the U.S. Fish and Wildlife Service and from the Audubon/UMRCC-sponsored public meetings were combined into a single mailing list of 727 individuals. State agency officials, persons residing in a state other than the five UMRS states, and the general media were not included on this list. A letter of invitation and an RSVP form (Attachment 1) were sent on July 14 and 15, and the recipients were asked to reply by July 19. Several people commented that the response time was too short, as some invitations were not received until July 19 or later. Several of the focus group participants stated that they had not been specifically invited, that they had heard about the focus group through other sources. Some attendants learned of the focus group through a Sierra Club email forward. Registration continued for each focus group until the evening before that focus group, at which time a final registration list was faxed to the facilitation team.

All pre-registered focus group registrants received confirmation of registration (Attachment 1) and a focus group agenda with specific location information (Attachment 2) and were contacted by telephone two to three days before the focus group to remind them of their commitment. Registration at the Cape Girardeau, St. Louis, and Rock Island focus groups and the evening St. Paul focus group was below the desired participation level (less than eight), so

¹ David W, Stewart, Prem N. Shamdasani. "Focus Groups: Theory and Practice." *Applied Social Science Research Methods Series*. Volume 20. Sage Publications, Newbury Park, CA. 1990.

² David L. Morgan. *The Focus Group Guidebook: Focus Group Kit 2*. Sage Publications, Inc., Thousand Oaks, CA. 1998.

the HNA team members were requested to contact individuals who might be interested in attending those focus groups. The Peoria, Dubuque, and La Crosse focus groups and the Friday morning St. Paul focus group reached the maximum registration limit of 12 participants.

Persons requesting registration at a filled focus group were given the option of registering for a different focus group, being placed on a "short notice" list in the event of a cancellation, or being placed on a list to receive future mailings. Several interested persons were accommodated through a different focus group and through the short notice list. Because some registered persons did not attend and because only a few unregistered persons showed up at the focus groups, the unregistered individuals were asked to sign in and were allowed to participate in the focus group.

FOCUS GROUP IMPLEMENTATION

Focus group participants were given a handout of the presentation slides and a fact sheet (Attachment 2). The Planning and Management Consultants, Ltd. (PMCL) lead facilitator, Dale Brown, opened the focus group with an explanation of the agenda. A member of the HNA team then gave a technical slide presentation on the HNA. Mike Thompson of the Corps, St. Louis District, gave the presentations at the first three focus groups, with Robert Clevenstine of the U.S. Fish and Wildlife Service, Rock Island Field Office, available to answer questions. Mr. Clevenstine gave the presentations at the next five focus groups. Barbara Naramore of the Upper Mississippi River Basin Association gave the present during the St. Paul focus groups to answer questions.

Mr. Brown then explained the ground rules for the focus group session and began to ask probing questions of the focus group participants based on a standard set of questions and subquestions developed jointly by the HNA team and the facilitation team (Attachment 3). The three main questions were: (1) Have any factors that define habitat conditions been overlooked? (2) What are your desired future river habitat conditions? and (3) What methods of public participation do you prefer? Two other members of the PMCL facilitation team, Nancy Hanna-Somers, Project Manager, and Katherine Bradshaw, Research Analyst, took notes at the focus groups (Attachment 3). At the conclusion of the focus group session, the participants were asked to complete an evaluation of the focus group (Attachment 4).

FOCUS GROUP ATTENDANCE

Of the 727 invitations mailed, 65 were returned with invalid addresses. A total of 142 responses to the invitations were received, yielding a response rate of 21 percent. There were 92 focus group participants and 6 focus group observers. The remaining respondents indicated an interest in future public participation opportunities and asked to be included in future mailings.

TABLE II-1

SELF-IDENTIFIED GROUP MEMBERSHIP PROFILE OF ATTENDEES

Group Membership	Cape Girardeau	St. Louis	Peoria	Rock Island	Dubuque 1	Dubuque 2	La Crosse 1	La Crosse 2	St. Paul 1	St. Paul 2	Total
Environment/nature Audubon Society, Izaak Walton League, county conservation society	0	3	4	4	7	1	6	1	1	2	29
Interested citizen Landowner, river resident, also includes participants with no listed affiliation	0	1	3	1	1	4	2	1	0	0	18
Civic/governmental MN-WI Boundary Area Commission, League of Women Voters, county board	1	0	1	1	1	0	0	1	1	2	8
Industry/business Moline Consumers Company, Brennan Marine, Iowa-American Water Company, Alliant Energy	0	0	0	1	0	0	0	1	2	0	8
Port/barge Cargo Carriers, City of La Crosse Harbor Commission, American Waterways Operators	2	0	1	0	0	0	1	0	0	3	7
Recreation Ducks Unlimited, Mississippi Walleye Club, MN Trout Association, recreational boater	0	1	1	0	0	1	1	0	0	0	6
River issues River Alliance of WI, Tri-County Riverfront Action Forum, Mississippi River Revival	0	1	2	0	1	0	0	0	1	1	6
Soil/drainage issues MO Soil and Water Conservation Association, Sny Island Levy Drainage District, USDA-NRCS	1	2	0	1	0	0	0	1	0	0	5
University/extension service University of Wisconsin Extension of La Crosse County, Resource Studies Center of St. Mary's University, Winona State University	0	0	0	0	0	0	0	4	1	0	5

Note: The participant groups listed in italics are examples of these group types and are not representative of all participants.

During registration, focus group participants were asked to list their affiliation. These open-ended responses were later categorized. Participants represented a range of interests, but persons belonging to environment and nature groups were most prevalent (Table II-1). While the group membership identified at registration was generally the focus group participant's primary interest, most participants noted during introductions that they had multiple interests in the river system.

III. FOCUS GROUP PARTICIPANT REACTION TO THE HNA PRODUCT

Discussion of the HNA product at the ten focus group sessions was prompted by asking an open-ended series of questions, including whether the participants understood the product, what they thought was important, and what they thought was confusing. The responses to these questions were wide-ranging. Focus group participants discussed technical aspects of the HNA, such as the use of habitat as the basis of management in the UMRS; the scale and other aspects of the data collection effort; and the use of the condition model using historic, existing, predicted future, and desired future river conditions. In addition, focus group participants discussed administrative aspects of the HNA and river system management they found important, such as balancing river interests, public involvement, agency involvement, and the end result of the HNA. It was apparent during the discussions that focus group participants who were more technically oriented tended to discuss more technical aspects of the data and tool, while participants who were less technically oriented tended to discuss personal values more frequently.

CENTRAL TECHNICAL ISSUES

The overall reaction to the HNA product was positive. Participants generally felt that it was a good beginning effort. Suggestions for improvement included considering ecological processes and indicators of habitat quality, expanding the scope of the effort beyond the river corridor, assuring that data are available for planning on a local scale, developing a plan to fill identified data gaps, and creating more concrete future and desired future condition scenarios.

Use of Habitat as Basis of Management Effort

Eight habitat classifications were presented to the focus group participants, four aquatic (main channel, secondary channel, connected backwater, and emergent marsh) and four terrestrial (floodplain forest, floodplain grassland, floodplain agriculture and isolated backwater, and developed floodplain). Participants generally accepted the use of the specified habitats and were comfortable that the HNA developers had a logical, workable purpose for this classification system. The classifications were deemed "simple enough for the general public to relate to." Many participants wanted more specific information on these habitat types, such as how local areas would be classified, examples of commonly known species or structures associated with each habitat type, and how the classifications were chosen. However, a few participants thought that the classifications had been created out of convenience due to time and database constraints and were uncertain as to how the classifications were an "overgeneralization." Another expressed concern was that if lands were not properly classified at the beginning of the HNA process, errors could be perpetuated and magnified up the decision-making chain. A few participants felt

that the health of the river system should be based on species counts rather than on habitat classes.

A significant concern many focus group participants expressed with the use of habitat classifications as the basis of river management activities was that "habitat" is a static state that does not consider important processes and interactions such as food chains, ecosystem interactions, flood/drought cycles, seasonal changes, geologic processes, introduction of exotic species, and human activities (i.e., changes in agricultural practices, population density, industrial demands, lock and dam operations, barge traffic, and recreation preferences). Some participants felt that the HNA would be of little practical value without consideration of such dynamic processes. Many focus group participants perceived habitat classifications as a type of land cover classification.

Participants felt habitat quality was another issue the HNA needed to address, in addition to the quantity and distribution of habitat. A particular aspect of habitat quality important to many of the focus group participants was the quality of the river water itself. There was a general feeling that water quality issues might not be properly addressed in the context of eight habitat classifications. Biodiversity was another measure of habitat quality important to many participants. However, a few participants felt that there was no intrinsic value in high levels of biodiversity. They indicated that in their opinion a better measure of habitat quality is the level of goods and services the habitat can provide. This sentiment was reflected in comments that the HNA had overlooked "human habitat" such as private land, recreation areas, and fishing areas.

Participants were comfortable with using habitat types when describing the river, terms from both the presentation and their own experience (Table III-1). Participants also spoke of the river in terms of goods and services provided by the river, such as transportation, fishing, tourism, recreation, and other economic opportunities. A few participants mentioned "ecosystem services" such as water filtration in marshes.

Scale of the HNA

Many participants were pleased that the HNA was intended to provide a planning framework from the broad perspective of the river system. They recognized that coordination among local plans is necessary. In fact, a significant number of participants felt that the "bluff-to-bluff" UMRS scale was not broad enough, that upland areas and tributaries, the UMRS watershed, or the entire Mississippi River system should be included in the analysis. Many expressed the importance of focusing on the whole system, not just individual pools. While the "big picture" was important, the ability of the HNA to help in planning efforts at the local level was also very important to a majority of the participants. Participants referred to their "local level" of the river in different ways. Legislative jurisdictions such as municipalities and counties provided a local reference point for some people. River structures such as locks and dams set the reference point for others. While many people used the term "pool" to define spatial areas, very few participants knew what a "reach" was. Several participants referred to specific water bodies such as the Illinois River, the Turkey River, or Lake Onalaska.

TABLE III-1

HABITAT-RELATED TERMINOLOGY FOCUS GROUP PARTICIPANTS USED TO DESCRIBE THE RIVER

Abandoned riverbeds	Headwater tributary	Secondary channel
Backwater lakes	High/low water level	Shoreline
Backwaters	Island	Side channel
Bioregion	Karst structures	Slough
Bluffs	Lake area	Spawning grounds
Boat dock	Life communities	Storm drains
Chute	Main channel	Surface water
Connected backwater	Marsh	Terrestrial areas
Deep water	Open water	Upland areas
Delta	Overwintering sites	Wastewater treatment
Ecosystem	Private land	Water itself
Farmland	Quarries	Wet/dry
Floodplain	River bottom	Wetlands
Groundwater	Rookeries	Wing dams
Habitat for beavers	Sand bar	
Hardwood forest	Secondary backwater	

Data Used for the HNA

The fact that the HNA made use of existing data was very important to many focus group participants. This value stemmed from financial motives: a desire for efficient spending in data collection and a desire to see more money allocated for physical restoration projects. At the same time, participants wanted good scientific research done to fill the data gaps in the HNA and to "ground truth" the computer output. Many participants noted that the HNA is not yet very useful because of the large data gaps. One participant compared the HNA to a "high-priced automobile with a cheap engine." Many participants felt that a longer-term, large-scale data collection plan should be developed, such as the data collection schedules used by local water quality monitoring programs.

There was also some concern that the coarse level of resolution represented by the eight habitat types would not be sufficient for monitoring and planning needs, particularly for management at the pool level or for a specific species. A few participants did note that this "data lumping" was necessary as a starting point or to make systemwide modeling possible. Focus group participants wanted data at a "useable scale" for both local and system needs.

Data concerns were also raised during discussion of the temporal structure of the data collection effort (historical, existing, predicted future, and desired future habitat conditions). A majority of focus group participants were unsure about how data for the future and desired future conditions were being collected and assembled. Specific concerns about the data used to develop the predicted future conditions included whether it was complete throughout the system, whether it was anecdotal data, and whether local/sectoral planning programs were considered

(such as the Illinois River 2020 plan or the Conservation Reserve Program). A few participants noted the need for baseline data on existing conditions more current than 1989. The fact that the presettlement land cover data are based on surveyor notes, not ecology surveys, caused a few participants to question the data's validity. Several focus group participants were also concerned about the legitimacy and comparability of data collected through various methods.

Framework Based on Historic, Existing, Forecast, and Desired Future Conditions

Focus group participants were presented with a planning model for the UMRS that considered four temporal habitat conditions: historic, existing, forecast future, and desired future. The historic conditions presented what the presettlement river looked like; the difference between the existing and future conditions represented current trends in the river; and the desired future condition represented a goal scenario for habitat conditions. The participants were able to understand this approach, and the majority felt that this was a reasonable approach: "You have to know where you are coming from to know where you are going." The biggest topic of discussion was the historical habitat condition. Many focus group participants were concerned that the presettlement river condition would become a management goal. Some noted that it would be physically and economically impossible to return to pristine river conditions, and as such, the presettlement perspective was of little value. The time periods just before and after the construction of the lock and dam system were discussed, and many people noted the pollution problems during these times. Others pointed out that the historic condition could provide an "environmentally sound" starting point and could give an indication of the type and variety of habitat that could conceivably be restored to a particular area. The use of existing conditions prompted little discussion. Many participants were concerned by the forecast and desired habitat conditions, however, as they were not sure how these conditions were created or how they would be used. Participants generally felt that more concrete predicted and desired future conditions and a plan of action should be developed. Several participants noted that the desired future condition needed to be grounded in reality: a "feasible" desired future condition.

IMPORTANT ADMINISTRATIVE ISSUES

While the purpose of the focus group sessions was to obtain public feedback on the HNA products and processes, many focus group participants voiced opinions on issues concerning the administration of the HNA that they felt were vital to the efficacy of the HNA. Two sentiments that surfaced throughout the focus group discussions were that the HNA should consider a balance of uses and users in the river system and that the public should be continually involved in meaningful planning and management efforts for the river system. The participants wanted to see continued and expanded multiagency management efforts and development of a concrete river management plan for the UMRS.

Balance of Uses and Users

A strong sentiment expressed by the majority of focus group participants was that the HNA should consider a balance between uses and users, that the HNA would have little practical utility without considering both economic and ecological issues. Without considering a realistic balance in the desired future condition of the river, some participants noted that the HNA would be "fundamentally flawed" and decisions based on it would "wind up too far afield." Several participants noted that without consideration of economic interests, the HNA cannot very well serve public interests other than those of environmentalists and hunters/fishers. Participants representing business interests wondered if the HNA would be useful to them for decisionmaking purposes. A few participants urged that the distinction between economic and ecological interests be dissolved in management efforts, as these interests are inextricably linked. One participant felt that balance between uses and users could be addressed by creating new habitat overlays in the HNA, such as classifying certain sand bars as "recreational habitat" and boat docks as "commercial habitat." A few participants agreed that the issue of balance should be kept out of the current HNA effort because of the hurdles involved in reaching consensus. However, many focus group participants wanted to see more effort expended to develop consensus among competing interests, noting that common ground does exist among stakeholders.

Public Involvement

The fact that the HNA will continue to be developed and refined was very important to the majority of focus group participants. Many commented that this first HNA was a good start but that it needed "a lot more work." In particular, the continued involvement of the public in the development of the HNA was a major component of the focus groups' goodwill toward the HNA. It was noted that public participation in the HNA should be a sincere effort to involve the public and not just a "check box" on an HNA "to-do" list. Some participants felt that the general public should not be involved in technical decision-making aspects of river management, that such tasks should be allowed to participate in every step of the planning process and that the HNA tool should be simple enough for the general public to use. A few participants expressed doubt that individual citizens not backed by special interest funding could have an impact on planning decisions. Overall, public participation was considered vital to the public's continued trust in the HNA. Further discussion of public involvement issues may be found in Chapter V of this document.

Agency Involvement

The majority of focus group participants felt that the involvement of multiple agencies and jurisdictions is very important to the HNA process. This multiagency involvement was seen as a way to avoid duplication of effort and to ensure that all river interests are granted an equal voice. In addition, the collaboration of multiple agencies could be useful in "building a common language" about the river. Several participants expressed discomfort with the Corps being involved with environmental issues and were pleased that the Fish and Wildlife Service was also a partner in the HNA. A few participants were concerned that the agencies were only working together on a superficial level, but were hopeful that progress could be made.

Application of the HNA to Future River Planning Efforts

Many focus group participants expressed confusion as to the end result of the HNA. An important goal for many participants was implementation of a river management plan or physical improvements being made to river habitats, and they were unsure how the HNA could help to accomplish this goal. Many comments expressed uncertainty and doubt as to how the HNA could be useful: the HNA is a "modeler's paradise" (all data, no results); the river managers still need to "adjust their aim to hit the target" created by the HNA; the HNA will "sit on a shelf because even the resource managers don't know how to use it." One participant noted that even the resource managers do not know how to use the HNA tool. Many participants felt that the HNA needs to be developed into a concrete plan with a timetable for action that includes such aspects as a project prioritization scheme or best management practices.

Another concern participants expressed with the end result of the HNA is that of the end user of the tool: Who will be using the HNA to make decisions? Many participants wondered if the HNA tool would be useful only to highly educated resource managers, or if local decision makers and the public would be trained on how to access and use it, perhaps through the Internet. The public's ability to use the HNA tool was important to many participants, particularly for making individual land use or business decisions. One participant felt that the HNA tool should be geared to the use of three different audiences: technical experts, decision makers, and the general public.

The initial focus group discussions and opportunities to comment on the HNA products served as the foundation for the participants to describe their desired future conditions.

IV. FOCUS GROUP PARTICIPANTS' DESIRED FUTURE CONDITIONS

Focus group participants were asked to consider what their desired future conditions for the UMRS were and to identify what changes needed to occur for these conditions to be realized. Many participants discussed general qualities they would like to see in the river system. River management issues were also identified as a part of participants' desired future conditions for the UMRS, even before they were asked to consider potential changes in river management. These desired changes in general aspects of river management are discussed under "Important Administrative Issues" in Chapter III. The prevalent messages portrayed through the focus groups participants' comments were a river managed for multiple uses, reduced manipulation of natural river processes, higher water quality and reduced sedimentation, and increased numbers and diversity of wildlife. Very few participants discussed specific habitats they would like to see restored. In fact, several participants did not feel comfortable answering the question, stating that they needed more information or that educated resource managers should be making such decisions. One participant objected to the question, noting that even the resource managers do not know what habitat conditions should look like.

BALANCE OF USES AND USERS

A majority of focus group participants wanted to see the river managed for multiple uses. They wanted a "naturally functioning river" with some engineering for navigation channels, maximum improvement in habitat without jeopardizing the economy, optimal use of resources to benefit current and future generations, and recognition of economic tradeoffs. There was a general feeling that planners should not forget the "habitat for people" when considering wildlife habitat. Some specific ideas related to management for multiple uses included providing for fish migration around dams, zoning the river for various uses (i.e., "quiet zones"), engaging diverse stakeholder involvement in planning activities, and developing a compensation scheme for the economic "losers" similar to water supply systems in California. Many participants wanted to see navigation and habitat treated with equal consideration in terms of importance in planning and in terms of federal funding.

NATURALLY FUNCTIONING RIVER

Many focus group participants felt that the river should be returned as nearly as possible to its natural state. They wanted to see river habitat that was "healthy," "sustainable," and "diverse." Some wanted to see the number of locks and dams reduced, or at least held constant. Several participants felt that an effort should be made to approximate natural water-level changes to meet the needs of various species, both in terms of seasonal flow and water-level changes caused by lock operation. However, there were several participants who wanted to see stability in the river, in terms of constant water levels and unchanging shorelines, to support recreation needs. Some participants noted that in order to attain this goal, it would be important for decision makers and the public to appreciate the natural changes and "roughness" in the river system. A few participants felt that what should be changed is human "arrogance" in the belief that we can engineer solutions to river problems.

WATER QUALITY AND SEDIMENTATION

A significant number of focus group participants were concerned about water quality issues, sedimentation in particular. Many participants stated that they wanted water where they could swim and fish. Participants also wanted to have clearer water and maintain the deeper portions of the river without having to spend money on dredging. Suggestions to reduce chemical or nutrient pollutants included reduction in fertilizer use, incentives/alternatives offered to farmers to use biodegradable pesticides, and better education and regulation of polluters, including people using household-level products. Three solutions to sedimentation problems were offered: implement better agricultural practices, stop/remove development in the floodplain, and return tributary streams to their natural state. Discussion of agricultural practices included suggestions to better enforce existing laws or to develop new penalties and incentives to encourage erosion control on farmland such as terraces or trees. A few participants wanted to see land use controls implemented along the river, but at least one property owner vehemently opposed any regulation of private land. Discussion of sedimentation issues frequently turned to the need for the HNA to consider tributaries and the watershed, as noted in Chapter III.

INCREASE IN DIVERSITY/QUANTITY OF WILDLIFE

Many focus group participants felt that an increase in biodiversity is an important goal for the UMRS. Some participants desired an increase in habitat diversity. Several participants wanted to see an increase in the numbers of various species. A few participants specifically stated that the number of only those species that are economically valuable to humans should be increased, while others felt that all species are valuable and should be increased. While a few participants wanted to see exotic species controlled or eliminated, one focus group participant felt that the introduction of exotic species, as well as the decline of endangered species, was part of a natural process of change and should not be managed. A few participants expressed a similar sentiment that habitat management was not necessary because "habitat happens."

CONTROL OF ACCESS, RECREATION, AND TRANSPORTATION

Several participants felt that in order for them to enjoy the river, some restrictions needed to be placed on river access, types of recreation, or modes of transportation. They felt that too many people are using the river that do not know how to respect it, that speedboats and personal watercraft are creating too much noise and too many large wakes, or that trends toward larger barges are creating larger wakes and increasing shoreline erosion. One person felt that the barge industry should be taxed for environmental damage. However, other focus group participants felt that there should be unrestricted access to river resources and more recreation opportunities. A few participants felt that certain transportation and other economic interests in the river could not be traded for better habitat.

