+UPPER MISSISSIPPI RIVER COMPREHENSIVE PLAN FOR SYSTEMIC FLOOD DAMAGE REDUCTION AND ASSOCIATED ENVIRONMENTAL SUSTAINABILITY

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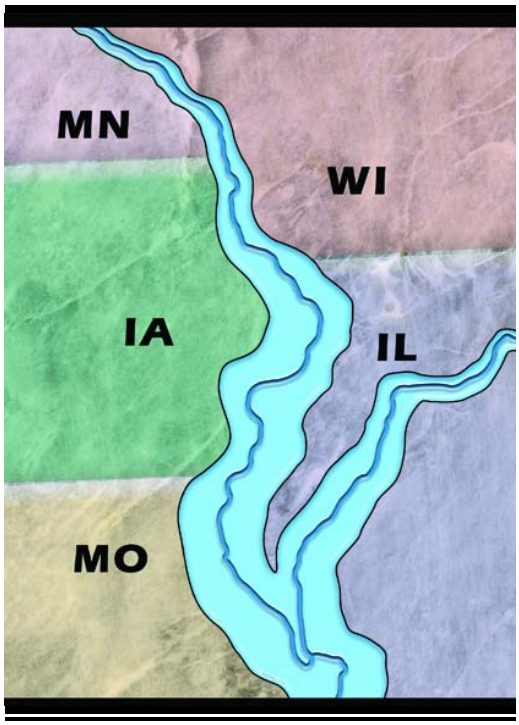

APPENDIX F

PUBLIC INVOLVEMENT

Prepared by the
U.S. Army Corps of Engineers
Rock Island, St. Louis, and St. Paul Districts
May 2006

UPPER MISSISSIPPI RIVER COMPREHENSIVE PLAN FOR SYSTEMIC FLOOD DAMAGE REDUCTION AND ASSOCIATED ENVIRONMENTAL SUSTAINABILITY

APPENDIX F

CONTENTS

I. PUBLIC COORDINATION, VIEWS, AND COMMENTS 1

A. Coordination 1
1. Website. 1
2. Collaboration Team. 1
a. Current UMR Comprehensive Plan Collaboration Team. 2
b. Collaboration Team Meetings and Conference Calls. 3
3. Newsletter. 3
4. Open Houses. 3

B. Public Views and Comments 5

II. SUMMARY 6

TABLES

Table F-1. Response Summary by Issue Category 5
Table F-2. List of Measures from the Public for Flood Damage Reduction 7

UPPER MISSISSIPPI RIVER COMPREHENSIVE PLAN FOR SYSTEMIC FLOOD DAMAGE REDUCTION AND ASSOCIATED ENVIRONMENTAL SUSTAINABILITY

APPENDIX F

PUBLIC INVOLVEMENT

I. Public Coordination, Views, and Comments

Throughout any study, the Corps of Engineers strives to inform, educate, and involve the many groups that may have an interest in the study. This coordination is paramount to assuring that all interested parties have the opportunity to be part of the study process.

One process used for coordination is the public involvement process, which is the exchange of information with various segments of the public. The public involvement process attempts to reduce unnecessary conflict and achieve consensus. The goal of public involvement and coordination is to open and maintain channels of communication with the public in order to give full consideration to public views and information in the planning process (Engineer Regulation 1105-2-100, Appendix B – Public Involvement, Collaboration and Coordination).

Throughout the study, an effective public involvement program must identify and respond to as many affected publics as possible and consider their input in the study's decision-making process. Content analysis is the method employed to identify public opinion, study concerns, and potential controversy. This method ensures that the public involvement plan is responsive to the level of interest and concern expressed by the public, and it assesses the effectiveness of the public involvement techniques.

This section summarizes the public involvement activities that occurred during this study.

A. Coordination

1. Website. A website was developed at the beginning of the study to provide information to those with an interest in the Upper Mississippi River Comprehensive Plan. The website