SPECIFIC HABITATS AND TIME PERIODS AS RESTORATION GOALS

While the participants' desired future conditions were usually general conditions, some people did refer to specific habitats or time periods they felt should be incorporated into restoration plans. Backwaters were the habitat classification most frequently mentioned as a restoration target by focus group participants. A few participants noted that islands, shorelines, and bluffs needed to be protected from erosion. Tributary streams, hardwood forests, deep-water habitats, side channels, fishing area around wing dams, and wetlands were also cited as areas needing special restoration or protection efforts. A few participants wanted to see a return to past river conditions they remembered; two specific examples were 1950-60 and 1942. A few other participants noted that great progress has been made in terms of water quality and that they would not wish to return to previous river conditions. As one participant stated: "We need to create something new."

No matter what their desired future conditions for the UMRS were, focus group participants felt that they should have input in determining what the specific desired future conditions should be. Participants discussed public participation methods at length; these discussions are described in Chapter V.

V. FOCUS GROUP PARTICIPANTS' RECOMMENDATIONS FOR FUTURE PUBLIC INVOLVEMENT

Focus group participants strongly felt that public involvement should be integrated into the HNA effort and future efforts for river planning and management. Participants highlighted the importance of, and discussed ideas for, actively engaging the public in all types of public involvement efforts. One idea espoused by many focus group participants was the involvement of the public in efforts to collect river data such as water depth, water quality, and bird counts. Many other comments were offered on specific methods of public involvement.

ENGAGING THE PUBLIC

Focus group participants discussed an element they felt was critical to any public participation effort: active engagement of the public in river management issues. Participants exhibited a high level of enthusiasm in brainstorming ways to actively engage the public in river management issues. Two extensively discussed topics were education on river issues and increasing public interest in the river.

Education

Many focus group participants deemed education of the public regarding river issues to be vital to public involvement efforts, for two reasons. First, if people do not know about river issues, they cannot be interested in them. Second, the more educated the public is, the more meaningful their participation can be. Education can serve to encourage the public to offer more than "backyard-type reactions" to river management issues. Several participants noted that there is significant misunderstanding about river issues, particularly with respect to water quality. These participants believed that the public should be made aware of the water quality improvements that have been accomplished in the UMRS.

Participants offered a variety of suggestions for public education efforts (Table V-1). One participant noted that the mode of education should be "driven by public tastes." The U.S. Environmental Protection Agency program on water and watersheds was offered as an example of effective public education. Suggestions were also made on education topics. Various participants felt that public education should correct misinformation, help the public understand the managing agencies, demonstrate the impacts human activities have on the river, and let the public know how they can help.

TABLE V-1

FOCUS GROUP PARTICIPANTS' IDEAS FOR MODES OF PUBLIC EDUCATION

Cooperate with other river programs	Partnerships with museums
Direct mailings	Radio broadcasts
Distribute information through schools	School field trips
Information booth at outdoors shows	Television specials
Interactive kiosks	Tour on a river barge
Interest group/civic meetings	Video games
Link river education with boater education	Videotape available for checkout
Magazine articles	Columns/guest editorials in local papers
Public meetings	

Increasing Public Interest

In conjunction with the need to educate the public, many focus group participants felt that it was important to arouse people's interest in river issues. One strong theme in participant responses was the need to develop a sense of ownership in river management activities. Many participants expressed frustration that they have been attending public meetings for years but have never received concrete feedback on their input. They felt that public involvement efforts have seemed "glazed-over," have appeared to be "window dressing," and have felt like "looking through a one-way mirror." There was a desire for the agencies involved in river management to be "honest and straightforward" and provide a two-way flow of information between themselves and the public. Participants felt that the agencies need to "convince the participants they matter" and tell them how they are making a difference.

Another public interest theme focus group participants raised was the need to develop a sense of shared responsibility in the river, to develop a "shared identity." Ideas for accomplishing this level of involvement included asking local governments to formally adopt river plans, encouraging the formation of river clubs, giving river tours, and discussing how the river impacts each community and each individual.

Other suggestions for developing heightened interest in river issues included hosting barge tours of the river and giving people specific projects and costs to react to. Several participants noted that the media could be used to generate interest and excitement in progress that has been made and to highlight problems that need to be solved. A theme running throughout participant comments was that public involvement efforts need to involve some action, not just talk, in order to garner interest.

Public Participants

The underlying idea of the comments focus group participants made on the need for public education and motivation in river issues was that the broadest public participation possible

should be encouraged. Part of the justification participants mentioned for a broad representation of public interests in river management was to increase the level of trust people have in the process and to "avoid the perception of a stacked deck." Many participants stated that all public involvement opportunities should be advertised as widely as possible to obtain a variety of input. Participants felt that all interests, not just moneyed interests, should have an equal voice. Several participants stressed that the opinions of special interest groups should not be represented as those of the general public. For example, a few participants expressed concern that a river advisory committee might be composed of representatives of special interest groups instead of ordinary citizens. Two publics that participants frequently mentioned as being especially important to involve in river management efforts were young people and legislators.

While a broad public input was sought, several focus group participants noted that all members of the public should not necessarily be involved in all levels of river management. It was expressed that members of the general public should not make technical resource management decisions. One participant noted that recruitment efforts for public participation should "target the group that can help with a particular need." Another participant believed that more educated publics should be involved in the "evolution" of a river plan, with feedback from the general public in later stages of the project.

METHODS OF PUBLIC INVOLVEMENT

Focus group participants were prompted, if necessary, for their ideas and comments on specific types of public involvement (web sites, public meetings, focus groups, pool or reach meetings, and individual project planning), but participants brought up many of these topics on their own and also came up with original ideas such as public involvement through data collection efforts. Participants mentioned several examples of public participation efforts they felt had been successful, including efforts that were formed to address forest management issues, purple loosestrife, the Everglades, Chesapeake Bay, recreation, and stream water quality.

Data Collection as Public Involvement

Many focus group participants discussed the utility of making use of public efforts for collecting needed data. Specific arguments raised included that there is too much data to be collected and not enough scientists; there is not enough funding available to collect all the needed data; that citizens can help data be collected more quickly; and people who live, work, and play along the river may have better insight into river conditions than many resource managers. Suggestions were mainly offered for collecting raw data, such as river depth, water quality, and bird counts. However, several participants wanted to know how they could transmit existing data to the HNA tool developers, such as data from older or obscure studies, university studies, wastewater treatment plants, or data collected by citizen nature groups (i.e., Audubon Society bird counts). It was noted that caution should be used in incorporating data collected by interest groups, however, as some organizations may have data slanted to their interests.

Suggested participants for public data collection efforts fell into two categories: academia and the general public. Focus group participants noted various ideas for academic participation, including involving grade school science classes in data collection efforts, giving grants to colleges and universities earmarked for needed river research, and developing advanced degree programs supported through river research funding. Several participants advocated training ordinary citizens to collect data. The benefits of involving "citizen scientists" included increases in public interest and trust in river management projects. However, participants noted that these citizen scientists must be properly trained in data collection methods and that they might not be willing to collect data in remote or difficult-to-access areas. A few participants wondered if some value could be found in the public's anecdotal accounts of river conditions. Some focus group participants noted that organized citizen groups such as the Audubon Society could be useful in recruiting and training citizen scientists.

Internet

The Internet was often cited as a useful and inexpensive method of public involvement, mainly as a tool for education and outreach activities. Its utility as a data clearinghouse and directory was noted. Many specific suggestions for web site features were made (Table V-2). However, as many participants noted, the number of people who do not have access to or do not regularly use computers limits the utility of the Internet in public involvement. It was suggested that paper copies of documents posted on the Internet be publicly available as well.

TABLE V-2

FOCUS GROUP PARTICIPANTS' SUGGESTIONS FOR AN HNA PUBLIC PARTICIPATION WEB SITE

Access to HNA GIS tool	Project demonstrations
Background information	Questionnaires
Form to submit data sets	River volunteer opportunities
Game to create and send desired habitats	Slide show
Links to reliable web sites	Virtual walk-through of habitat features
Newsletters on river projects	

Public Meetings

Based on past experience, most focus group participants did not hold a favorable view of public meetings. They noted that these meetings are often acrimonious, dominated by a few outspoken individuals, "boring and scary," and/or poorly attended. However, participants noted that these meetings do allow for a broad public involvement, collect valid ideas, and allow people to "vent." Several focus group participants noted that while public meetings may not be the best method for obtaining public feedback, they are a good method for educating the public. The focus group participants offered several suggestions for successful public meetings (Table V-3).

TABLE V-3

FOCUS GROUP PARTICIPANTS' TIPS FOR SUCCESSFUL PUBLIC MEETINGS

Advertise widely (newspaper, radio, flyers at clubs and public meeting places, etc.) Give away door prizes Hold meetings in conjunction with river recreation events Present clear information on topics of local concern Present information at community meetings (city council, rotary club, etc.) Set clear goals for the meeting

Focus Groups

The focus group participants generally had a favorable opinion on the use of focus groups in public involvement efforts, but noted that they should not be the sole method of public involvement. The most significant topic of discussion on focus groups was who should participate in them. Most participants were concerned that the smaller size of focus groups made them too exclusive. There was also a general feeling that the participation of more educated, interested members of the public could make for a more productive focus group, but some participants noted that everyone should be given the opportunity to participate. Participants also felt that it was important to compose a mixed group of interests. One justification for this idea was that it would prevent blame from being placed unfairly on groups not represented at the focus group.

Pool/Reach Meetings

Focus group participants were generally supportive of river meetings at the pool and reach levels. Participants favored pool-level meetings over reach-level meetings because of a stronger affinity for local issues and an unwillingness to drive long distances. A few participants felt that community-level meetings would be more effective than those held at the pool level. It was noted, however, that it was important to keep the larger river scale in perspective at local meetings: "information needs to flow up and down the river." It was suggested at several meetings that representatives from pool meetings be selected to attend and report back on reach-level meetings. Another thought was that planning should take place at the system level, and project implementation at the neighborhood level.

Individual Habitat Projects

Focus group participants generally felt that participation in individual project planning teams would be a good method of public participation, as it would raise awareness of and appreciation for river habitat issues. They note that members of the public are already involved

in habitat restoration projects through entities such as wildlife refuges. However, a few participants were unsure about the level of involvement the public would have in such activities. There was concern that the public should not be involved in the technical aspect of planning these projects, but there was also sentiment that public presence during planning can help provide common-sense oversight and decision-maker accountability.

Meeting Frequency

When asked how often they would be willing to attend meetings, focus group participants frequently qualified their statements. The frequency at which people are willing to meet and the distance they are willing to drive depend on how interested they are in the topic and whether they feel their input will make a contribution. Participants commonly answered that they would be interested in attending regularly scheduled meetings two to four times a year. Other participants felt that meetings should be held when input is needed or when there is progress to report. Meetings held once a year were considered to be too infrequent by many participants, as they noted that they had forgotten issues raised at a public meeting they had attended the previous year. Participants felt that meetings should be held both during the day and in the evening to accommodate the schedules of the general public and people with work-related interests.

VI. PARTICIPANTS' REACTIONS TO THE FOCUS GROUP SESSIONS

PARTICIPANT REACTIONS TO THE FOCUS GROUP PROCESS

At the beginning of the focus group discussions, participants generally expressed confusion as to the purpose of the focus group. Many participants had not known what to expect from the focus group or had expected to be included in a "concrete" decision-making process. By the end of the focus group session, participants expressed satisfaction with the session, noting that they learned more about the HNA and would like to continue to participate in the process. This general satisfaction with the focus group process is reflected in the participants' evaluation of the focus groups (Table VI-1). More than 90 percent of participants agreed that the focus group was long enough to allow their views to be expressed, that they were given the opportunity to "hear and be heard," and that the facilitator provided effective support to the discussion. About 70 percent felt that the focus group made good use of their time or that their input should be useful to future habitat planning efforts (Table VI-1). As a group, the participants were concerned with the end result of the information gathered at the focus group sessions. They wanted to be sure that their opinions were accurately represented and transmitted to the agencies and that their input would make a meaningful contribution to the HNA process.

Many focus group participants expressed misgivings with the legitimacy of the sessions as a meaningful public involvement device. Some thought that certain organizations or individuals might have been purposely left off the invitation list in an attempt to influence the results. These suspicions were mitigated when the facilitation team explained the sources of the invitation list and pointed out the participant diversity at each session. A few participants thought that the absence of a Corps representative at all focus groups or the short timetable under which the focus groups were carried out signaled that the focus groups were not very important to the Corps. Other participants were concerned that the exclusive nature of the relatively small focus groups would fail to paint a true picture of public opinion.

PARTICIPANT REACTIONS TO THE PRESENTATION

The level of technical experience the focus group participants possessed on river management issues and decision tools varied greatly. Thus, some participants felt that the presentation was too complex, while others wanted more technical detail. The slides used in the presentation may be found in Attachment 2. Twelve percent of participants did not agree that the presentation had set an effective foundation for the focus group discussions (Table VI-1). There was a common feeling that the presentation had been designed for a more "select, informed audience" rather than for the general public. Across the board, the participants stated that they would have liked to receive background information before the focus group so that they would

TABLE VI-1

	Percentages				
Evaluation Statements	Agree	Neutral	Disagree		
The presentation helped me to understand the Habitat Needs Assessment process.	73	20	7		
I understand the goals of the Habitat Needs Assessment.	66	22	12		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	57	37	6		
The presentation effectively laid a foundation for the focus group discussions.	66	22	12		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	85	10	5		
The focus group duration was sufficient to allow my views to be expressed.	93	6	1		
I was given the opportunity to "hear and be heard."	99	1	0		
The facilitator provided effective support to the discussion.	93	6	1		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	69	25	б		
This focus group made good use of my time.	70	22	8		

know what to expect and could better contribute to the discussion. Desired background information included definition of acronyms and layperson definitions of HNA/EMP-specific terms, legislative background of the HNA, project funding, and specific examples of progress, problems, and programs. Most participants noted that they did not have a clear concept of the outcome of the HNA process. Twelve percent of participants felt that they did not understand the goals of the HNA process (Table VI-1).

VII. SUMMARY AND CONCLUSIONS OF FOCUS GROUP SESSIONS

The focus group sessions successfully captured information on the three topics of inquiry: public reaction to details of the HNA process, public perspectives of desired future habitat conditions, and perspectives and preferences for future public involvement in the HNA/EMP process. The discussions on these topics were wide-ranging.

The focus group participants generally felt that the HNA process presented to them was a step in the right direction. They generally accepted the use of habitat classifications as a basis for river management; the systemic scale at which data were collected; and the comparison of historical, existing, predicted future, and desired future conditions. Participants also viewed the use of existing data, the involvement of the public, and multiagency coordination as positive aspects of the HNA.

The continuing development of the HNA was also viewed in a positive light, as focus group participants felt that several aspects of the HNA could be improved. In terms of technical issues, participants wanted more definition of what is encompassed in each habitat class, inclusion of river processes and habitat quality, expansion of the scope of the HNA to include tributary streams and the watershed, a plan to fill data gaps, and a clearer definition of what the desired future condition is. The desired future condition was also the subject of one of the administrative issues raised by the focus group participants: that a balance of uses and users should be a part of the management goal for the UMRS. Related to this idea, participants felt that obtaining input from a broad range of publics was vital to the public trust in the HNA. Focus group participants were also concerned about the end result of the HNA; they wanted to see more concrete results, especially results that could be directly useful to the public in participating in river management.

The desired future conditions focus group participants described were as richly varied as the many interests and perspectives of the participants. However, one general theme did prevail: many participants wanted to see a "multiuse river" managed with a goal of balance among competing uses and users. In general, focus group participants did not describe their desired future conditions in terms of specific habitat types. Rather, more general conditions were mentioned, including a more naturally flowing river, higher water quality with less sedimentation, and increases in the diversity and quantity of wildlife. As several participants noted, they did not feel educated enough to be able to point out specific habitats that should be increased or decreased. Again, focus group participants tended to speak more in terms of values when they did not know enough technical detail.

Most participants felt strongly that a diverse public should continually be involved in river management programs. They noted that more effort should be made to engage the public by educating them on river issues, especially on how the river affects them personally, and by instilling a sense of ownership in river management processes, such as through involvement in the entire planning process, direct feedback on individual input at meetings, and training laypersons to collect river data. Other specific ideas included developing an interactive web site through which the public could submit data and opinions and through which the HNA tool could

be used by the public, holding educational public meetings followed by focus groups to get feedback on management decisions, and developing a hierarchical public meeting setup where representatives of local/pool planning meetings would attend reach or system meetings.

ATTACHMENT 1: CORRESPONDENCE WITH PUBLIC:

LETTER OF INVITATION, RSVP FORM, AND CONFIRMATION LETTER



DEPARTMENT OF THE ARMY

ST. LOUIS DISTRICT, CORPS OF ENGINEERS 1222 SPRUCE STREET ST. LOUIS, MISSOURI 63103-2833 July 12, 2000

REPLY TO ATTENTION OF: Planning, Programs and Project Management Division

Subject: Focus Group Meetings on the Upper Mississippi River System, Environmental Management Program (UMRS-EMP), Habitat Needs Assessment

Dear Sir/Madam:

Because of your demonstrated interest in issues relating to the Upper Mississippi River System, we would like to invite you to participate in a focus group meeting to provide comments on an environmental planning effort for the river system. In support of the Upper Mississippi River System Environmental Management Program, the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service have been coordinating development of a Habitat Needs Assessment (HNA) to support improved future decision-making for the river system. Continuing feedback from informed members of the public is vital to the success of this ongoing planning effort. Small focus groups of motivated citizens representing a range of interests are being assembled to obtain this public feedback.

The three-hour focus group meetings will include a technical presentation on the HNA products and opportunity to provide input on the products and on future methods of public participation in the HNA development process. The meetings are scheduled at a number of locations along the Upper Mississippi and Illinois Rivers. Please refer to the enclosed RSVP to note the date and location a focus group session that is more convenient for you to attend. Pre-registration for the focus group is required. We ask that you return your acceptance to participate no later than **July 19, 2000**.

We encourage you to attend one of the focus sessions. Your input is very important to the overall management of our valuable river resources. We appreciate your willingness to represent the views of others who will not be able to attend these focus groups. Thank you for considering our request for participation in the ongoing HNA effort.

Please contact Katie Bradshaw, Planning and Management Consultants, Ltd., our focus group contractor, if you have any questions regarding these meetings: (618) 549-2832, katherineb@pmcl.com. Issues directly related to the Habitat Needs Assessment or the Upper Mississippi River System Environmental Management Program may be directed to either Michael Thompson, (314) 331-8039 or Robert Clevenstine, (309) 793-5800, ext. 521.

Sincerely,



Michael R. Morrow Colonel, U.S. Army District Engineer

Focus Group Reservation EMP Habitat Needs Assessment

Please review the list of dates and regions to find the focus group session most convenient for your schedule and location. Note your preference by checking the box next to that meeting site. Complete the contact information requested below. Return this RSVP by e-mail, facsimile or U.S. Postal Service **no later than 19 July 2000** to:

Katie Bradshaw	Planning and Management Consultants, Ltd.
katherineb@pmcl.com	P.O. Box 1316
(618) 529-3188 (fax)	Carbondale, IL 62903

Once your request has been received, your registration will be confirmed, and you will receive more detailed information regarding the specific meeting location.

[]	Wednesday, 26 July 2000	6 – 9 p.m.	Cape Girardeau, Missouri
[]	Thursday, 27 July 2000	1 - 4 p.m.	St. Louis, Missouri
[]	Friday, 28 July 2000	9 a.m. – noon	Peoria, Illinois
[]	Monday, 31 July 2000	6 – 9 p.m.	Rock Island, Illinois
[]	Tuesday, 1 August 2000	1 – 4 p.m.	Dubuque, Iowa
[]	Tuesday, 1 August 2000	6 – 9 p.m.	Dubuque, Iowa
[]	Wednesday, 2 August 2000	6 – 9 p.m.	La Crosse, Wisconsin
[]	Thursday, 3 August 2000	9 a.m. – noon	La Crosse, Wisconsin
[]	Thursday, 3 August 2000	6 – 9 p.m.	St. Paul, Minnesota
[]	Friday, 4 August 2000	9 a.m. – noon	St. Paul, Minnesota

[] I will not be able to participate

[] Please inform me of future opportunities for participation

Planning & Management Consultants, Ltd.

6352 South U.S. Highway 51 P.O. Box 1316 • Carbondale, IL 62903 618.549.2832 Fax 618.529.3188 www.pmcl.com

<date>

RE: Confirmation of Registration for Habitat Needs Assessment Focus Group Meeting

Dear Focus Group Participant:

We are pleased to confirm your registration for the <city> Habitat Needs Assessment focus group meeting on <day, date> at <time>. Please refer to the enclosure for specific meeting location and agenda information.

Thank you for your commitment to attend this meeting. Public input from a range of Upper Mississippi River System interest groups and interested citizens is vital to the success of the Habitat Needs Assessment process. Your participation at this meeting is important to ensure a broad-spectrum of input is received to support this process.

We look forward to seeing you in <city>!

Sincerely,

Katie Bradshaw Research Analyst

Enclosure

ATTACHMENT 2: MEETING MATERIALS:

MEETING AGENDA AND HANDOUTS (PRESENTATION SLIDES AND FACT SHEET)

AGENDA Upper Mississippi River System Environmental Management Program Habitat Needs Assessment <date> <city> Focus Group Meeting

- LOCATION: <site> <address> <phone number>
- <time: 1/2 hour> Sign-in
- <time: 15 min> Meeting begins
- <time: 35 min> Technical presentation on Habitat Needs Assessment process
- <time: 10 min> Break
- <time: 105 min> Focus group discussions regarding public input on future river conditions
- <time: 15 min> Closing comments
- <time> Meeting adjournment

Please contact Katie Bradshaw, Planning and Management Consultants, Ltd. if you have any questions regarding these meetings: (618) 549-2832, katherineb@pmcl.com. Issues directly related to the Habitat Needs Assessment or the Upper Mississippi River System Environmental Management Program may be directed to either Michael Thompson, (314) 331-8039 or Robert Clevenstine, (309) 793-5800, ext. 521.

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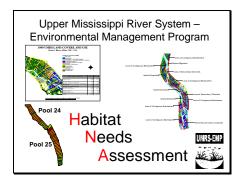
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Meeting wrap-up



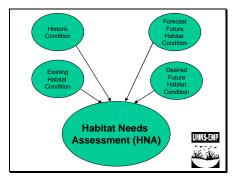
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Purpose of Workshop The purpose of the focus group is to receive feedback from the public regarding the Habitat Needs Assessment (HNA) products that will support improved future decisionmaking.



Slide 5



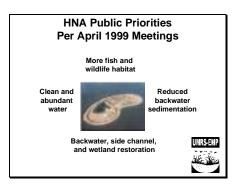
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What the HNA is not:

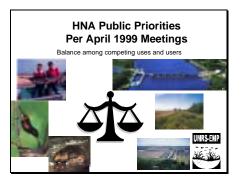
- The HNA is not a tool to identify specific projects or establish a rigid set of restoration priorities.
- The HNA is not completed-it is a "living" tool to be updated as new information or technical tools are developed.
- The HNA is not the only tool in the restoration-planning toolbox.

UMRS EM









HNA Public Involvement

- Input from the 1999 public meetings and this series of focus groups will be reflected in the 9/30/00 HNA report
- Public will also be involved in future efforts to refine this first iteration of the HNA



HNA is a Work-in-Progress

- Based on limited data
- Many things we'd like to know but don't, e.g., water depth, velocity, life histories
- Uses best available data, with commitment to refining in future



Slide 11

What are Habitats?

- The places where plants and animals live
- Sources of food and shelter
- Formed by river processes
- Modified by human activity

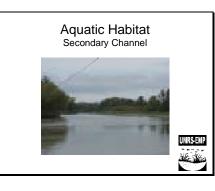
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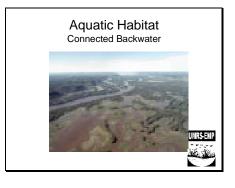
HNA Habitats

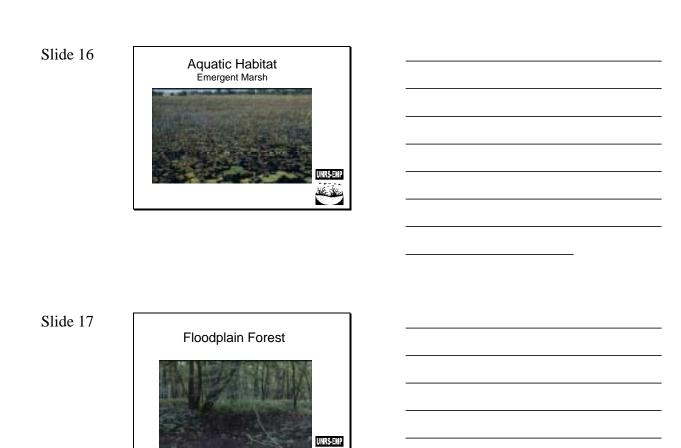
- Expressed as habitat based on interrelationships of land cover classes and species/guild needs
- Land cover classes provide a common denominator
- Condensed land cover classes = 8
 habitat types
- Aquatic and floodplain habitats

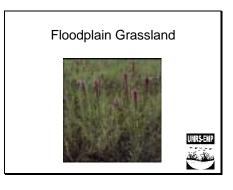




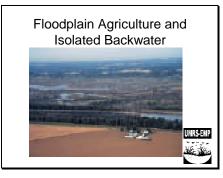




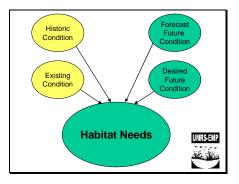










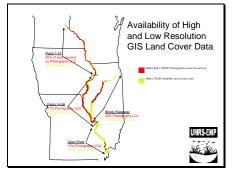


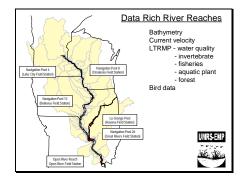
Existing Conditions (HNA Query Tool)

- Spatial data about existing habitat conditions (e.g., amounts and distribution of land cover)
 GIS-based Query Tool combines data on existing land cover classes and species/guild needs
- Tells us what we would expect to find, no guarantee that's what will actually be in a particular place
 Land cover data available for entire system, other data only in certain areas

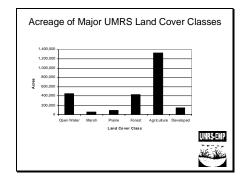


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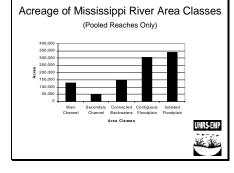




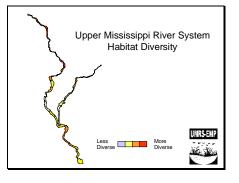


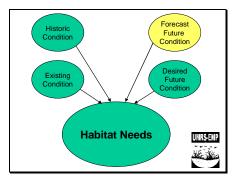






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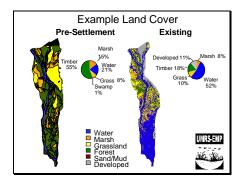


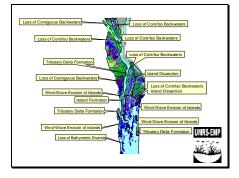


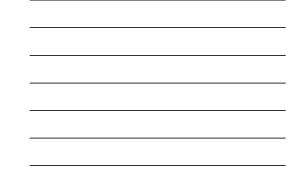
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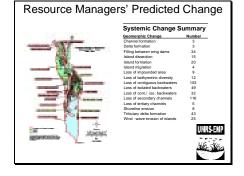
Forecast Future Conditions

- Use data about past conditions, current conditions, and documented changes to forecast future conditions
- General type and magnitude of anticipated changes
- Predictions based on observed changes, however future changes may shift locations - difficult to map

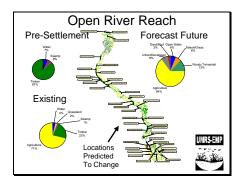


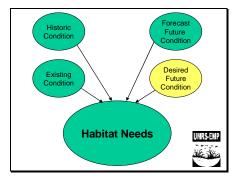












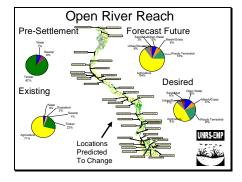


Slide 35

Desired Future Conditions

- Input from
 UMRS public agencies and resource managers
 general public
- Inevitable tradeoffs among some desired future conditions
- Reflects range of agency responsibilities (forestry, fish, migratory birds, soil conservation, and endangered species)
- Does not establish a rigid or single vision

Slide 36





Slide 38

Future of the HNA

- Updated and refined over time
 new data
 new insights into species/guild habitat needs
 new perspectives on desired future conditions
- HNA will be available for use in future planning and public involvement efforts

MRS-EMP

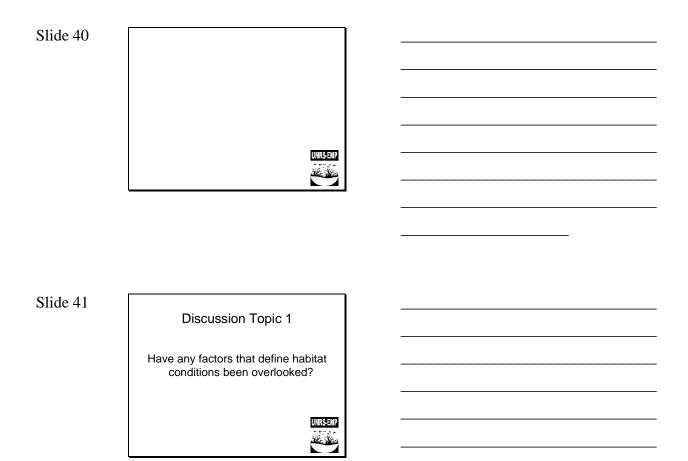
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Future Public Involvement

- The programs' challenge is to effectively engage public in all facets of the EMP
 - future revisions of HNA (system, reach, and pool scale needs)
 - individual HREP identification and design

information needs and access to dataprogram vision



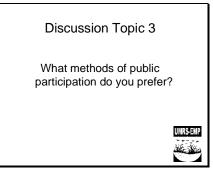


Discussion Topic 2

What are your desired future river habitat conditions?







FACT SHEET

Environmental Management Program (EMP)

1. EMP consists of two major components:

- Habitat Rehabilitation and Enhancement Projects (HREPs)
- Long Term Resource Monitoring Program (LTRMP)

2. Authorized by Congress in Water Resources Development Act (WRDA) 1986

- > 60 HREPs planned, constructed, and completed
- > 12 years monitoring and research under LTRMP
- > 97,000 acres restored or enhanced

3. Reauthorized in WRDA 1999

Habitat Needs Assessment (HNA)

- 1. Completion of the ongoing HNA was legislatively mandated by the Water Resources Development Act (WRDA) 1999. The completion date is September 30, 2000. Per WRDA 1999, the HNA shall be part of future Reports to Congress (six-year cycle).
- 2. This HNA (first iteration, work-in-progress) is a tool to help guide the process of planning in EMP:
- guide HREP design and selection via ecosystem needs at pool, reach, and system scales
- identify monitoring and research needs
- 3. The HNA goal is to be a technically sound, consensus-based management tool for restoration, protection, and enhancement of the UMR ecosystem.
- 4. HNA (first iteration):
- Based on limited data
- Many things we'd like to know but don't, e.g., water depth
- Uses best available data, with commitment to refining in future
- Habitat expressed as land classes
- 5. GIS-based Query Tool combines data on existing habitat conditions with what we know about species/guild needs:
- Shows where species and habitat types are found
- Query Tool is limited by our data and assumptions
- Tells us what we would *expect* to find, no guarantee that's what will actually be in a particular place

ATTACHMENT 3: FOCUS GROUP QUESTIONS AND RECORDED RESPONSES

Planning & Management Consultants, Ltd.

6352 South U.S. Highway 51 P.O. Box 1316 • Carbondale, IL 62903 618.549.2832 Fax 618.529.3188 www.pmcl.com

August 15, 2000

Bruce Carlson, CEWRC-IWR-R Institute for Water Resources U.S. Army Corps of Engineers Casey Building 7701 Telegraph Road Alexandria, VA 22315-3868

RE: Notes from EMP Habitat Needs Assessment Focus Group Meetings

Dear Mr. Carlson:

Enclosed please find the discussion record for each of the ten EMP Habitat Needs Assessment focus group meetings held between July 27 and August 4, 2000. This work was completed under U.S. Army Corps of Engineers, Institute for Water Resources Contract DACW72-99-D-0005, Delivery Order 32.

The first page of the document contains the list of questions the meeting facilitator used to frame the discussion. The notes for each meeting are presented separately. Questions and comments the focus group participants raised during and after the formal presentation are listed under the first bold heading. The remaining bold headings indicate the general questions the facilitator used to promote group discussion.

If you have any comments or questions, please contact Planning and Management Consultants, Ltd., (618) 549-2832.

Best regards,

Nancy A. Hanna-Somers Program Manager

Enclosure

cc: Mike Thompson, CEMVS-PM-N Robert Clevenstine, FWS-RIFO **Discussion Questions**

Have any factors that define habitat conditions been overlooked?

- 1. We have shown you the HNA team's method to describe existing river habitats. We have also described the river resource managers' desired future habitat conditions. From your perspective, have any factors that define habitat conditions been overlooked?
- 2. What aspects of the HNA, as presented, do you think are most important/most confusing?
- 3. Do you see a need to consider other factors to define habitat conditions?
- 4. How well do your views of river resources match the eight habitat types described in this presentation?

What are your desired future river habitat conditions?

- 1. Given the existing and forecast river habitat conditions described today, what are your desired future river habitat conditions?
- 2. What future mix of habitat types would you prefer?
- 3. What changes must occur to ensure the river habitat conditions meet your future expectations?
- 4. How effectively can you describe your desired future river habitat conditions using the standard habitat types you heard described today?
- What methods of public participation do you prefer?1. Public participation is essential in planning and conducting habitat protection and restoration on the UMRS. What types of public participation methods do you recommend to continue to support future refinements of the HNA and the UMRS-EMP habitat work? Examples include:
 - a. Informational web sites with the ability to email comments back to the agencies;
 - b. Public meetings advertised through notices posted in public places;
 - c. Focus groups such as today's meetings, convened by invitation;
 - d. Convening a separate group for each pool of the river;
 - e. Convening a separate group for each reach of the river (encompasses several pools);
 - f. Participation in an individual habitat project planning team.
 - g. How often would you like to participate?

Cape Girardeau Notes

CAPE GIRARDEAU, MISSOURI

Wednesday, July 26, 2000 6-9 p.m. Six participants

Questions and comments during and after presentation

How is river regulation a stressor?

How can you discuss sedimentation on the middle Mississippi without considering the Missouri?

How is the UMRS linked to the LMRS? Are they cooperating on this?

The HNA was mandated by what law?

Where does the HNA funding come from?

Can you break down the river data by multicounty area?

How many bureaucracies are involved in the HNA?

How much money is allocated to the EMP?

Where's the habitat for people?

You just saw a presentation. What did you think? Was anything confusing? What was important about it?

Fast.

Explain more in depth.

Give more background in order for me to make an evaluation.

Familiarity with terms helps.

Try not to cover so much in such a short amount of time.

More background than the fact sheet...quality information.

(Regarding the presentation) An overview of what?

I would like detail on projects, funding, the sponsor, the authorizing legislation.

Not so much rhetoric from a government bureaucracy.

Public input-get what the public wants.

If agriculture represents 71 percent of the current condition what is it going to be in the future.

The data are out there. You can go to Terra Serv and other internet sites to get data on the river.

Give us a mail-ahead packet so we are familiar with the general terminology.

Send project-specific review sheets, one-page fact sheets.

If you are a registered participant, have a primer on the background, include it in the overview of the program.

The fact sheet provides little information; need something in advance.

I had no idea what this meeting was about.

I would like a copy of the report that comes out of these meetings.

What are the habitats of your area? Can you give any examples?

With reference to the meeting handout, the participants named the eight major habitat types.

Are these the right terms? Is the study team overlooking anything?

Habitat is where fish and animals live.

We would like to have lay-person definitions.

We can understand: slough, main channel, connected backwater.

What is emergent marsh?

Provide us an introductory glossary, Habitat 101, in "people talk."

Connected backwaters only exist when the river is high.

That is true in the south, you are thinking in local terms rather than for the system. For example, Cottonwood is a side channel.

What was most important to you?

Nothing stood out; not just one thing.

As they went through the program, telling how it works, I wondered about the credibility. They should cut to the chase, tell the differences of the futures, how to get them...make things "better."

They have an overview of data.

The pie graphs are the most interesting. The existing conditions are of local interest for this service area.

Has water quality changed over the last 20 years? Is the river in better condition with the control of output?

I liked the data on existing conditions. I would like to know more on how it was derived. Is it accurate? What does it mean?

They said it is a work-in-progress, ever-changing. That the public has an opportunity to input. The public can have input, not just now but also in the future. This is not just a one-shot deal.

The presenters showed you a basic model. Do you agree with it? Is this a good way to define the habitats to project the future?

Yes, you have to know where you are coming from to know where you are going.

You can never go back.

It is useful as a guide.

The historic is great, the existing we know, they are forecasting the future. The desired future is what we are here for.

Did you understand the HNA as a tool to project the future?

There are too many variables to forecast. You need to know what is going on to get to desired. Is it what we want?

If I developed my land over my lifetime and it was willed to my son, he comes in and bulldozes all the trees...I can't do anything about it. The future is for the folks who will be in the future.

Everything negative that has happened to the river has been done by the government.

You need to consider people in habitat needs.

Don't make decisions based on tourists, recreationists, but local residents.

What is the cost/benefit to get to the desired future.

You can make a projection by looking at the past, but you have to look at multiple futures.

In terms of river habitat conditions used today, what are your desired future river habitat conditions?

A clear river that supports food fish, mussels for fine pearls that are exported, environmentally friendly projects along the banks and use the river as a main economic street of this area.

We already have habitat for beavers, keep the land in as productive a form as it has been for the last half century. I have hills that contribute to habitat.

Clean river and keep the river for transportation for barge traffic - so farmers can pay their bills.

Balance in habitat. For example, quarries are part of the habitat. Economic development for people, jobs to feed families.

Need more information/education to understand how to answer the question.

It has local perspective.

Anything peaceful.

No persons displaced unwillingly.

No limits on what you can do on your land.

Less government interference.

"Habitat happens," it comes as a result of letting folks live.

Clean water.

Private landowners, keep their actions on a voluntary basis. Educate private landowners. Don't regulate the private land owner. Let them have voluntary compliance/participation.

Clean up the river as we have over the last 20 years through education. The river has benefitted.

Cities are a different story. For example, in the Great Lakes, dumping of raw sewage, that should be regulated.

River quality has improved. I think there has been an increase in diversity. We should encourage those trends...habitat diversity.

Land owner rights, planning, zoning.

The bar keeps being raised – that is human nature. For example, people used to use open pipes before septic tanks, now those are unacceptable. Things continue to improve.

Economic development is important. Use a carrot/stick approach with regulations or congressional mandates.

Be creative with projects. People can learn to do better. Educate them, then expectations can increase.

What methods of public participation do you prefer?

In general, 100 percent public involvement should occur.

When?

All the way through.

Test ideas with a small group.

Have participation at certain points in development.

If a project is authorized by Congress, then a project is approved...have participation all the time from conception through development to completion.

Get input from people.

What is public...is it public <u>funds</u>?

Should public funds be involved?

For the HNA, Congress already approved public funds for this.

Focus groups are a practical way to be involved. If you open it up to all, how can they understand? If you want to discuss specifics you have to have smaller committees unless there is more down to earth information. Otherwise you will just go in circles.

It is ok for the public to be on a committee.

You can't <u>make</u> the public be involved.

Facts and figures discussed in the paper, many people would be willing to participate.

Do we want the HNA? Do we want to control the river without considering the needs of people.

What legislation is this?

This is a knee-jerk reaction to the 1993 and 1996 floods. They want a way to mitigate the decisions of the past. They want to get back on track after poor decisions.

Again, should the public be involved? Are focus groups good?

If it is an emotional issue, it may be better to focus on a specific issue. Large meetings get emotional.

An evening meeting is better than a two-day workshop where you have to give up work. It is easier to give personal, direct input.

What other methods would be good? Web sites, open meetings?

All agreed an informational web site would be good.

Open public meetings publicized in public places or notices published in the paper are ok. You get some outbursts but some valid information.

What about a focus group convened by invitation?

You need to invite a diverse group to maintain credibility and to get meaningful opinions.

Invite diverse river inhabitants.

Should meetings be convened by pool?

If you have an open public meeting, give a reference of what the meeting topic will be.

If you say it is for "Saint Louis – south" it may not be applicable here.

You have to think of the river as a whole...it all connects!

Multiple groups provide checks and balances...do they say the same thing?

Most people think in local terms but will find commonality along the river.

Should meetings be convened by reach?

What is a reach?

Multiple pools

That is probably not good way to divide up the river. People think locally, they won't want to travel far.

A focus group in the evening is good.

Don't open up the Corps to criticism for expensive hotels and workdays eaten up.

Open mic nights with presentations are also useful for educational purposes...like MODOT.

Would you want to participate in an individual habitat project planning team?

I would want to see the proposal.

What does that mean?

Are you participating in the management or an advisory role or just along for the ride?

Can they vote on the details of the plan? Can't that be dangerous?

What does the phrase mean, "individual habitat." Does that mean just for "fin or feather" or a site where it would go from place to place.

We have already been doing that.

I need more definition on what an "individual habitat project planning team" means.

How often would you like to be involved?

Will there be a condensed version of these activities available on their web site?

Once a year is not enough.

The web site is fine from work, I don't have it at home. It is not convenient for personal interest and involvement issues.

You have to watch the government <u>all the time</u>.

You need to always have the public involved all the time.

You can't have meetings all the time, you can't control the public...that is impractical.

Have meetings at practical intervals, like every six months.

It depends on what happens. Are there findings to talk about, do they need input?

It should be an information flow – back and forth.

A minimum of six months, maximum of quarterly, if there is a reason to have meetings that often.

Closing comments

I would like to continue to participate.

I thought it was all wonderful.

Keep balance among users.

It was informative, I learned a lot, I want to continue to be involved.

St. Louis Notes

Thursday, July 27, 2000 1-4 p.m. Eight participants

Questions and comments during and after presentation

Where is the future data coming from?

What geographical area does the HNA cover?

What is the historical data based on?

Who was invited to this meeting? What was the source of the invitation list?

What do you mean by "tradeoffs"? Quantity for quality in terms of habitat?

Who makes the ultimate decisions regarding the HNA and river habitat?

Are HNA appropriations being cut?

What did you think of that presentation? What was good about it? Was there anything bad?

It was clear.

Why is an engineer giving a presentation on biological processes?

It would be helpful to have both sides of the picture.

There are biologists employed by the Corps.

The Corps hasn't married their environmental and engineering areas very well. The Corps listens to outside biologists better than their own.

The Corps says it's getting information from the states and other sources. Are they doing this legitimately or only for appearance's sake?

This partnering effort is a good start.

I've met a Corps biologist who was very cooperative.

The Corps is going through a culture change.

The Corps is the wrong agency to be doing ecosystem restoration. I'm suspicious of decisions coming from the Corps.

But projects take engineering, not just biology.

Did the presentation make sense?

Where we're going is not so clear. What do we want? How do we monitor? I want more specific answers.

Need a timeline. What will happen? For how long? How long will this be funded?

What was most important about the presentation?

Confused – if this is not a plan, if there are no decision points, what are we here for?

No one asked us to plan to begin an assessment or evaluate if this is a good plan. Should they (federal partners – ed. note) be doing an assessment?

There is not enough to comment on that is quantitative or objective.

HNA is in response to a Congressional mandate.

This is just an assessment to use as a tool to make decisions on proposed projects.

Did you understand that this assessment is to be used to determine what is needed?

(By vote, four agreed they understood, one agreed – with reservation, a sixth voted no, while two participants remained silent.)

Should they be doing an assessment?

(The focus group unanimously agreed the assessments should be done.)

Should the HNA teams continue the effort?

(Five agreed it should, one did with reservation, while two participants remained silent.)

What are we commenting on?

Is the HNA going to determine what we are going to spend money on? Is the HNA probing those needs?

Is the four-stage model (past, current, future, desired future) logical?

(All participants agreed.)

Do you think the eight habitat types used in the presentation are good? What's important to you?

Wetlands.

My definition of "prairie" is not related to the river. Do we want to be creating prairie where none existed before?

Does the public want prairies in the river system? Would this be good to create?

There are sand prairies on abandoned river beds, but nearly all have been eliminated, as they are generally forming in response to flood events.

There needs to be accurate data. We're doubting the presettlement data now because it doesn't include prairies.

What other habitats are there?

Geomorphology should be described by FWS experts.

Want more baseline data.

The river is going to hell in a handbasket.

The EMP represents bandaids, the patient is going to bleed to death. When are we going to get from data collection to a plan? It is time to fix some small things soon.

There's a problem with public input when groups like Audubon and Sierra Club get involved and want more information - - it slows things down.

They need to get the HNA done by the deadline, base the next round of projects on this, and continue the process.

If you could push a magic button, what desired future habitat conditions would you create?

All life communities in stable, sustainable system.

Sustainability and healthy.

Greater biodiversity, more systems than currently exist.

Natural conditions and all that entails; addressing existing urban disturbances and existing anthropogenic changes; closer to the attitude on the Coast where they're knocking down dams.

Commerce and conservation can go hand-in-hand; work together to achieve both. Dams and barges and environmentalists won't go away.

Use balanced approach, sustainability, not weighting one habitat as more important than another. Each form of life has to continue. We have to stand together.

Who should work together?

Life communities.

Everyone.

UMBRA, Marc 2000, recreational boaters, hunters.

Life communities yielded biodiversity.

Can you use HNA terminology to describe your desired future conditions?

Backwaters that don't silt shut.

Problem with land use titles.

Developed floodplain – if sustainable, then can be no more development – prefer to see no more development.

Should the public be involved? What? When? How?

There should be a broad spectrum of interest groups, the general public. The worst thing is to have exclusive lists or the perception of exclusivity.

Levy districts, barge companies, farmers, sewage treatment plants, Audubon/nature groups, hunters, land owners, boaters, fishers, swimmers.

Avoid the perception of a stacked deck.

Should all people be invited?

All interested people.

Get river residents.

You should have interested parties (such as the people at this focus group) involved in the evolution of the process, then it should be open-ended.

What is the best time for meetings?

A long drive would eliminate night meetings.

Open house evening meetings are well-attended.

What should be discussed at such a meeting, say 100+ persons?

Area-specific topics.

Bring everyone up to speed with clear, rudimentary background on the EMP.

Advertise in the newspaper, at boat clubs, hunting clubs, Audubon meetings, historical societies, radio, etc., but you should not limit the group size. You should go to the extreme to fight perceptions of exclusivity.

How far in advance should the invitations be sent?

With a smaller meeting choice, there can be a shorter time frame.

Give information on all meetings in case someone can't make a local meeting.

Use a comment form to collect input from all parties.

When would your group prefer to meet?

No preferred time.

Evenings are the best time.

Evenings and weekends are best for small, focused sessions.

The Internet is important.

What should they do?

Have a demonstration.

It should be on the Corps web site.

What do you want from a meeting?

No presentation over 10 minutes. Something on WRDA, EMP, purpose of HNA, and lots of pictures of accomplishments.

Collect information on interested groups and societies that are willing to help collect data.

Consider the public as a team player.

Establish regular, on-going meeting schedule to update on EMP/HNA progress.

Keep the same membership for two to three years.

Update on project progress.

Can people submit projects they want done to the state, then on up . . . ? How can people get access to the decision makers?

Detail federal/state and partner fund matching.

(When asked if meetings should be convened by river reach, the group did not have an operational definition of that term.)

What about email interaction through a web site?

This is only good if the email is answered.

A staff person needs to be assigned to that web page.

This would be a good start, but it is not all-inclusive. Not everyone has access.

There should be hard copies available at the district office.

What about open meetings advertised by notices posted in public places?

The notices have to be posted in the right places.

Post them in river towns with plenty of lead time, at least a month.

What about focus groups?

They should be convened by invitation of super-interested people, small enough, but diverse.

How about groups convened at the pool level?

This makes a lot of sense.

No more than an eighty-mile radius for driving purposes.

How about groups convened at the reach level?

What's a reach?

How about participating on an individual project planning team?

Are you asking for volunteers?

Good idea: it's inclusive.

Great idea. The only input you could get on the EMP until now was to elbow your way in.

It's hard to draw a line as far as the involvement of non-professionals in projects; the focus should be on policy.

If you don't separate policy from operations, you're asking for disaster. We have opinions but not all the facts. It's best to defer to the experts to an extent.

(Suggestions were offered that in project meetings, groups could hear an overall update then break-out into smaller work groups to participate in specific issue areas.)

Final Remarks

Support ecosystem restoration with broad spectrum of participation in the plan.

One hundred percent in support of HNA – glad to have public participation, a good beginning.

This is a beginning to a common sense/balanced approach for flood control, recreation and habitat planning.

Need a comprehensive plan to avoid unforeseen chain reactions.

I'm pleased the Corps is placing more emphasis on habitat needs; need funding directed to resources to acquire data used to meet needs of balanced, sustainable, enhanced life communities.

Did we accomplish what we were here for? Where do we go? We should use our respective groups to get the word of mouth out. Let's get started!

EMP is a big experiment; hopefully there will be a higher success rate, accept mistakes, then go back to fix.

Put more information up on the net.

Peoria Notes

PEORIA, ILLINOIS

Friday, July 28, 2000 9:30 a.m. – 12:30 p.m. Twelve participants

Questions and comments during and after presentation

Why do you say that balance of uses and users is not a part of the HNA? If this isn't a basic fundamental approach, you'll wind up too far afield.

Why is there missing data? Funding?

What is the geographical scope of the HNA?

Can you elaborate on the historic conditions? How were current conditions obtained?

Do you have presettlement data on the whole river?

What is the significance of the counts of river change processes?

What is "river regulation"?

Are there more contiguous backwaters now than in presettlement times?

Were local/ sectoral planning programs (i.e., Illinois River 2020 Plan, CRP) considered in the forecast future conditions?

Is HNA making use of previous studies?

Where does presettlement biodiversity information come from?

What is the timeframe of the HNA?

Is the HNA computerized? Can it be used by local groups to access local data?

What process do you use to get to the desired conditions?

How will the HNA help people make decisions? Will there be Best Management Practices?

How was the presentation? What did you think? Was it clear? Was it confusing? What was most important?

Need more time and detail on the presentation.

Need more background information (outline, fact sheet, intent of meeting mail-ahead).

Preknowledge was assumed: this is not the "general public".

Need a higher-ranking decision maker present to answer questions; they should "make this effort for the taxpayers".

Participants filled in gaps in knowledge of history of HNA and the river.

An ecologist should have done the presentation, not an engineer.

Policy and politics need to be part of the program.

Doesn't make sense to consider Illinois and Mississippi Rivers in the same tool: they are different!

The purpose of the HNA is not to fix problems but to identify them.

HNA is useful for decision making.

HNA is intended to "create a target" for habitat restoration; the question remains: "how are they going to adjust their aim to hit the target in the future"?

What do the policymakers want? How will we be involved?

Need to consider impact of exotic species.

Need to consider cause/effect relationships; corollary tool.

Need to consider past conditions: "to see forward, you have to look back".

There are too many studies and not enough action ("thought without action is useless").

EMP is an action tool that is not adequately funded, and if more money is spent on studies, less is available for action.

HNA is not useful for the general public, but for a "finite set of people at a certain management level."

Even the resource managers are "in the dark" about how this tool will be used.

The HNA will not have further public participation.

Purpose of HNA is to help middle management keep fairness in spending for habitat projects.

Three people here did not get a direct invitation.

What about the eight habitat types used in the presentation? Was anything left out?

What about rookeries, spawning grounds, backwater lakes?

The habitat types needed better description, and there needed to be an explanation of why those 8 types were chosen.

What about "bioregion" "sustainability" "natural ecosystems"?

There must have been a database reason for the categories.

What are your desired future habitat conditions?

Reduced suspended sediment, more light penetration.

Inappropriate question, as everyone has their own answer; balance is not considered in HNA.

Maximum improvement in habitat without jeopardizing economy.

This should be determined by "decisionmakers who are educated and have the authority."

Optimum utilization of resources to benefit future and current generations.

Support natural diversity, sustainability, promote natural processes.

Restore lost and degraded resources; create stable, sustainable habitat; recognition of economic tradeoffs.

Less emphasis on economic questions; the "pendulum needs to swing the other way."

Naturally sustaining ecosystem.

Enforce BMPs.

We've surpassed industrial carrying capacity, need to create recreational opportunities.

Prevention of problems, not just fixing.

Implementation of soil erosion control mechanisms.

There must be action instead of more studies.

Either prevention or treatment of sedimentation.

What methods of public participation do you prefer?

Public involvement that's "not just window dressing."

There needs to be "two-way learning."

The appearance of "glazed-over" public involvement should be avoided.

"I feel like I'm looking through a one-way window." Ask us what we need to know!

People providing feedback need to understand river processes or all they will contribute are "backyard-type reactions".

There needs to be leadership in public participation, through local elected officials or local interest groups.

Who are the public you are trying to reach?

Need to use local hot-button issues if you're going to get the general public to participate; use the tool to create specific predicted futures.

How can the public participate in the HNA when we don't really understand it?

Interested people will "self-select"; these are the ones who should be thoroughly educated.

Things are not accomplished by opinion poll but by special interests and negotiation: [involvement of entire public is not necessary.]

There hasn't been enough public involvement in general; need to show the public success stories; there is a desire to be involved in specific projects.

Public input question inappropriate for the HNA, but good for the EMP.

Definitely need to include "good, young brains" with fresh ideas.

Despite efforts for public involvement, you'll always get second-guessing when a local project is not funded.

What about informational web sites with the ability to email comments back to the agencies?

Need to have reliable information from unbiased professionals.

Don't want government resources going to maintaining elaborate web site.

Need to have a clearinghouse.

Web is relatively inexpensive.

How about open public meetings advertised through notices posted in public places?

Information needs to be very simple for general public.

Citizens are only interested in particular projects and policy; leave data collection to the scientists.

The general public is not attuned to the issues.

The HNA is not intended to get general public feedback.

Informational meetings ok, feedback meetings, no.

What do you think of focus groups such as today's meetings, convened by invitation?

OK, if they are well prepared.

Need fairly detailed send-ahead information and specific intent of meeting.

Focus groups should have educated, interested public.

These selected special interests can't be considered to represent the general public.

Some people outside of agencies are interested in this tool; meeting should be appropriately inclusive.

What about convening a separate group for each pool of the river?

Peoria public would be interested in this.

How about convening a separate group for each reach of the river?

Need to have meetings where there is information missing.

Final Comments

The ACE has been helpful and should be complimented, but they need to let the interested public know how to get involved.

I hope this information will be tailored to the lay public's use.

It would be better to have the Department of the Interior do this work rather than the Corps.

Need to integrate hydraulics and biodiversity. More ecologists should be doing studies. Need to sustain and increase biodiversity.

Provide the best available information. Be accountable for decisions. Use professional judgment.

Work with natural processes instead of against them.

Focus group was ill-conceived, ill-timed, ill-prepared; work on the needed timetable, not on the upper management's timetable.

Need to make better use of university and other informed resources people.

Need to take another look at a balanced approach to management. Get out of compartmentalization and take a global look.

Enough talk! There is plenty of information available; the agencies are there – let's get going!!

Rock Island Notes

ROCK ISLAND, ILLINOIS

Monday, July 31, 2000 6-9 p.m. Nine participants

Comments and questions during and after the presentation

You are missing information from waste water treatment plants (flow rates, oxygen levels).

When the HNA is completed, whose plan is it?

What do you think of the HNA and that presentation? Was it clear? Was it confusing? Was there anything left out? What was important about it?

They made their case pretty well.

8 habitat types could have used a glossary and list of common species in each habitat.

It's good to introduce the public to the program with "broader generalizations."

Need more "ground truthing" of computer models.

Need a longer research and monitoring component, a large-scale, long-term monitoring program.

Need more terrestrial data; the emphasis is on aquatic ecosystems.

Consider UPLAND forests, grasslands, agriculture, residential development.

Need to accentuate biodiversity.

The tool needs to be fine-tuned to the level of detail that best suits its users.

While it is not economically feasible to expect detailed data ad infinitum, more can be done as far as data collection.

The Corps must be an active partner in the river system, or nothing will be accomplished.

The Corps has been developing a better environmental record.

The Corps is friendlier on non-navagable waterways.

The HNA planners are "diving into new waters/ diving in a new direction."

Important that this is a multiagency effort.

We will all benefit if this all comes together well.

The 8 habitat classes are simple enough for the general public to relate to.

The 1-mile diversity index is an important indicator to use.

"This is the best game in town right now."

The HNA provides an opportunity to "bring the Corps along" on environmental issues and to allow the public to "get a foot in the door."

Don't just rely on the computer tool, since the data is not complete; this would be like "a highpriced automobile with a cheap engine." This reliance on the computer "scares me to death."

These habitat classes don't give specificity for species/guild needs.

By creating such broad habitat classes ("data lumping"), you run the risk of missing important trends, especially in terms of biodiversity within a habitat class.

Historical data may not be useful: these are just anecdotal surveyor notes, with nothing on biodiversity.

The HNA is a good start, but it must be brought to a conclusion.

If the public (associations, corporations, the whole spectrum), is not included in the process, the HNA is doomed to failure from lack of trust.

Iowa DNR is collaborating with water treatment plants on data monitoring within 12 months.

I have a "healthy distrust of Corps", so a multiagency approach is good.

A global interest in the river system should be encouraged (such as through the Iowa Communications Network) rather than a local view.

Upland forest was left out of the habitat classification system because there's hardly any of it left.

Referenced publication: Ecological Status and Trends of the Upper Mississippi River System. If this was square 1, buy the time we get to square 2, it'll be too late.

Responsibility for taking action to improve the river system is being passed along and not acted upon.

What resources (monetary and staff) are being committed to the HNA?

What about all the other data from all these other studies?

What are your desired future habitat conditions?

A true river with no locks and dams.

Reduced siltation rate and implementation of sound agricultural practices.

Improved water quality.

Eliminate/reduce abrupt water level changes caused by locks and dams.

Systemwide zoning to provide consistent development standards with "teeth."

"Stability breeds diversity": barge canals are as simple as you can get, which can lead to collapse.

Reduced nitrate.

Currents in backwaters, such as was the case 30+ years ago.

Balance between environment and economics.

Increased fish and wildlife habitat.

What changes need to occur for this to happen?

Private property rights must be addressed.

These changes are monumental.

The barge interests and environmentalists need to find a middle ground.

Political rhetoric must be removed.

What type of public participation would you prefer?

To get public participation, you need to be well organized on what you want from the public, with a cut and dried schedule of events.

Let the public know what they will be asked to do.

Target the group that can help with particular need.

Educate the public about what is needed.

Participants need to be from diverse interests who would normally not come together.

Don't pit one group of interests against another; don't separately classify interests; they're all linked.

Publicize problems to generate interest, as happened with the EPA report on degraded water quality on smaller streams.

There's a lot more interest out there than you think there is.

Make the public feel like they're contributing.

Raise awareness through educational displays and partnerships, such as an information booth and questionnaires at the Quad Cities Conservation Alliance outdoors show.

Raise awareness of projects/accomplishments in outdoors section of local paper.

Meetings should be held in an interesting place, i.e., on a barge.

There is too much data and too few professionals for them to collect data themselves: they need help from the public.

Need leadership in effort: Rich Leopold, River Watch, Iowa Water.

The public can help with long term research and monitoring, such as with Audubon bird counts.

Caveat with public participation: varying levels of experience.

Caveat with Audubon bird counts: lack of accessibility by road caused hole in floodplain data.

With instruction, the public could help collect needed data, such as river depth.

Public participation needs to have "parameters": (standardized collection methods).

Public involvement in data collection can increase credibility and acceptance of project.

Get school children involved in the river through educational projects.

What do you think of focus groups, such as this one?

These should be continued, but they should accommodate more people.

What do you think of open public meetings?

May be beneficial to let people vent.

More likely to get a broad representation of interests.

(No one had ever been to a really successful open public meeting.)

What about a web site?

Should include: survey form, newsletter on progress updates, volunteer opportunities, condensed information on the HNA (i.e., the slide show).

What do you think of convening meetings by pool or by reach?

"Pool" is a Corps term.

Might get inter-pool conflict, may be better to use districts or reach to keep river SYSTEM in perspective.

How often would you like to participate?

The public should be continually engaged.

Some people are/can be continually involved through their jobs.

When would you like to participate?

Meetings should be in evenings to maximize participant diversity.

Meetings should be during the day/night to maximize participant diversity.

Daytime meetings should be held in the morning when people are most alert.

Meetings should not be held on weekends.

Meeting space should be found close to the river.

Final Comments

EMP/HNA process is a good beginning, but you have to back up plans and computer models with hard data.

Ecological diversity of the river must be appreciated and protected.

Interested folks from all walks of life need to be brought together to participate in river issues.

This meeting has been a positive experience; it gives me hope for the future.

Stop using bipolar terms like "economic" and "environmental." Don't pit the interests against each other; they are linked. A sound environment is worth money.

HNA is one of the most positive things for the river, a total diversified resource. We need to encourage individual stewardship.

The ag industry has made progress; I want to see systemwide results.

I hope the leadership and willpower is there to see the process through.

Reduce divisiveness in the issues and build confidence and trust.

Individual stewardship exists within the public, enforce cooperation and sense that everyone has something to contribute.

Dubuque (1) Notes

DUBUQUE (1), IOWA

Tuesday, August 1, 2000 1-4 p.m. Fourteen participants

Questions asked during and after the presentation

Can you clarify where diversity is good/bad?

Who are the resource managers?

You can't have a tradeoff for habitat that never existed!

So decisions are based entirely on public opinion?

Clam bed protection is federal law: when is the FWS going to sue the Corps?

It's "sticky" to ask the public to choose what habitats we want.

You should make use of MARC 2000 and more money to get more public input.

You need an outline for island hardwood forest protection.

The river is too shallow: loss of deep backwater causes flooding downstream.

What is "river regulation"?

You are missing nutrient loading problems.

What do you think of the navigation study?

Why do you show agriculture declining if other projections show more land coming out of CRP programs?

Buffer strips on streams should be mandated.

The money being spent on this meeting should have gone into data collection.

The river situation is like the government of Pompeii - - the government acknowledges that there is a problem and knows the solution, but it not taking action until it's too late.

The Turkey River is an environmental disaster.

We need to keep the patient's heart working, then get to the fingernails.

Development is a problem too; economic development is bad.

There needs to be multiagency efforts for land planning to help with better management.

Municipalities are three times as polluting as farmers.

We need to address the challenges of tomorrow by addressing the problems of today.

Is this a representative group?

You need to work very hard to ensure a diversity of viewpoints, uses and users.

What did you think of the HNA and this presentation?

How much area does the HNA cover?

The HNA is interesting and worthwhile, but it is doubtful to have a big impact.

The HNA is a useful planning tool.

Presentations in the 1980s talked about the same incomplete data; lack of data is a "weak crutch" to explain lack of action.

The political will does not exist to make this information compatible.

People from Chicago are buying up all of our bluff land.

Has progress been made in backwater areas?

The river is an economic necessity.

You can't separate economics from the environment.

We want a list of specific improvements that have been made.

Why is the Corps not here? They should have been. What message are they sending?

There should have been more specificity in the presentation, more illustrations of studies through pictures and tables.

The "feigned neutrality" of the presenter is irritating because the presenter is holding back the best information.

Is the 4-stage model reasonable?

Who is creating the predicted and desired futures?

A timetable of action is needed.

Are we overlooking any habitats?

The concept of the watershed should be used.

What about earthworms and soil microbes?

Was there anything confusing in the presentation?

The presentation was repetitious.

Need more definitions in layman's terms: chute? Reach? Are sidewaters and back channels clearly defined entities?

Cut the use of acronyms in all materials, especially in a presentation.

Presentations should be tailored to each individual area to make it easier to understand.

Use specific maps of local areas.

The past and current conditions were shortchanged: "you can't go to the future without addressing the present."

There need to be pre and post (urban development) (habitat) surveys.

Are established and mitigated habitats classified in the same way in the HNA?

When you describe habitat conditions, how well do these eight types match?

Need to consider storm drains and wastewater treatment plants as part of the developed habitat class, not just buildings.

What about the water quality itself?

What about river bottom conditions and river bottom plant life?

What about the shoreline that's being lost?

Navigation should be focused on as a primary stressor.

The Corps is just doing what they were directed to by Congress (we should lobby for changes).

The government prevents its employees from speaking freely.

Environmental projects are underfunded.

The Corps is not trustworthy, but "Ron Kind" is.

"Unavoidable scientific information" (i.e., hypoxia in the Gulf) does not lead to action.

The CRP requires the addition of fertilizer to buffer strips (There is conflict in messages from federal agencies regarding river management).

What are your desired future habitat conditions?

Special island/water (bathymetric) and nutrient needs for island hardwood forests, which have not been regenerating for the past 10 years.

Self-sustaining natural community with minimal manipulation by humans.

Clean water.

Return to river conditions of 1950s and 1960s.

1% per year increase in wildlife to the point of overpopulation.

State-level household (cleaning) product management.

Balance of competing needs.

Diverse stakeholder involvement.

Increased diversity of habitat & wildlife.

Habitat maintained for "people's quality of life."

Shore protection from barge traffic.

Silt control that would return the silt to the farmland.

Reduction in fertilizer use.

Fewer locks or at least maintain the current size of the locks.

Stop excessive recreation (i.e., cabin barges, speed boats).

Return channeling to watersheds.

Stability in water depth.

Protect islands from wind wave damage and change the structure of islands for biodiversity. Remove the locks.

Reduction in tilled crops.

More trains.

"Reworking" of the economy, such as local food processing.

What changes need to occur for your desired habitat to become reality?

Shoreline land use control.

If you can't control agriculture, you've lost the battle.

All the responsible agencies need to "get on the same page" and cooperate on river issues.

There has been distrust/incompetence in agency communication.

Citizens should be instructed in how to bring lawsuits against pollution sources.

More action, fewer studies.

What is your preferred method of public participation?

Opposing groups can get closer together through interaction.

We need to realize a common cause: we all need the river.

The input of health care workers should be considered.

All interests should have an equal voice.

A good process would be to find x number of river projects and pare them down to the ones that could be funded.

People living along the river are not always the most aware; you must arouse interest and give information.

Make sure to include the youth.

Youth are impatient and want to see action; (we need to have active participation to get them interested and keep them from burning out.)

Evening meetings would increase participation.

We need to be problem solvers instead of "problem kickers."

When will action occur?

A paid government ombudsman is needed to "work people up before a meeting" (counteract corporate lobbyists.

There is lots of apathy along the river.

Make all meetings worthwhile! It should make a difference (for the river) when people go to meetings.

Meetings should have a very specific agenda; a good start would be to introduce a small item that people can pursue with their legislators: something that can be accomplished.

The lack of action in the river system is somewhat our fault for being satisfied with just attending meetings.

Meetings should have a followup; some conclusions are needed.

If you want to slow the data collection process down, use only professionally collected "scientific" data. If you really want to progress, make use of the "conscientious observer", train them to collect data: "citizen science."

Can value be found in anecdotal data?

What about public participation through a web site?

This will not reach everyone: not everyone has access to a computer or the time to use it.

Good for schools, but not good for a large audience without a downloaded (print) version also.

Web sites can be used for efficient interagency exchange (of information).

What do you think of focus groups, such as this afternoon's meeting?

What is being done with this information?

You have to be choosy in focus group invitations.

It's better to have a mixed group of participants because it's too easy to blame people (for river problems) who are not in the (discussion) group.

Concern with invitation list: lots of interested people were not included.

There should be equal representation of groups, such as 4 politicians, 4 environmentalists, and 4 business people.

There should be a caucus of the groups before a focus group to determine who should attend the focus group.

What do you think of open public meetings?

Don't talk down to people at public meetings.

There is a bias against big meetings; with more people there is less input.

To what end? These are ineffective if they're unfocused.

How about convening meetings at the pool or reach level?

People have an affinity for their own habitats – it's hard to get interest beyond a pool-by-pool approach.

People can only compromise on river issues to a point unless the focus is kept global: "I can't sacrifice the river."

There's nothing wrong with this approach.

Final Comments

The health of the river has been a concern for many decades.

The intent of the HNA is a more unified approach to the EMP, rather than a spot approach. Multiagency data collaboration for action is good.

The Corps should be returned to civilian control. Public involvement in the river should be global, not just at the poolside.

A solid timetable (for action) pinned down (such as by Congress).

There needs to be a specific timeline and guidelines.

We need action, fewer meetings and studies.

Immediate action on known problems.

Look beyond the river to the whole watershed. We shouldn't be so arrogant that we can build things to fix problems; we need to look at how we can assist natural processes.

Dubuque (2) Notes

DUBUQUE (2), IOWA

Tuesday, August 1, 2000 6-9 p.m. Eight participants

Follow-up questions to formal presentation

What is bathymetric diversity?

What are we commenting on?

What is the timing associated with the historical data collection?

My main concern is sedimentation, control of water for towboats. I see the river depth decreasing, the back sloughs decreasing. We need open secondary channels to make better habitat; open sloughs, move out sedimentation, make islands.

What do you see happening in the next two years? What do you want, more scientific data?

Where do the federal agencies get their information from?

Have you considered data from colleges and other research programs?

What water quality impacts of the HNA/EMP do you expect?

Still, I feel this is vague. What will the HNA do to allow me to express my opinion on water conditions, habitat, features, etc.

General comments were requested following the presentation. Was it clear, did it make sense, was it confusing? What was most important? What could have been done to make it clearer?

I thought it was hard to understand. He is just selling his policy. He just showed the overall, he didn't want audience input. I found it complex. We need down-to-earth straight talk. Our goals should be getting people to work.

It took me some time to understand what the HNA wants: can people understand it, can the public work with it.

It was pretty understandable, there were some confusing parts, like "bathymetric."

Where are we going? There is no policy here. They are here to tell us they are gathering data, then make it available. It should be made more clear they are not looking for policy.

I thought the definitions of habitat were clear, I had no trouble understanding habitat.

I was not clear why they were having the meeting until the end.

What habitat terms do you remember from the presentation?

(The group named the series of habitats from the presentation in their entirety adding: sloughs, chutes, secondary backwaters.)

The presentation should have been reversed. It became clear at the end that what the focus group was convened for was to gather input, to comment on ways to input to the HNA in the future.

Were any habitat conditions overlooked based on what you saw in the presentation?

No, that is not the issue. It is more important to consider what John Q. and Joan Q. Public would know what is up. Keep in perspective who are the "publics."

What terms would John or Joan Q. Public use?

Wet, dry...people don't have the background unless they care about the river.

The fact sheet would need more explanation for general public.

Concerned citizens would understand if they dealt with the river on a regular basis.

General public would use: wetland, high/low water level, flooding.

I am interested in the sedimentation of the river, I don't have a big knowledge of habitat, but I know the river is ever-changing.

You heard the presentation, did it make sense?

(The group continued to list words associated with habitat:)

Forest.

Surrounding area for the environment of things that live in it.

Wing dams.

For fish species, would list - food chain, water quality, current.

Sedimentation.

Backwaters.

What was most important, most critical idea you heard?

They are not spending extra money to do this. They are using existing data.

They are using combined agency efforts to build one common language.

Is that good or bad that there is one tool?

Finally there is a major river study being done. It should have been done a long time ago. So much money has been spent on navigation needs; wildlife has been neglected.

There have been many haphazard studies from many groups. There should have been one major study of the river.

They are developing a common language for everyone to use. I am surprised we are here to input and comment on the HNA product.

I thought I came here to understand how to help. I am not sure why we need a meeting to critique a product.

I thought I would have input into what will be crafted.

If you input data from organization sources, it may be weighted to some organization's perspective. For example, beach nourishment projects are not valued the same in different areas along the river. Who is right and who is wrong on the data that drive such decisions?

Is the four-component model a reasonable way to develop projections of the future?

Yes, it matches a planning model.

You saw some of the images this tool can provide. Were those useful illustrations? Were they understandable, clear? Is there a better way to display this kind of information.

Graphs, bars, pictures help explain charts.

Some of the slides were not visible.

The pictures show we are not dead yet, they show we still have diversity.

Color is really important; it is hard to understand the bottom slide on page 9 if it would be presented to the public in black and white.

Present things to the public in large color pictures that are easy to understand.

What are your desired future river conditions?

I want to see a diverse river that contains islands, backwaters, hardwood forest, deep water. I want to see all habitats to bring the most wildlife and fish. I want a clean river with out sedimentation.

Changes in urban development and agricultural practices would have to be made to reduce sedimentation. The river is getting flat, dirty, filled in with less water than it used to.

Want to have the river available for recreational boaters, fishermen, and duck hunters.

Want a biologically divers river.

Want a diverse, self-sustaining, healthy river. I appreciate the importance of habitat.

I agree with the previous remarks.

I want the river to look the way it used to be: backwaters, chutes; probably can't restore backwaters, but we should slow down their deterioration.

The river continues to be used for commercial applications, barges, etc. I don't care to see it.

I have seen dramatic changes in the lake area up river. The depth is changing all the time with the locks and dams. I used to be able to bathe in the river, eat the fish. Now the fish are gone and the river is dirty.

Yes, it would be ideal to have a constant river level, perhaps nine or ten feet.

I second that!

I want clean water, improved fishing. I wish I could be comfortable on the river again. You used to be able to hold up a glass of river water; it was clear enough that my grandfather would drink it.

Increase the backwater. Dredge it out. There are no places for the pan fish to overwinter. Blue gill and crappie have nowhere to go.

The river is up and down. Why so much I don't understand. They used to be able to hold it steady.

What would need to be done for you to have your desired future?

Money to dredge backwaters, use tax money.

Let's make a list, numbers talk (numbers of people). Go up and down the river (to raise awareness). Put back the islands, get numbers out there. Persuade Congressmen with numbers of people.

Control barge input on their hold on "say so" of water. Joe Public has no input on the pool they reside on.

We are going to have a new fleeting in Dubuque. It will be an eyesore. They are going to take away the beautiful wing dams, removing the fishing areas. I buy my fishing license but I don't get to have any input on what the money from that is used for.

The almighty dollar speaks; you can't combat who has control over the river.

Market the river, get folks to band together with a common interest for the river.

Get rid of the political interests of organizations in control of the river.

Restrict the power of the organizations in control of the river, the people controlling water depths are out of touch. When they make their decisions they don't understand the common people who like to use the river.

I commend the agencies for trying to get input. It is a good first step.

Erosion control will give you the biggest bang for your buck. Keep soil on the agricultural cropland. Address creek bed and riverbank erosion too. Dredging is done at an astronomical expense.

Does commercial traffic impact the movement of sedimentation? It seems that the backwaters near barge traffic areas fill in faster.

Develop land use changes for sedimentation control. Use public education on what is going on with the health of the river. Take the issue to senate and congress. Make people aware to reduce their impact.

People at the bottom don't mean crap. Government officials don't care. They only listen to the barge money. Put a tax on the industry for the damages caused by barges.

Plant trees and dig out ditches going up along tributaries. Build ponds, terraces instead of spending so much on dredging.

So many programs are late in coming; the Conservation Reserve Program and Riparian Programs are much too late.

So much money has been wasted on the Navigation studies, they are falsifying the date on such a big study. Where is the money for habitat?

We maintain channels to ship grain overseas - to China. The Chinese are not buying as much grain anymore. Then, we ship seed grain to South America so they can compete for the same

markets. It is too warped. Average people understand what is going on better than the government.

I am really frustrated. I have been going to meetings for twenty-nine years and there s no progress. It is not due to lack of interest or input.

Let government see overall impact and act like they give a damn.

How would you like to be involved? What kinds of participation would you prefer?

Joe Average should sit in on the process of HNA, the whole process. Joe Average should be in all along, not just now, but earlier and from now on.

We should highlight the four or five main topics that would benefit the river. Go with a mass of people, not really sure how.

Inform people first, have river meetings...I am in favor of meetings.

What kind of meetings, public meetings or focus groups?

Have an informational meeting where the results of the HNA study are presented where people can learn. Then continue to go up and down the river. Go more places and explain the results. Don't have the meetings too far away.

Use a mentor society, develop a grass-roots organization able to go out and tell about the river conditions. Let everyone do their share.

Create a movie or a tape that could be rented out for showing at interest group meetings.

Break the river into pools and have government agencies that are already established host meetings. Keep the meetings at the pool level. Individuals can participate in local meetings and can help gather information at the local region. Have the participation begin from day one and continue until the end of the product. Start working from today.

Take advantage of the American Rivers project.

Write to legislators to tell them you are concerned about the river.

Put all agencies into one basket and let them work together. That way they will work out the problems; ther are too many politics and agendas. No one is out to do what is best for the river.

Let colleges given grants focus their research criteria on what needs to be studied. Collect information and distribute it as a disinterested third- party. Get the information out.

Education is important. Look for opportunities to educate people about the river. For example link river education to boater education programs. Give out information on what degrades the river. Have the education impact what is needed to get a license.

Highlight positive influences and impacts for the river. If people are working to restore the river, feature the efforts, even if it is just picking up trash. Tell these kinds of stories in the local papers, articles and other media.

What do you think about web sites and the ability to correspond via electronic mail?

Some web sites, like the US Army Corps of Engineers are outdated, fouled up.

Have environmental spotters use web sites to input data.

(More recommendations on how to be involved:)

Take small actions, e.g., don't dump oil in sewer drains.

Put public notices in public places to reach large audiences.

Make a "River Rat Club" to motivate people.

Educate people from a young age – take advantage of the River Museum (at the south end of Dubuque). Send grade school and high school students there for field trips.

Build the America's River Project (ARP) – approximately \$30-40 million dollars and use it to educate people about the river.

Put public information there in the ARP - a comparative display of how dirty the river is now and how clean it was historically.

Take a look at the St. Croix. It is protected – we need something like that to address the Mississippi like we do for St. Croix.

What do you think about focus group style of meetings?

Sometimes they are better than the big meetings. You can do something. In big meetings, all you get to hear is stuff.

I feel like the information is going somewhere. In a big meeting, only 3 or 4 get to talk, talk too much. You hear fewer ideas than in a big meeting. You hear more ideas in a smaller group.

What do you think about a separate interest group for each pool? (reach?)

(All participants agreed they would like to participate in activities targeting their local pool. When asked the same thing regarding "reach," the response was "what does that mean"? With a definition of "reach" as several pools, the group said, "no." They generally thought the best way to gather information was by pool.)

More people deciding in local area can impact outcome that means something to them personally.

If you need to give feedback up and down the river, compile data and share it so it can be analyzed overall.

Put a local representative on a regional group.

Find some place convenient to meet; being in a group larger than pool means people have to travel more distance.

Don't forget, information has to flow both ways...up and down the river.

Would you be interested in participating on individual habitat project planning teams?

Pinpoint the worst area and work on it. For example, pick an island project.

Yes, I would enjoy having local input.

Yes, it would be fun.

Open it up to public participation.

How often would you like to participate?

One day or evening per month.

If there are results, there would be no problem with participating. If you see something positive you would have to have more than one meeting; there would be a domino effect.

When would you prefer meetings be scheduled: morning, afternoon, or evening?

The group preferred evening meeting times versus any work-day times or weekends.

No Friday evenings.

Thursday evenings are good!

If I see progress, results, actually doing something, I would be flexible.

Please provide a personal closing comment for this set of activities.

Continue to have public input to the end of the project, preferably on a more frequent basis. As the study continues, solicit public involvement regularly.

I want to stay involved, get involved. I am very concerned. It sounds good, results oriented.

We need to know what agencies are thinking, planning. We need more meetings.

Invite public input, not just in mandated sessions. Keep us involved; return input of agency to public. Let the public know what is happening.

Would they have sought input if it was not mandated?

Tell the public about the results of data collection and the decisions made.

What improvements are going to result? Keep people involved. Not just a data bank for river users with money.

Remember, people are habitat too. Keep it inviting to people too.

Make best utilization of the river and of river funding programs.

Educate the public, understand public uses, what they want. Insure the government officials understand the health of the river.

Many people are interested; use good, solid research for all.

La Crosse (1) Notes

LA CROSSE (1), WISCONSIN

Wednesday, August 2, 2000 6-9 p.m. Ten participants

Questions and comments during and after the presentation

Four aquatic habitats are not enough. Can we have specific examples? How is the open water portion of Lake Onalaska classified?

Can you generate different levels of resolution?

I'm concerned that the picture this biodiversity index creates could redirect federal funding.

The public should have input on the creation and definition of classes.

I have "pre-dam" unpublished data. We assume that the upper and lower river were once of the same quality, but they were very different.

There is no need to spend money to increase habitat diversity downstream when it never has been diverse.

Diversity isn't the answer to everything.

We want to "overcreate" as the dominant species. Desire conditions should more closely resemble historic conditions.

You can't draw conclusions from pre/post settlement conditions based on a single pool; you need to consider the bigger picture.

Do you have process change information for each pool?

It's hard to believe that only 8 places in pool 8 have shoreline erosion (referring to slide).

99% of what we're talking about is structural: what about contaminants?

One of the problems here is lack of money, especially for ground truthing. The USGS tried to get information for free.

How much other data is out there that is not being used?

It's hard to plan with bad, incomplete data and a faulty model.

Are the agencies working together well (concern that info won't help upper levels in agencies make decisions) or are we just appeasing the media?

The public out on the river can gather information that resource managers aren't even aware of.

How is the HNA being used right now?

Has a plan been identified to fill in the data gaps?

You need to stress that resource maps are temporal and in flux; there needs to be a recognition of changeability for effective use of GIS technology.

What did you think of that presentation? What do you think of the HNA? Was there anything missing? Anything important? Clear? Unclear?

Need reference points on maps (i.e., pools, locks/dams, state borders, towns).

There should be a 10-15 minute demonstration (after Karl Korstein) of what the tool can do and a discussion of the available data.

This presentation was specialized for a specific group; the general public would not follow it.

The presentation only mentioned trees: where is the wildlife?

Need to present concrete information at the pool scale; the public doesn't necessarily want to know process data.

Put dates on the slides for presettlement and current data.

There are big differences in pool size, so percentages in pie charts are not necessarily comparable.

Percentages are meaningless; use something people can relate to.

Make handout text bigger, print on both sides to save paper.

Concern: if 8 habitat classes are "out of balance" or lands are improperly categorized at the start of the process, this could cause snowballing errors in decisionmaking.

Data clumping and categorization will always cause disagreements.

Tributaries should be considered.

Not bothered by the items mentioned; bothered by what might be left out.

Water quality! (sediment, pesticides, lack of light penetration).

Land issues (ag) need to be considered as important as water issues.

Need an environmentally sound starting point.

Data should be aggregated at a "mini ecosystem" level.

Everyone has different terms for habitat classes based on their experience - - this is part of the problem that needs to be addressed through public outreach.

Need to consider sand bars as part of recreational habitat.

Boat docks create "commercial habitat."

Need to consider more interrelationships.

Need to consider water quantity: flood/drought cycles and regional climatic factors.

Need to consider geologic forces: erosion and sedimentation processes.

Need to consider minor/major watersheds.

Need to consider direction and strength of flow.

Need more data on sediment transport history: there is a backlog of historical sediment that cannot be blamed entirely on current farmers.

Need info on water level manipulation.

Need to clarify whether preservation or conservation or rehabilitation is the goal of the HNA. Do we want to preserve the status quo?

How do I "play with this toy"? What will the delivery system be? This will not be a useful tool if I can't access it.

This tool should be geared to three audiences: tech people, decision makers, and the public.

This is not an accurate diagnosis; I'd hate to be a patient in this hospital.

Need to have higher resolution for individual project planning, but less resolution is needed for planning at the system scale.

What does "protection" refer to in the HNA goals? Legislative protection? Construction projects to protect homes? Or are we protecting the environment directly?

Concern: decisions have already been made by a small group.

What are your desired future habitat conditions?

Better than the status quo, rehabilitation, improved conditions, grow healthier habitat.

Healthy, productive, sustainable, clean river system.

Cessation of erosion, starting with headwater tributaries.

Stop artificial manipulation of river levels.

Accept natural geologic change over time; don't expect stability. The key is improved water quality.

Clean water, less contamination of silt and chemicals.

High water quality with sustained wildlife populations: fish, shellfish, land animals, birds.

A balance of sustainable commercial, recreational, and other uses of the river.

Objection to question: even resource managers can't answer this.

Variety of habitat types and wildlife.

Island protection and restored backwater flow.

A river program that responds to a variety of users.

Water quality.

Respect for natural processes.

Refine the management rules of the river to encompass technical and social abilities to protect the river.

Accept the challenges of social and technical changes in transportation and recreation.

The "iron curtain" that restricts public access to the river is good (such as through railroad ownership of land).

Reiteration of 5 goals in presentation.

Stop human's nature to control the river through dams, levees, wetland filling.

Look at animal life as an indication of where there may be problems.

Sustainable, natural, healthy, improved habitat for a diverse variety of birds, animals, fish, and other living organisms.

Reduced human artificial impact.

Removal of exotic species and prevention of future introductions.

What mixtures of habitat would you prefer?

Nature has given us a mixture of habitats; we don't want to recreate/fool with what's out there.

Do they want a pie chart formula for each pool?

There is habitat diversity that people are not aware of, such as in river lakes.

What needs to change for your desired futures to be realized?

More \$ needs to be allocated for data collection, and especially for ground truthing.

Don't know if this is achievable: you'd need to depopulate the river area and stop geological processes.

It all comes down to politics: need to pass local laws that prohibit building in the floodplain, prohibit dams and floodwalls.

Continue and expand EMP funding to allow more rehabilitation work.

Limitations on the type of commercial navigation on the river: size and horsepower of towboats, not the number of boats.

Management should use the public more often.

The process of acquiring lands in levy areas to expand backwaters should be expanded.

Better coordination between federal agencies and the public on information and data needs.

Work with DNR basin teams.

Increase federal funding.

Decisionmakers should consider that special interests are representing the interests of their constituents and do not represent the general public.

Clean up tributaries.

Mandate/encourage biodegradeable farm chemicals or provide reasonable alternatives.

Limit commercial vessels.

Provide for fish migration around dams.

Clear floodplains of development.

Regulate flows to approximate natural processes.

Stop studying and start working.

Match spending on habitat needs on the upper river with commercial navigation spending at New Orleans.

Share costs to provide long-term funding stability.

Control the population using the river.

Use the best available information and technology to improve private land use decisions.

What methods of public participation do you prefer?

How can we funnel river habitat data we are aware of to the HNA project?

Natural resource issues should not be managed through consensus of the public.

The public doesn't necessarily need to see examples of their pools, but they need geographical reference points.

The general public relates to local pools, not reaches.

Public should be told how much money is being allocated to each project (and study).

The general publics should not be presented with too much detail.

Will the public be educated on how to use this tool, or will the public merely be fed the results?

Need to generate media interest and excitement. Force feed them!

A good handout would be a chart of EMP projects by pool.

It's hard to get the general public to come to meetings: these meetings should present specific projects and costs and information on how the projects will impact the river and the users.

The EMP/HNA program needs to be sold on the public.

There should definitely be public common-sense oversight of projects.

Want to see the results of participation at meetings; this would provide a sense of ownership in the process.

Concern: WRDA advisory committee of NGO experts will override public input.

Public education is needed before any meetings, such as through newsletters, TV, radio, newspapers, internet.

There should be a regular river column in local newspapers.

There should be a public participation group in each community, composed of 12 or 14 people appointed by legislators, to discuss river issues and work to expand public involvement.

Involve people in greater numbers of communities.

Don't make people drive great distances.

Be sure to correct misinformation (i.e., ADM's claim that expanded navigation is vital to farming business).

Public meetings need to have a written goal, the agencies need to act and then report back to the public.

Provide a "show and tell" of river projects and ask for evaluation/modification.

What do you think of a web site with the ability to email comments to the agency?

This could be a major outreach tool, with datasets and manipulation tools, but you also need paper copies available for the general public.

Public outreach should include a web address and also a contact person.

What about focus groups, such as today's meeting?

There needs to be expanded participation (more than 12 people).

Don't rely solely on this form of participation, as this format may bring out personal opinions more than group opinions.

What do you think of open public meetings?

These could be more productive with more pre-education.

These should not be held. This is only used to destroy the concept of public participation by "dividing and conquering." People hate this type of meeting and quit coming to public meetings.

To increase public participation, train people to provide water quality data.

How about meetings convened at the pool or reach levels?

Whether meetings should be held at the pool or reach level depends on the area.

The pool level of participation is preferred to reach level.

Reach groups should be comprised of representatives from pool groups.

Be careful not to create too many layers of bureaucracy.

How about involvement in an individual habitat project planning team?

Good to have a member of the public in with the bureaucrats.

How often would you like to participate?

2-3 times/year.

Quarterly, but it depends on the results.

Final Comments

Water levels back to those of 1942.

The HNA considers too small a universe: need to look at Mississippi River watershed.

The tool is valid, but the database is too small and needs to include tributaries.

Congress has lots on money for habitat projects, but it must be spent wisely. The public should oversee habitat projects to assure wise spending.

I'm concerned that an appointed advisory committee will do project selection. If an advisory group is assembled, it should include representatives from pool teams and field resource managers, not special interest groups.

Expand appropriations for habitat rehabilitation for the common good. Continue an interagency decision process.

Concern: commercial and recreational interests are jeopardizing the integrity of the HNA.

We are being contradictory; we want action and information, we want public participation, but this costs time and money.

Just sitting in on these meetings provides education.

La Crosse (2) Notes

LA CROSSE (2), WISCONSIN

Thursday, August 3, 2000 9 a.m. - noon Nine participants

Questions following presentation

Why wasn't the 1975 data also used in the historic/current condition development?

In the existing/predicted graphics on the open river reach slide, there was no category for "urban." Is that an oversight?

The year 1989 was a bad year on the river. Don't you agree?

How did you predict the future?

Did you use USACE traffic numbers?

When will the first iteration of the HNA be done?

I noticed the areas of critical need line up with glaring data needs. Is it fair to assume future HNA efforts will target data needs?

When USACE did cumulative effects, they went to the Resource Managers. How good is Resource Managers data?

This is really more of a comment...we all agree the Mississippi River is a valuable resource; it is a major challenge to involve the public to look at what individuals see in the river. Every group has a vested interest: fishermen, birders, canoes, motor boats.

Habitats differ. Habitats for who and what? Habitat Needs seems to mean "perceptions." How do you measure needs?

It is difficult to get broad agency cooperation, but sometimes there are urgent issues such as loosestrife or electric power generation that need immediate attention. Have you built in an expediting process to deal with these kinds of things effectively and quickly?

The land cover habitat assessment, how does it relate to other land cover classification systems?

Now that you have seen the presentation, please share with us your general impressions. Was it clear, understandable?

Nice job on the presentation. Given the problems with the information, they did well.

The biggest constraint is the public balance...page 3, middle slide (Balance among competing uses and users). No goals or objectives are described.

Balance among competing use is/should be the goal of HNA.

I am disappointed they have tried to divorce the balance of competing uses from the HNA process.

I understand there are limits on money and time and other activities going on, but cannot limit the need to balance among uses.

When the Minnesota/Wisconsin Boundary Area Commission got a report out on the HNA, the commissioners went livid. The Boundary Area Commission is to elicit participation on all river issues. When this is not being done, there begins to develop mistrust.

Use the focus groups to direct thought rather than to elicit all thoughts.

This is not a focus group. We are already informed.

I am disappointed that we had to wait until now for public involvement. Generally you start with public involvement as a design component. Then, based on public input, you determine what the process should be.

It was a surprise that there is already a report in process.

Focus group is a technique, but need to put components together for full public involvement.

It appears the HNA is taking the brunt for the EMP public involvement.

Is there a balance of representation? There should be focus on who participates.

Turning again to the presentation, was there anything confusing?

It was informative, it assessed the scope and focus.

How does ag policy/production get evaluated? It has a lot to do with sediment.

What about the impacts of agriculture? Apply what they learned to the tributaries of the Mississippi.

They need to expand beyond the corridor of the Mississippi.

Need to deal with sedimentation issues. They have presented how sedimentation is managed in the river and look to how to manage it in the watershed.

I am unclear about the historic data. What changes are noted by looking at the historic data and how have those changes impacted what exists?

What has there been a loss of? In comparison to what? Are the losses implied? Were the resource managers input just anecdotal? Why do we always think of "loss" of something as a negative? That implies goals and objectives.

What is sedimentation defined as? Is it soil loss or do they include chemical run-off. We need to know what they are talking about.

Is it sand versus organic sediment. They have different impacts on the river, where it settles, how it moves.

Remember the KISS principle: keep it simple, stupid.

Academicians and scientists talk to each other, publish for each other. Write for the public in terms they can understand. Publish so the man on the street can read and understand.

Writing about technical matters does not mean they can simply distill hydrological and ecological issues. Can the message translate to intelligible terms for the public.

Yes, for instance computer geeks write the manuals but can average people read them?

The public understands more than we give them credit for. They have improved knowledge. Our educational system has improved, they are introducing new concepts into education.

Yes, but keeping things simple should still be part of the goal.

Something that is missing in a summary or the introduction is what is the model for how comments will be integrated into the report?

Yes? Is this effort a "check box"? How is this input going to be integrated.

There are avenues to make simple information available: media, internet, advance notice. See what is going on.

There needs to be feedback on public involvement activities. Use the medial, use the internet.

This effort covers broad geographical areas. Does it apply everywhere?

The nature and timing of the public involvement raises questions of legitimacy.

They are not dealing with the public. They are dealing with self-selected, informed audience.

How long have they been working on this?

Is there a public involvement section in the budget?

Does the general public know the HNA is going on?

How long do we get to respond?

Will there be advance notice?

Will we be able to turn out members to generate input?

The graphics are very small, they were difficult to read. Put the slide show on a web site.

What has been overlooked is the ecological perspective. Before we look at habitats and their functions, we need to look at the value of various ecotypes along the river to guide rehabilitation projects.

They only showed general classes. Did they think about ecological integrity? What are the functions and values of various ecological systems? Beyond habitat for birds, what is the value and function? It must be evaluated in depth before focusing on habitat.

Is it important to me? In the environment, how do you capture everyone's values?

What makes the Mississippi River? Can we understand the ecology, the integration of habitats from the floodplain, the river?

The existing condition is based on 1989. If we utilize that to determine what is going on today, we need to define the current conditions based on a comparison to 1989.

Are the eight habitat types mentioned during the presentation adequate?

For setting goals and management objectives/priorities, eight major types are not sufficient at the pool level.

Habitats are temporal. The variability is left out. Spring versus August is totally different. If we manage for August, we eliminate habitat for spawning and hatcheries.

I wonder about the resolution too.

I have sympathy for the need for aggregation due to the time line, but we need to look at the lvel of aggregation. Does it serve management needs?

The floodplain agriculture/isolated backwater don't belong together.

Why? You see them together. The isolation is a result of the levee system.

It appears to be included as a convenience.

Have any other habitats been overlooked?

The dynamic events – runoff, wind, ice. Natural events.

Flooding...major changes happen yearly. Islands are here, there. Isolated backwater. Have to consider these changes in the overall.

Must look at more than between the bluffs. Look at the ecological conditions of the watershed.

Relate to what is here. If they say we need "x" percent or numbers of acres, who will believe it. The relationships of habitat features are due to process and sophisticated understanding. WE are not that far along in understanding the processes.

There is no set of consensus goals.

You may be able to get an idea for a particular pool, but forget it on a system basis. If you do it on a pool-by-pool basis, you think you would have a systemic result, but you don't.

If you don't plan on a systemic basis it becomes to parochial... spend on what I want...use that to set goals and objectives with outcomes.

What should be there (to describe habitats)?

Hydrologic changes from lock and dam system.

Sediment changed by agricultural practices

What are natural processes of the river system? We spend billions of dollars to restore areas but are they restoring considering the fact that with locks and dams you can't restore some processes? You can't turn the clock back 100 years.

We need to mirror more natural processes.

There should be a balance among competitors, but usually fail to meet all needs.

If balance is not a component of what is included in the HNA, how do they intend to balance for competing uses. Will that be on the table for future discussions?

We must consider the physical environment. That is an important element of ecological function. Habitat is defined by guilds is an overgeneralization, e.g., what walleye needs are. May be a combination of function and processes. There are longitudinal and horizontal components in the system that should be considered rather than a surrogate like guild.

The fact they overlooked balance is the fundamental flaw in the overall study. Without that, the utility of the HNA process is limited.

We commend the Fish and Wildlife Service for keeping the balance issue out. They realize there is no decision that can be made here so they just kept moving.

It is not that they left balance out, they will just address it at a later time. They needed the biological information and feedback.

Where the process and function information leads, information on organisms will follow. "Build it and they will come."

It is difficult to take a piecemeal look at organisms. You must look at processes.

HREPS mimic function and process.

I am frustrated there is no responsible action. Generally wait for an emergency before reacting. The goby is a good example.

Yes, it took over twenty years for there to be staffing related to lamprey research.

Does the four-stage model from the presentation seem reasonable?

Yes, the problem comes in when you recognize that data for each period was generated different ways. The historical data uses Mississippi River Land Survey records. The existing conditions are based on aerial photography. Not sure what the future is based on, enhanced Navigation Study data? The desired future represents the resource managers input.

Yes the historic is irrelevant. How much has the river been manipulated over the last two hundred years? Nothing exists like that anymore. What utility does it have? Native organisms have evolved and adapted. Maybe not evolved, but changed in response to the environment.

Yes, how far back do we go? Do we discuss historical as pre-lock and dam? What did we have five years after the lock and dams? Is that what we want? I have heard arguments that we should go back to the flourish that occurred after the locks and dams went in.

Yes, what data are there? There are sets from 1939, 1940, 1958, 1965, 1969...there is information out there that was not used in the HNA. That is a disappointment.

This is a habitat assessment, not needs. We see what is there, not what is needed or a consideration of whether it is beneficial.

Describe your desired future conditions for the Mississippi River.

It should remain public, remain a river as much as it can behind the locks and dams and be as diverse biologically as it can be so it can be a multiple use resource and still inspire people the way it has and still does as it has in this part of the watershed.

Based on a fifty-year future with the infrastructure in place, it should be multiuse, zoned and manage for multiple uses, restore the hydrodynamics if possible and remove the rock structures that started in the 1800s.

I would like to see a restoration of natural ecological functions and values and to continue to evaluate (ask) what functions are/were/ought to be.

Any fish, navigation systems, wildlife, support aesthetics and improved access by people.

Restoration of natural processes including flood pulses, improved water flow in backwater. An environment with flows sufficient for wildlife and navigation channels.

Better control of sediment, sand, ag runoff, fertilizer and other materials, from outlying areas of the watershed.

The system has diverse use. Find a way to restore and maintain river cycles.

Maintain the attractiveness and diversity of the bluffs. Bring to the river the diversity of the entire ecosystem.

Restore dynamics of hydrologic cycle. It may not be necessary to try to achieve historic lows, but sufficient cycling to restore diversity.

I would like to see the closing dams removed and put the water into side channels and backwaters.

This is sort of a collective thought: we continue to perform systemic research of the entire river on a piecemeal basis. We should consider continuing research on a system-wide basis. We need to remove the river from the political process. We all need to do as much as we can.

How would you go about accomplishing your desired futures?

Balance.

Define goals and objectives that are adhered to.

Allocate necessary resources.

Work harder to achieve consensus.

Integrate goals and objectives in the legislation to mandate they are worked toward.

Relate to ecology/hydrology/geology and ecosystem dynamics.

Involve the public in assessing needs, desires, and interests – not just sportsmen, recreationists, or commercial fishermen.

Public information and education.

More coordination between states to protect our national treasure.

Disseminate information between users groups on the advantages and disadvantages of what works.

Increase agency accountability to the public.

Look at the accomplishments of interest groups for the Chesapeake and Everglades for what public interest groups can do.

Look at user ethics- agencies, publics. They are key in appreciation and user support. Through exploration of ethics we will understand what we need to maintain, what our socioeconomic and political infrastructure can support.

How do you propose we do that?

Use educational institutions.

Promote ethical education.

Make decisions based on science rather than rhetoric, not mud-slinging.

Pull divergent groups together, for example ag and navigation.

Everyone is driven by professions and positions in the economy. But in a broad sense, we all have the same feelings about the river. How we get there is the only difference.

Ethics are a necessary prerequisite to consensus.

So much misinformation is perpetuated about the river. How can we develop ethics when we have the wrong information? For example, the river is cleaner than when I was a lad. The public thinks the river is dirtier. We need to recognize when good things are happening on the river. Over the last fifteen to twenty years, agencies have worked together on a team-wise effort. USACE/FWS/DNRs have been discussing problem solving.

The American Rivers group would rather sensationalize than educate. This is the major challenge-the need to educate, not misinform.

We need to develop understanding and dialog.

What methods of public involvement would you think are appropriate?

Ones that actually involve the public.

We recognize there is no "general public," but a range of different needs, desires, perspectives and understanding.

We need to develop a strategy to reach all, even if the large percentage doesn't know or care. They need to be given a chance to see if they should.

We need to be honest and straightforward with the public-all persons. We need to go out of our way to put information in the papers, direct mailings, through interest groups.

Host meetings and solicit input based on the premise that with understanding and education, the public can be motivated. We need a process to create awareness.

Primarily utilize the media: newspapers, magazines, newsletters. Then engage the public to get their opinions as knowledgeable individuals with some background on the issues. Then they will know how to use the information.

The river needs a single public involvement process. Create a process similar to what the agencies are doing to come together. They have developed a process for meetings that occur at bridges that bring together the flood damage interests, navigation interests, boaters, legislators. Do this between the agencies and the public as a seamless process.

Help the public understand the agencies. Don't keep the agencies apart. They can be issue driven meetings.

Perhaps there should be an umbrella organization. Design a collaborative effort that is driven by a budget.

Keep the group accountable. Don't allow for finger pointing. For example, look at the way issues related to loostrife and recreation have been handled.

Balance is a result, an outcome to strive for.

Lack of information is prevalent. Draw on the experience of groups who have worked to restore treasures like the Chesapeake Bay. Bring the attention of the country and the political process to the Mississippi.

Distribute information to the public through schools. Information needs to be delivered and packaged through newspapers, schools.

Books sit on shelves, reports are not education. We need a central EMP information site, like a telephone clearinghouse: 1(800) number.

Look at the Chesapeake Bay model for public involvement. We need a way to engage the public.

Look at the EPA water and watershed programs. They provide information to the public.

The technical advisory committee of the HNA could get a public representative there with agency representatives for communication.

What does the WRDA reauthorization require, the Assistant Secretary of the Army? USACE, FWS, EMPCC?

Develop a regional identity. Develop a sense of shared responsibility.

Create a directory of web sites for agencies that are related to the river.

Put out a list of web sites to find information that cross-references sites.

Use e-mail to exchange information and more in a form the public can and is willing to consume.

Use the web, television, video games; let public information be driven by public tastes.

Publish guest editorials and outdoor page articles on what is happening in the forests adjacent to the river and other associated information.

Publish weekly articles in newspapers.

Develop PhD and Masters thesis projects with funds targeted to river research.

Let students participate in river projects through their class room activities.

Funds are out there for graduate students.

Put together what the universities do with what the media and other agencies do.

Take part of the river budget and dedicate it to academic river research.

The money is locked in the federal government; let limited funs to academics by redirecting NSF funds or part of the EMP budget.

What about open meetings?

Who would conduct them?

Who should?

Anyone who would have a point of view would find it hard to build consensus. There should be agency collaboration to display consensus.

Participate in meetings that are already scheduled in communities such as city councils, rotary meetings.

Meetings just for public issues are counter-productive, don't rely on them.

The Minnesota/Wisconsin Boundary Water Commission has a mission to bring groups together.

What do you think about focus groups?

They tend to have a specific outcome structure. They generally are well-defined. They are not to elicit public input but to gauge information and understanding.

Would you convene meetings by pool?

For water level management and vegetation management, flood damage and control, pool-level meetings would be good. However, there is a danger of overlooking systemic ecology.

You can plan for the system but implement at the neighborhood.

No ecological or institutional structural issues need to be decided at the pool level.

People identify with their pools.

Based on credible science at the system-level but work at the pool-level.

Public involvement in EMP projects should be pool-specific or even more specific.

What about by reach?

Good luck.

USACE and FWS have no presence in the watershed.

Focus on the ecological issues of each watershed. That is larger than the river.

People relate to their town, city, community. It is difficult to relate to the watershed as your community.

Awareness of issues-some may fear legislation/regulation.

I think you can broaden responsiveness with education.

Do you think people should be invited to participate in individual habitat planning teams?

Why not?!

People volunteer for refuges. They can be involved in program implementation.

That would reflect the outcome of the HNA process.

I am not sure how it will inform the HNA process at the front end.

It would be good to raise awareness.

The public should have clear expectations of why they are there, not open-ended expectations.

How often would you like to participate?

In what?

It would depend on what form of participation, the cost.

Would it be via internet or would I have to travel?

Would it be a mail survey?

Would I have to take time off from work?

The level of effort would impact the magnitude of my participation.

What is the best time of day for you to be involved?

(The majority of the respondents indicated these types of efforts are part of their job, thus prefer workday hours. The general public would be better able to attend evening meetings.)

When should the public be involved, at the beginning, the middle, or the end?

We need to understand their role in the decision-making process. This is like a giant lake. One meeting doesn't make any difference. The lake remains very smooth. We have to convince them they matter. If it matters, then their participation would be meaningful, many meetings throughout the process would make a difference.

What is the agencies' perspective? Is public involvement too much work?

Please share a final comment.

Feedback-the agencies need to hear it directly, not facilitated. The decision-makers need to hear our comments.

We have a long way to go.

Good past/present/future information to define goals and objectives. We need to define our outcomes.

Late start on important process.

A necessary first step, (baby step), in long, essential process. I appreciate the opportunity to chew on someone's leg.

I concur.

The effect of education and information in the process is critical.

Greater involvement of non-agency people at all levels.

Give academics and non-academics money.

Interact with others who have vested interests.

There is a frustration of not knowing what happens to these results.

Where do we go from here?

St. Paul (1) Notes

ST. PAUL (1), MINNESOTA

Thursday, August 3, 2000 6-9 p.m. Six participants

Comments during and after the presentation

Does habitat diversity consider individual species?

How do you get a prediction for increased urban development in the floodplain?

Will we get feedback from this meeting?

Have solutions/mitigating factors been identified for river stressors?

Why can't there be extrapolation from data-rich pools?

Why would hardwood forests be more threatened now than they were 50 years ago?

Where does the "desired future" come from?

Why is the entire watershed not included?

Have increases in recreational use been considered?

How will the HNA be formalized? Who will make the decisions? Will local units of government be involved?

What is diversity?

What is a reach?

Do we get a copy of the notes?

What did you think of the presentation? What was important? What was confusing? Was anything left out?

I'm underwhelmed and confused. Data needs are not new. What's the price tag of needed data? What models are being used?

Need to state how this relates to the river areas I know; how do other river areas relate to my area?

Need to use GIS to show connectivity of the systems.

Need more graphic representation we can relate to: 2000 vs 1980 vs 1960 vs 1950; changes during the 1980s drought, 1993 floods; timelines with benchmarks that stick out in people's minds.

Wanted to see a systematic approach; this is a minute, myopic aspect of a larger system.

I want to know how this system can be used to make a decision, such as how to keep endangered species out of the way of businesses.

Need something more visual and visceral; perspective drawings, boat tours.

Need a glossary in simple language and better background info (primer of Great River), and make this information relevant to public choices.

Need to emphasize how marshes act to filter drinking water.

The Fillmore conferences in St. Paul of riverfront communities makes effective use of slides of the river.

Consideration of the entire watershed is needed.

Consideration of climate change impacts (i.e., bigger snowfall means a bigger surge of toxic materials in the spring.

Need to focus on the whole system, not just individual pools.

Need to consider stormwater and ag runoff, point source pollution, tributaries, groundwater, karst structures, deforestation of upland areas, recreation predictions, exotic species.

Need to consider the relationship between higher water tables, agriculture (esp. no-till methods), and drainage.

Have the impacts of increasing no-till and decreasing nitrogen use been considered?

What about spawning grounds and aquatic vegetation?

Need to take a widespread approach, or there will be no good science to back up anyone's claims.

There should be some formal adoption of the HNA by local governments to increase involvement and agreement.

What do you think of the eight habitat types described in the presentation?

I understand what the 8 habitat classifications are, but how is this classification useful to the management of the river system?

People probably can relate to surface water and agriculture, and maybe to floodplain, but the other habitat classifications are vague, especially to "drylanders."

Need to consider climate as part of habitat.

Nothing is wrong with the 8 habitat classifications used; the pictures helped.

The HNA should relate to things people care about: recreation, housing, drinking water.

Where is the human factor in the HNA? Population density and recreational and industrial demands should be considered.

Need to consider exotic species and their ecological impacts and the role of shipping and recreation on distribution of exotics.

Need less emphasis on fish and game and more emphasis on lower trophic levels and the food chain.

The HNA is essentially useless as compared to other data collection efforts (i.e., local water quality planning).

What is it doing? Where is it going?

The HNA effort does not compare well in scope to local government planning.

The HNA is incomplete and piecemeal.

What is the end result? I thought this was supposed to be an umbrella to identify weak spots in the data; this is fuzzy. In the end, decisions will have to be made: politics!

This is data gathering with no end result and no methods.

The HNA is a pile of work that's useless to everyone and maintains the status quo of bureaucratic control.

The only result of HNA spending is employment for agency people. The HNA is very piecemeal and will only sit on a shelf, it has a meaningless focus on selected areas. More information is needed to make decisions.

The HNA is not ecologically complete - - it can't be if important impacts are not considered.

There is valuable data gathering, but this is a modeller's paradise (i.e., lots of info to play with, not necessarily any recommendations).

This HNA document is more useful for hunters, fishers, and rural people, but most people live in cities; thus, the HNA is not relevant to most people.

Need to consider distribution of habitat diversity in relation to the distance people would have to travel to use it.

The EMP was previously criticized for being project-specific; we need to take a wider approach.

Shipping, dredging, and transportation are intentionally ignored in the HNA because of the Corps' involvement (they already have a plan, this is a diversionary technique).

What is your desire future habitat condition?

Sustain current habitat conditions.

Return to a past river condition with plenty of habitat diversity and room for every use.

I like the fundamental structure of the river now, with its pools, dams, marshes, islands, but I want functional backwaters and side channels, some roughness to accommodate natural changes, don't put all the pressure for habitat diversity on the main river channel.

Want more beauty.

Need to share the benefits and pain of good and bad years on the river.

Need to work in harmony to get a comprehensive sense of the value of the river and to develop a plan.

Need to increase sustainable economic activities for people living along the river; if people can make money off of river habitat, they will protect it.

Need quiet zones on the river.

A specific plan to improve water quality in the system and its tributaries.

Acceptance of the multipurpose management goals of the river, such as the Metropolitan Commission has done for the various needs of the cities area.

Clean, useable, sanitary water and a shoreline you can rely on.

Multiple use of the river, especially allowing for barge transportation, which is essential to the economy, safe in relation to trucks, and important in relation to the rail monopoly after deregulation.

Acceptance of exotics and the decline of endangered species; change should be expected.

The river will never return to a pristine state, so we should mitigate human damage.

What changes need to occur for your desired habitat condition to become reality?

Need more money and time and a more complete investigation into a watershed approach.

Congressional commitment to fund needed studies and the fortitude to fund the projects.

Politicians and their staff should be involved in Mississippi River meetings.

People must be able to understand and interpret current information and objectives.

All doors must be open: there must be an open process of exchange that identifies conflicts and engenders an understanding of opposing viewpoints.

ACE is managing river resources under an outdated system; DOT, DNR, and/or the Coast Guard should be managing the river.

Regional management that fits into a national system: not mandates from Washington.

Need to establish a system to compensate the "losers" in the river system, such as the California water management scheme that predicts water shortages and notifies impacted individuals in advance.

What method of public participation would you prefer?

Public participation is vital even if governments view them as annoying gripe sessions.

Alternate methods of public participation need to be researched and evaluated (other than public meetings and focus groups).

Take a lead from USFS management of public (corporate and private) participation in forest management issues (i.e., Quincy library groups). There needs to be participation with an outcome.

Survey river users at museums, vistas, river festivals, boat ramps, etc.

Encourage youth involvement.

There's more interest out there than you'd think; presentations without a personal angle turn people off.

People need to be aware of how river changes will impact their lives.

A tour on an ACE inspection barge can really "do something to people" to get them interested in river issues.

Meetings should have concrete goals and objectives, not endless meetings that go nowhere.

Public participation efforts are failing; there is no feedback, no input.

Without feedback to the participants on the issues presented in the meetings, the meetings are a waste of time.

Public meetings are an "obfuscating process."

Unless bureaucrats are threatening some action, there is no point in going to a meeting.

What do you think of a web site with the ability to email the agencies?

There should be a repository of data compiled online for focus group participants to use to educate their constituencies that include questionnaires, virtual walk-throughs of habitats, etc. This should be compiled by someone who doesn't have everything internalized.

Try an internet game to create and send desired future habitat.

(general support of web site.)

What about focus groups such as this evening's meeting?

It's weird to REDUCE the number of participants involved in the process: a large cross-section of attendees is needed.

The media and people with a general interest in the topic should be allowed to listen in.

Focus groups can give a good cross-section of views and opinions.

This meeting would have been better if there had been a real product to react to.

What about open public meetings?

They can provide information and education to get people "in the door" for river management issues.

Effectiveness depends on how it's organized.

Organizations are overrepresented in relation to individuals.

Can't get people to attend without a controversy.

Be creative in scheduling meetings: i.e., after a river-related concert, give away door prizes.

These meetings are boring and scary.

How about meetings convened at river pools or reaches?

It is essential to focus on local problems and plans, but then stack that up so it makes sense stem to stern.

Fragmentation of river issues could be a problem with small pool groups.

Travel distance may be a problem for reach meetings.

Meetings should be held everywhere and have local topics but also a systemwide discussion.

What about participation on an individual project planning team?

This is good for raising awareness and appreciation.

Members of organized citizen groups should be asked to participate, as this would be a frustrating exercise for the average citizen off the street.

How often would you like to participate?

Quarterly.

Biannually.

Maybe once a month for a few months.

Evenings are best for participation of average citizens.

Final comments

I'm still reasonably confused about the accomplishments. Is this just data gathering? Where are we going?

The information gathered needs to be scientifically defensible.

Information relevant to consumers should be considered in developing public policy.

This meeting was a good experience, but there are still significant questions about the HNA. Do we get a copy of these notes?

What is the ultimate impact of this meeting process? The personal outcome is good, but what's the global impact?

People need to realize that the river has multiple uses and that it has to be managed for multiple uses.

I learned lots this evening, but I'm fuzzy on the end result of the process.

The \$1 million spent on the HNA is a sorry commentary when compared to the \$55 million navigation study.

The HNA is a sorry effort.

St. Paul (2) Notes

ST. PAUL (2), MINNESOTA

Friday, August 4, 2000 9:30 a.m. to noon Ten participants

Post-presentation question and answer session with the technical presenter

What is all this data being collected for?

Regarding pool plan development, what are the needs, what's happening?

Will there be funding for projects?

Will this do project prioritization?

Will it look at pool-by-pool needs?

You say this is on-going. What is the follow-on schedule for review, schedule of assessment?

You mentioned a rough schedule of approximately six years. Is that for a revised HNA product?

If over two years you spent \$1M on this project, can you forecast how many EMP dollars are targeted to this tool in the future? What will be the annual investment?

You just heard the presentation on the HNA. What did you think of it? Was it clear, understandable? Were any parts confusing? What was most important?

It was good. They glossed over the fact that habitat conditions are the product of physical conditions; flowing-not flowing, rising-not rising, fluctuating water levels, unique changes of flowing water. They could do a better job on emphasizing water conditions.

Habitat conditions are variable management conditions.

I was confused during the presentation. It appears to be about "static" conditions; there is no correlation to flow.

There was enough material presented for discussion and comment. Maybe I missed it, but I didn't hear or see any overall goal for the program, for what it is, that it supports the EMP. Specific goals and objectives that we should be thinking about.

We need to put ourselves in the position of a river rat. The resource managers are on to something. When are they going to provide a list of what is going to happen next?

Will the HNA define if there is anything we want or should do? All they showed us was designed to cut losses of aquatic habitat.

How the river takes care of itself over time, pool-by-pool makes sense, especially to a citizenbased commission.

There is a need to overcome the suspicion that there is a hidden agenda that the focus group was too selective.

Consider the outcome and expectations of those who rely on the river; learn if we need to make changes.

It is not clear if this is a process. It appears to want to establish goals. Look at the feasibility of anticipated goals and expected changes. Planning, zoning – what is going to have to happen to meet those goals. For example, low-flow impact on navigation, recreational boating, water intake for drinking water supplies of cities along the river. Changes have to be anticipated to account for river bounce.

Not just one goal; work together...what is balance.

It has to include balance.

If it cannot be attained due to economic or development constraints, then have to be realistic about attaining goals.

I expect the HNA to serve broader purposes: flood control, recreation, ecosystem, and navigation systems. We need to drive an integrated plan for all uses and what the trade-offs are, one alternative versus another.

I would like to see this (HNA) continue to develop to see what we can achieve on a large scale; I'd like to see more money for modeling on a small scale.

There is not a strong enough tie between upland problems and this effort. Dredging does not need to happen if we take care of upland problems.

Look at the Burnsville holding pond; they installed a clay liner, it blew the bluff out. Who makes these decisions?

Communities need more assistance.

We use the river as a storm sewer.

Lo-till and no-till farming practices have decreased input into the river, but we must still consider wind, rain, water flow.

What is the goal? Is it realistic? How much is in my control. Human impacts...

Plan for floods each spring, you should expect that with a river.

We have pretty maps, nothing substantial. I am uncomfortable with the Corps driving Habitat Needs Assessment. We need state involvement with adjacent communities input to develop the inputs that are driving the system.

Develop partnerships – DNRs, FWS, NRCS, USGS. Work together, it won't be perfect.

The Corps' districts know their customers, they listen well, they learn well. We are in better shape than we could be.

Are there factors other than the eight habitat types to consider?

To look at the system as a true system, you have got to simplify definitions. Simplify the layers.

That is what the HNA is trying to do...to try and help the whole become greater than the sum of its parts.

There are \$33M per year for this system built in the budget by Congress to work at the system scale. We will get much more participation at the local scale. We need to get more detail.

I like the local, pool focus plus the overall interrelationship between pools.

It can be dangerous to think "only my pool."

The focus is too narrow. That has been the criticism up to now, a very parochial perspective.

Habitats are specific to the corridor.

How do you address the interface to the uplands? What about development outside the corridor in the uplands?

How long has flood plain management been in place? Since the 1950s, 1960s?

Not sure...in some places it started in the 1920s and worked its way upstream.

You saw the model of the HNA process, four "bubbles" associated with the Habitat Needs. Can you name those four components? Does this seem like a reasonable approach to developing habitat needs?

Not enough information has been collected. People don't know enough about it to say. They are not projecting to get more information, yet I don't know how to get it either.

Are the data there? Should they go get it?

(With hesitation) It seems like there is no monitoring...just boats and motors. The focus is too narrow.

The catchword is "to restore the river." To what? Pre-settlement, pre-lock and dam, pre-sewage treatment? When?

What is the effort of HNA...to restore the river or to establish habitats?

So what are we going to do with historical information? There are 50 million people along the river now. It is different today, we can never go back.

Manage the river for habitat that is good to wildlife and to people.

What is the capacity to support?

Is this for management, protection...the data are at too coarse a scale. There is no expertise at a refined enough scale, no information out there.

Where should we go to get it?

To the public.

To management habitat with trends, looking at the variability is too coarse. It is good at a gross scale, but we need to go to the pool level. Can't do anything but look at trends at the system scale.

Are the habitat terms ok?

Check page 9, middle slide (Acres of main channel, secondary channel, connected backwater, etc.) If you are going to do pool planning, you should be able to get acreages by pool. What is the level of data available with this tool? If you can't get fine-grain data with this tool, then there will not be much gain with this tool.

What is included within the floodplain? Does it include levee farming?

The detail of the information in the HNA query tool is the most important information we need. We need to know the definition of the coverage of the natural floodplain.

They did a good job on the system quantity, but little about the quality of the habitat. I hope they get to describe the quality.

We need an inventory of organisms.

If the ongoing process is every six years, they need to fine-tune the information, for example buckthorn versus cardinal flower. Will they refine the information to be able to make those kinds of comparisons?

We need to know the scale and source of the data.

Please describe your desired future habitat conditions for the river in a brief statement.

Rely on comprehensive management plan. Restore the river to as naturally healthy an environment as possible. Support as many uses as possible.

More diversity of backwater depth and life forms – plants, animals (and fish).

Make sure to stabilize the river structures: bluffs and islands. You will take care of many problems if you don't let the bluffs and islands disappear.

"A river that works and a working river" to quote a publication title. I would like to see a naturally functioning river with a certain about of engineering for Navigation. There are ways to mimic the natural river that can also support economic purposes.

Multiuse. Don't want to see us to a restoration to "what"? If we never did anything to the river, what would it look like?

What is the type of healthy environment we want to create? Is it supposed to be like 100 years ago? That was a sanitation mess. We want to create something NEW, develop an environment that may not have been thought of.

The river is much better today.

I want a multiuse river with responsible management for water quality.

Specific regulations for specific limited uses, e.g, recreation, retreats, preserves.

Sufficient amount of habitat to continue and sustain biodiversity.

Make sure you have met the minimum habitat needs for the continuation of species and focus on instances where some may be close to the threshold.

Maintain a connected and sustainable riparian corridor that is rich with biodiversity, clean enough to swim in.

Naturally let the river maintain itself.

The function of management practices is multidimensional; not only to focus on navigation and agriculture.

Habitats are a function of condition.

What has to happen, what changes may need to be made to meet your desired future expectations?

We have to look at the end game, look at the infilling of pools with sediment and what impact that has on sustainability of habitat.

Prolonged aquatic life depends on these pools – as stated in the "Trends and Management" report.

Focus on the upland piece.

Sediment is killing the river; we need sediment management and management of the hypoxia plant.

It is a continuum. Before we used the river, it was healthy. Then we started to manage it for navigation. The more we mange it, the more degradation we caused to the ecosystem. We have to balance navigation with the ecosystem. Bring ecosystem management to the same level as navigation, otherwise, only navigation will survive and the ecosystem will continue to degrade.

Yes, we need to balance the ecology and navigation but you can't see it as only one or the other. There is common ground between stakeholders.

It is premature to identify changes. First we need to identify the species diversity, then the habitat needs to sustain them. Then let it be defined as to what needs to be changed. Can't answer that now.

There are "good and bad" uses of the river, we need to address balance.

Imbalance in the main stem are problems that would change if we would put time, effort, assets against upland or stop what is going on.

It is politically advantageous to look at the river but work from the upland...

Watershed level.

Education and regulation...for example, we used to dump motor oil, but we educated people not to do that. Similar results with sewage treatment...we didn't used to know any better.

Start at a young age.

What has happened due to levees. We farm the floodplain that is now behind the levees (83%).

It is an issue of farming versus floodplains.

Add to the balance concept the perspective of 150 to 200 years ago – there was no settlement that impacted the river. It is not that way today. Fifty million people impact the river. The magnitude of what we are dealing with is an issue. If we are going to balance among uses, we may have to sacrifice some for others. For example, ag development...should we do away with

it all? Only some? What are the impacts of leaving some versus restoring the floodplain other places?

Attitudes change, we need to bring awareness to the people of what the river is.

We need to place value on the ecosystem, what a river ecosystem is; not just a slough...provide respect for the river.

It used to be a highway to the ocean for our waste, attitudes are still changing.

We need an inventory of organisms so we have more awareness of what is there. Raise our level of understanding of the river to be equal with other ecosystems.

Are there any habitat types you prefer?

By definition, habitats are areas for others than humans. The more we find our own interactions with the river are an important factor. Humans are change agents. Our internal compass must be aligned with the river too. Don't overlook the human element. Animals don't change habitat.

Not just numbers of waterfowl, eagle counts, fish catch, sand bars...these are human value systems.

Mother Nature is a change agent accounting for the natural events such as floods, new deltas. Is the concept to restore to the way it was before Mother Nature changed anything or what? The channel used to move quite a bit. Will we let it move around?

Change to when? Where do you turn the clock back to? 1937? Pre-lock and dam?

Do we let natural events continue to let habitat change; for example, silt in the pools?

We have a good model with information requirements of organisms in their habitat; use the HNA tool to help make decisions. Develop a management system to maintain stable systems, but what is the best course of action? The natural sequence of events involves change.

We used to define a person who as "healthy" as being free from disease, but now we recognize that can be a continuum. The river without locks and dams is not necessarily a healthy river. What level of health do we want to restore?

Restore to what benchmark? It was a cesspool in 1937.

We forced sewage treatment.

We want to create something new.

Should there be public participation?

(Yes, all participants voted there should be public participation in the HNA process.)

Education must be a component.

There must be sufficient public participation to demonstrate to Congress the need to support habitat needs.

Send letters, put messages on television, hold forums.

Education is required. Understand the implications of decisions...how do we get people to be interested unless there is a disaster?

The commissioners are concerned that the HNA does not work through selective, hand-picked individuals. This arouses suspicion, breaks the faith.

There are advantages to this type of small meeting.

Yes, but we have developed a trust, respect for multiuser involvement. This is not a good way to continue to go. We are willing to offer to facilitate meetings at the district-level for the next generation of the habitat project on the ground as described by river management in the HNA/EMP.

Habitat prioritization framework process at the district level is still yet to happen.

The HNA is to be systemic but still go with pool-by-pool. For the HNA itself, fold into the process work at the ground level. Plan in place at each district for 300 mile reach to develop projects for candidate work-up through the process, including the HNA piece.

It is safer not to have a separate HNA workshop. Do it at the district level with a project-by-project, pool-by-pool approach.

What process would you use other than inviting known stakeholders?

County or local level administration – mayors, chief executives, watershed districts...you can't take the river out of the watershed...soil and water conservation districts, rod and gun clubs. Invite these people to get their folks to come.

What process would you use to get all to come?

Yes, how would you get them to show up?

Is there partnership with this initiative with pollution control, DNRs, major resource managers?

Where is the public? If it has personal impact, the public turns out.

Give them concrete information, is it a plan or a threat?

Have open, well-advertised public opportunities, even with focus groups.

There are museums along the river, NPS, FWS, USACE. Tap into the federal infrastructure to inform the public. Use this PowerPoint presentation at a kiosk in the museum with three or four questions for the public to answer.

Let Congress fund partnerships at museums.

Are people going to care?

It has to impact them at a personal level to be "catching."

You can impact the public, but do people care?

Do you think a web site with e-mail capabilities is a good idea?

Yes.

What about open public meetings?

(Sixty percent in favor, forty percent against by vote.)

The people must understand the significance of the meetings, I predict a low attendance, but there will always be the same stakeholders.

Perform a values assessment, learn what people care about.

Bring this up to congressmen and politicians.

Some people take comfort in knowing they are represented by a particular group at these types of meetings. For instance, they support Audubon, DNR...someone they believe is representing their interest...in other words they "pay" for their representation by support one group or another.

I beg do differ about the value of the river...it needs to be considered first, best, accessible...useful for more than boats.. it should be for swimming, fishing, it is magnificent.

I am concerned that what public involvement means to the public is that they enjoy that part of the river they are familiar with. It is different at Cape than Peoria, versus Wabash. Localized public involvement is what matters...we are trying to look at 1300 miles of river.

What about focus groups?

They are good, informative.

Where is this going? To what extent are people going to listen?

What is in the document so far? What is behind the curtain? What does the HNA look like, maps?

What has happened? What happened at the UMRCC approximately two years ago (referring to meetings held with Audubon.)

What about convening a group for each pool?

Yes, when ready.

What about by reach?

What is a reach?

The USGS has defined five geomorphically defined reaches.

(The group responses all fell in the "not so sure" to the "no" based on vote by show of thumbs.)

The reach is a larger distance, more difficult to attend due to the drive time.

There are other means of public involvement that could be done at the reach and system scale.

For example, you could go pool-by-pool, fold those into "pool meetings" where you overview what other pools are doing...thus get to a multipool level or reach.

Incorporate systemic/reach scale at the pool level.

Maybe not have separate public meetings.

Would you want to participate in individual habitat project planning teams?

Yes, if I got information on what to do.

How often would you want to participate?

It's part of my job...daily...

Well, if it was Pool 2- all or Pool 3, I would attend some meetings.

I have an interest in three pools in our area.

I would participate often locally, less often farther away, some...never.

It is issue driven rather than location.

What time of day would you like to participate?

(By vote: Morning = 5, Afternoon = 3, Evening = 2)

What time of day would the general public like to participate?

By vote, nine of ten said "Evening," with one non-respondent.

Please share your final statement.

The more information you can glean trends from is better.

Ecosystem and navigation system values should be treated equally. It used to be that navigation always came first.

This process is of little value unless it is coordinated with state agencies and other planning groups. Otherwise, I see it as a duplication of effort.

Emphasize balanced approach and treatment of all interests.

Goals should be forward looking, create something new rather than bring something back...don't look backward.

Balanced, achievable goals.

Visions close even in diverse groups.

The HNA is an ongoing program to provide the public with clear, usable information.

This is fragile due to political whims. Get the right data to the right people; we need to be comfortable the HNA is a working process.

I like the direction this is headed, I like the big picture. I would like to have data at a usable scale, both for the smaller area and larger scale.

I hope this isn't going to become an end in itself that perpetuates bureaucracy, not wheelspinning. I hope it really matters; that we keep validating this data is what is needed.

ATTACHMENT 4: MEETING EVALUATION

EVALUATION SHEET AND TABULATED RESPONSES

EVALUATION FORM

Upper Mississippi River System Habitat Needs Assessment Focus Group Meeting Series

Please take a few minutes to address the questions below using the following scale:

SA = strongly agree A = agree N = neutral D = disagree SD = strongly disagree

1.	The presentation helped me to understand the Habitat Needs Assessment process.	SA	А	N	D	SD
2.	I understand the goals of the Habitat Needs Assessment.	SA	А	N	D	SD
3.	The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	SA	А	N	D	SD
4.	The presentation effectively laid a foundation for the focus group discussions.	SA	А	Ν	D	SD
5.	The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	SA	A	N	D	SD
6.	The focus group duration was sufficient to allow my views to be expressed.	SA	А	Ν	D	SD
7.	I was given the opportunity to "hear and be heard."	SA	А	Ν	D	SD
8.	The facilitator provided effective support to the discussion.	SA	А	Ν	D	SD
9.	My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	SA	А	Ν	D	SD
10	. This focus group made good use of my time.	SA	А	N	D	SD

Please feel free to provide any additional comments on the back of this sheet.

Thank you very much for your time!

	Frequencies*							
Questions	SA	Α	Ν	D	SD	#		
The presentation helped me to understand the Habitat Needs Assessment process.	0	4	0	0	0	4		
I understand the goals of the Habitat Needs Assessment.	0	4	0	0	0	4		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	1	3	0	0	0	4		
The presentation effectively laid a foundation for the focus group discussions.	1	3	0	0	0	4		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	1	3	0	0	0	4		
The focus group duration was sufficient to allow my views to be expressed.	2	2	0	0	0	4		
I was given the opportunity to "hear and be heard."	2	2	0	0	0	4		
The facilitator provided effective support to the discussion.	1	3	0	0	0	4		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	0	4	0	0	0	4		
This focus group made good use of my time.	0	4	0	0	0	4		

PARTICIPANTS MEETING EVALUATION CAPE GIRARDEAU, MISSOURI

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree, # = number of responses.

	Percentages*							
Questions	SA	А	Ν	D	SD			
The presentation helped me to understand the Habitat Needs Assessment process.	0	100	0	0	0			
I understand the goals of the Habitat Needs Assessment.	0	100	0	0	0			
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	25	75	0	0	0			
The presentation effectively laid a foundation for the focus group discussions.	25	75	0	0	0			
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	25	75	0	0	0			
The focus group duration was sufficient to allow my views to be expressed.	50	50	0	0	0			
I was given the opportunity to "hear and be heard."	50	50	0	0	0			
The facilitator provided effective support to the discussion.	25	75	0	0	0			
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	0	100	0	0	0			
This focus group made good use of my time.	0	100	0	0	0			

PARTICIPANTS MEETING EVALUATION CAPE GIRARDEAU, MISSOURI

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree.

		Frequencies*						
Questions	SA	Α	Ν	D	SD	#		
The presentation helped me to understand the Habitat Needs Assessment process.	1	7	0	0	0	8		
I understand the goals of the Habitat Needs Assessment.	2	4	2	0	0	8		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	3	2	1	0	0	6		
The presentation effectively laid a foundation for the focus group discussions.	2	4	2	0	0	8		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	4	4	0	0	0	8		
The focus group duration was sufficient to allow my views to be expressed.	5	3	0	0	0	8		
I was given the opportunity to "hear and be heard."	7	1	0	0	0	8		
The facilitator provided effective support to the discussion.	6	2	0	0	0	8		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	3	5	0	0	0	8		
This focus group made good use of my time.	3	3	2	0	0	8		

PARTICIPANTS MEETING EVALUATION ST. LOUIS, MISSOURI

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree, # = number of responses.

	Percentages*							
Questions	SA	Α	Ν	D	SD			
The presentation helped me to understand the Habitat Needs Assessment process.	13	88	0	0	0			
I understand the goals of the Habitat Needs Assessment.	25	50	25	0	0			
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	50	33	17	0	0			
The presentation effectively laid a foundation for the focus group discussions.	25	50	25	0	0			
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	50	50	0	0	0			
The focus group duration was sufficient to allow my views to be expressed.	63	38	0	0	0			
I was given the opportunity to "hear and be heard."	88	13	0	0	0			
The facilitator provided effective support to the discussion.	75	25	0	0	0			
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	38	63	0	0	0			
This focus group made good use of my time.	38	38	25	0	0			

PARTICIPANTS MEETING EVALUATION ST. LOUIS, MISSOURI

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree.

	Frequencies*						
Questions	SA	Α	Ν	D	SD	#	
The presentation helped me to understand the Habitat Needs Assessment process.	0	1	5	2	2	10	
I understand the goals of the Habitat Needs Assessment.	3	3	2	2	0	10	
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	7	2	1	0	10	
The presentation effectively laid a foundation for the focus group discussions.	0	1	2	4	3	10	
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	1	5	1	1	2	10	
The focus group duration was sufficient to allow my views to be expressed.	1	7	1	0	1	10	
I was given the opportunity to "hear and be heard."	2	7	1	0	0	10	
The facilitator provided effective support to the discussion.	3	5	1	1	0	10	
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	1	3	3	1	1	9	
This focus group made good use of my time.	1	4	4	1	0	10	

PARTICIPANTS MEETING EVALUATION

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree, # = number of responses.

	Percentages*						
Questions	SA	Α	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	0	10	50	20	20		
I understand the goals of the Habitat Needs Assessment.	30	30	20	20	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	70	20	10	0		
The presentation effectively laid a foundation for the focus group discussions.	0	10	20	40	30		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	10	50	10	10	20		
The focus group duration was sufficient to allow my views to be expressed.	10	70	10	0	10		
I was given the opportunity to "hear and be heard."	20	70	10	0	0		
The facilitator provided effective support to the discussion.	30	50	10	10	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	11	33	33	11	11		
This focus group made good use of my time.	10	40	40	10	0		

PARTICIPANTS MEETING EVALUATION

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree.

ROCK ISLAND, ILLINOIS									
	Frequencies*								
Questions	SA	Α	Ν	D	SD	#			
The presentation helped me to understand the Habitat Needs Assessment process.	2	5	1	0	0	8			
I understand the goals of the Habitat Needs Assessment.	2	б	1	0	0	9			
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	7	2	0	0	9			
The presentation effectively laid a foundation for the focus group discussions.	4	4	1	0	0	9			
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	4	5	0	0	0	9			
The focus group duration was sufficient to allow my views to be expressed.	4	5	0	0	0	9			
I was given the opportunity to "hear and be heard."	5	4	0	0	0	9			
The facilitator provided effective support to the discussion.	6	3	0	0	0	9			
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	1	8	0	0	0	9			
This focus group made good use of my time.	4	5	0	0	0	9			

PARTICIPANTS MEETING EVALUATION ROCK ISLAND, ILLINOIS

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree, # = number of responses.

ROCK ISLAND, ILLINOIS									
	Percentages*								
Questions	SA	Α	Ν	D	SD				
The presentation helped me to understand the Habitat Needs Assessment process.	25	63	13	0	0				
I understand the goals of the Habitat Needs Assessment.	22	67	11	0	0				
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	78	22	0	0				
The presentation effectively laid a foundation for the focus group discussions.	44	44	11	0	0				
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	44	56	0	0	0				
The focus group duration was sufficient to allow my views to be expressed.	44	56	0	0	0				
I was given the opportunity to "hear and be heard."	56	44	0	0	0				
The facilitator provided effective support to the discussion.	67	33	0	0	0				
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	11	89	0	0	0				
This focus group made good use of my time.	44	56	0	0	0				

PARTICIPANTS MEETING EVALUATION ROCK ISLAND, ILLINOIS

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree.

	Frequencies*						
Questions	SA	Α	Ν	D	SD	#	
The presentation helped me to understand the Habitat Needs Assessment process.	1	7	3	1	0	12	
I understand the goals of the Habitat Needs Assessment.	0	б	5	1	0	12	
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	1	3	7	0	1	12	
The presentation effectively laid a foundation for the focus group discussions.	0	6	5	1	0	12	
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	2	6	4	0	0	12	
The focus group duration was sufficient to allow my views to be expressed.	6	5	1	0	0	12	
I was given the opportunity to "hear and be heard."	9	3	0	0	0	12	
The facilitator provided effective support to the discussion.	5	5	2	0	0	12	
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	1	5	4	0	2	12	
This focus group made good use of my time.	0	5	3	3	1	12	

PARTICIPANTS MEETING EVALUATION DUBUQUE (1), IOWA

*SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree, # = number of responses.

DUBUQUE (1), IOWA								
	Percentages*							
Questions	SA	Α	Ν	D	SD			
The presentation helped me to understand the Habitat Needs Assessment process.	8	58	25	8	0			
I understand the goals of the Habitat Needs Assessment.	0	50	42	8	0			
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	8	25	58	0	8			
The presentation effectively laid a foundation for the focus group discussions.	0	50	42	8	0			
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	17	50	33	0	0			
The focus group duration was sufficient to allow my views to be expressed.	50	42	8	0	0			
I was given the opportunity to "hear and be heard."	75	25	0	0	0			
The facilitator provided effective support to the discussion.	42	42	17	0	0			
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	8	42	33	0	17			
This focus group made good use of my time.	0	42	25	25	8			

PARTICIPANTS MEETING EVALUATION DUBUQUE (1), IOWA

	Frequencies*						
Questions	SA	Α	Ν	D	SD	#	
The presentation helped me to understand the Habitat Needs Assessment process.	1	7	0	0	0	8	
I understand the goals of the Habitat Needs Assessment.	2	б	0	0	0	8	
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	4	2	2	0	0	8	
The presentation effectively laid a foundation for the focus group discussions.	1	6	0	1	0	8	
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	1	7	0	0	0	8	
The focus group duration was sufficient to allow my views to be expressed.	4	3	1	0	0	8	
I was given the opportunity to "hear and be heard."	6	2	0	0	0	8	
The facilitator provided effective support to the discussion.	4	4	0	0	0	8	
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	2	5	1	0	0	8	
This focus group made good use of my time.	4	3	0	1	0	8	

PARTICIPANTS MEETING EVALUATION DUBUQUE (2), IOWA

DUBUQUE (2), IOWA							
	Percentages*						
Questions	SA	Α	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	13	88	0	0	0		
I understand the goals of the Habitat Needs Assessment.	25	75	0	0	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	50	25	25	0	0		
The presentation effectively laid a foundation for the focus group discussions.	13	75	0	13	0		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	13	88	0	0	0		
The focus group duration was sufficient to allow my views to be expressed.	50	38	13	0	0		
I was given the opportunity to "hear and be heard."	75	25	0	0	0		
The facilitator provided effective support to the discussion.	50	50	0	0	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	25	63	13	0	0		
This focus group made good use of my time.	50	38	0	13	0		

PARTICIPANTS MEETING EVALUATION DUBUQUE (2), IOWA

LA CROSSE (1), WISCONSIN								
	Frequencies*							
Questions	SA	A	Ν	D	SD	#		
The presentation helped me to understand the Habitat Needs Assessment process.	0	10	0	0	0	10		
I understand the goals of the Habitat Needs Assessment.	0	8	2	0	0	10		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	8	2	0	0	10		
The presentation effectively laid a foundation for the focus group discussions.	2	6	2	0	0	10		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	1	б	2	1	0	10		
The focus group duration was sufficient to allow my views to be expressed.	1	8	1	0	0	10		
I was given the opportunity to "hear and be heard."	4	6	0	0	0	10		
The facilitator provided effective support to the discussion.	7	3	0	0	0	10		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	5	4	1	0	0	10		
This focus group made good use of my time.	4	5	1	0	0	10		

PARTICIPANTS MEETING EVALUATION LA CROSSE (1), WISCONSIN

	Percentages*						
Questions	SA	А	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	0	100	0	0	0		
I understand the goals of the Habitat Needs Assessment.	0	80	20	0	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	80	20	0	0		
The presentation effectively laid a foundation for the focus group discussions.	20	60	20	0	0		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	10	60	20	10	0		
The focus group duration was sufficient to allow my views to be expressed.	10	80	10	0	0		
I was given the opportunity to "hear and be heard."	40	60	0	0	0		
The facilitator provided effective support to the discussion.	70	30	0	0	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	50	40	10	0	0		
This focus group made good use of my time.	40	50	10	0	0		

PARTICIPANTS MEETING EVALUATION LA CROSSE (1), WISCONSIN

	Frequencies*							
Questions	SA	Α	Ν	D	SD	#		
The presentation helped me to understand the Habitat Needs Assessment process.	2	5	2	0	0	9		
I understand the goals of the Habitat Needs Assessment.	0	4	2	3	0	9		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	4	4	1	0	9		
The presentation effectively laid a foundation for the focus group discussions.	2	4	2	1	0	9		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	7	2	0	0	0	9		
The focus group duration was sufficient to allow my views to be expressed.	0	8	1	0	0	9		
I was given the opportunity to "hear and be heard."	5	4	0	0	0	9		
The facilitator provided effective support to the discussion.	6	2	1	0	0	9		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	2	3	4	0	0	9		
This focus group made good use of my time.	2	4	3	0	0	9		

PARTICIPANTS MEETING EVALUATION LA CROSSE (2), WISCONSIN

LA CROSSE (2), WISCONSIN							
	Percentages*						
Questions	SA	Α	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	22	56	22	0	0		
I understand the goals of the Habitat Needs Assessment.	0	44	22	33	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	44	44	11	0		
The presentation effectively laid a foundation for the focus group discussions.	22	44	22	11	0		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	78	22	0	0	0		
The focus group duration was sufficient to allow my views to be expressed.	0	89	11	0	0		
I was given the opportunity to "hear and be heard."	56	44	0	0	0		
The facilitator provided effective support to the discussion.	67	22	11	0	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	22	33	44	0	0		
This focus group made good use of my time.	22	44	33	0	0		

PARTICIPANTS MEETING EVALUATION LA CROSSE (2), WISCONSIN

ST. PAUL (1), MINNESOTA								
	Frequencies*							
Questions	SA	A	Ν	D	SD	#		
The presentation helped me to understand the Habitat Needs Assessment process.	0	1	4	1	0	6		
I understand the goals of the Habitat Needs Assessment.	0	1	3	2	0	6		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	1	4	0	1	6		
The presentation effectively laid a foundation for the focus group discussions.	2	2	2	0	0	6		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	1	3	2	0	0	6		
The focus group duration was sufficient to allow my views to be expressed.	2	4	0	0	0	6		
I was given the opportunity to "hear and be heard."	3	3	0	0	0	6		
The facilitator provided effective support to the discussion.	3	3	0	0	0	6		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	1	1	3	1	0	6		
This focus group made good use of my time.	1	2	2	1	0	6		

PARTICIPANTS MEETING EVALUATION ST. PAUL (1), MINNESOTA

ST. PAUL (1), MINNESOTA							
	Percentages*						
Questions	SA	Α	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	0	17	67	17	0		
I understand the goals of the Habitat Needs Assessment.	0	17	50	33	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	17	67	0	17		
The presentation effectively laid a foundation for the focus group discussions.	33	33	33	0	0		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	17	50	33	0	0		
The focus group duration was sufficient to allow my views to be expressed.	33	67	0	0	0		
I was given the opportunity to "hear and be heard."	50	50	0	0	0		
The facilitator provided effective support to the discussion.	50	50	0	0	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	17	17	50	17	0		
This focus group made good use of my time.	17	33	33	17	0		

PARTICIPANTS MEETING EVALUATION ST. PAUL (1), MINNESOTA

	Frequencies*						
Questions	SA	Α	Ν	D	SD	#	
The presentation helped me to understand the Habitat Needs Assessment process.	0	8	2	0	0	10	
I understand the goals of the Habitat Needs Assessment.	0	б	2	2	0	10	
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	2	7	1	0	10	
The presentation effectively laid a foundation for the focus group discussions.	1	6	3	0	0	10	
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	2	8	0	0	0	10	
The focus group duration was sufficient to allow my views to be expressed.	4	6	0	0	0	10	
I was given the opportunity to "hear and be heard."	6	4	0	0	0	10	
The facilitator provided effective support to the discussion.	5	4	1	0	0	10	
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	1	4	5	0	0	10	
This focus group made good use of my time.	0	6	4	0	0	10	

PARTICIPANTS MEETING EVALUATION ST. PAUL (2), MINNESOTA

ST. PAUL (2), MINNESOTA							
	Percentages*						
Questions	SA	Α	Ν	D	SD		
The presentation helped me to understand the Habitat Needs Assessment process.	0	80	20	0	0		
I understand the goals of the Habitat Needs Assessment.	0	60	20	20	0		
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	0	20	70	10	0		
The presentation effectively laid a foundation for the focus group discussions.	10	60	30	0	0		
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	20	80	0	0	0		
The focus group duration was sufficient to allow my views to be expressed.	40	60	0	0	0		
I was given the opportunity to "hear and be heard."	60	40	0	0	0		
The facilitator provided effective support to the discussion.	50	40	10	0	0		
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	10	40	50	0	0		
This focus group made good use of my time.	0	60	40	0	0		

PARTICIPANTS MEETING EVALUATION ST. PAUL (2), MINNESOTA

Questions	SA	Α	Ν	D	SD	#
The presentation helped me to understand the Habitat Needs Assessment process.	7	55	17	4	2	85
I understand the goals of the Habitat Needs Assessment.	9	48	19	10	0	86
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	9	39	31	3	2	84
The presentation effectively laid a foundation for the focus group discussions.	15	42	19	7	3	86
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	24	49	9	2	2	86
The focus group duration was sufficient to allow my views to be expressed.	29	51	5	0	1	86
I was given the opportunity to "hear and be heard."	49	36	1	0	0	86
The facilitator provided effective support to the discussion.	46	34	5	1	0	86
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	17	42	21	2	3	85
This focus group made good use of my time.	19	41	19	6	1	86

PARTICIPANTS MEETING EVALUATION

	Percentages*				
Questions	SA	Α	Ν	D	SD
The presentation helped me to understand the Habitat Needs Assessment process.	8	65	20	5	2
I understand the goals of the Habitat Needs Assessment.	10	56	22	12	0
The Habitat Needs Assessment will lead to better planning decisions concerning the future of the Upper Mississippi River System.	11	46	37	4	2
The presentation effectively laid a foundation for the focus group discussions.	17	49	22	8	3
The Habitat Needs Assessment presenter was responsive to questions about the Habitat Needs Assessment.	28	57	10	2	2
The focus group duration was sufficient to allow my views to be expressed.	34	59	6	0	1
I was given the opportunity to "hear and be heard."	57	42	1	0	0
The facilitator provided effective support to the discussion.	53	40	6	1	0
My input at this focus group meeting should be useful to habitat planning in the Upper Mississippi River System.	20	49	25	2	4
This focus group made good use of my time.	22	48	22	7	1

PARTICIPANTS MEETING EVALUATION

WRITTEN COMMENTS – ALL LOCATIONS					
Meeting Location	Comment				
St. Louis	(Two people did not circle a response for question 3, instead writing "hopefully.")				
	In addition to being able to provide input, it was very educational as to the focus of the EMP which I was not familiar with prior to this meeting				
Peoria	(On person wrote "hopefully" next to question 3.)				
	 No lead time to prepare for this meeting. One day's notice when mailed to me. Very disappointed in how this was presented. Window dressing. The general public would be hard pressed to participate in a meaningful discussion on the material presented during this meeting. Keep the information simple always send out meeting background material prior to the meeting taking place so participants can be better prepared. Better info needs to be provided read-ahead. Inappropriate questions being explored as part of 				
	HNA focus group more appropriate to EMP itself. A lot of talk, very little action.				
	The discussion would have been far more productive if led by agency personnel more knowledgeable of the program and issues. I was disappointed that the agencies were not present during the discussion. I hope this discussion is not just "window dressing."				
Dubuque 1	(One person wrote "hopeful" next to question 3.)				
-	We have attended many of these meetings with no results.				
	One person was overbearing and disruptive. This diminished the effectiveness of the session.				
Dubuque 2	(One person wrote "hopefully" next to question 3.)				
La Crosse 1	(One person wrote "I hope!" next to question 9.)				
La Crosse 2	(One person wrote "if this information is used" next to question 10.)				
St. Paul 1	I disagree that this focus group made good use of my time because the HNA process is so screw up and the agnecies involved demonstrate so little response to public input				
St. Paul 2	(One person wrote "hopefully" next to question 9.)				
	It remains to be seen whether the HNA will lead to better planning decisions what has been done so far is not "broke" so we should not spin our wheels on trying to "fix it."				

PARTICIPANTS MEETING EVALUATION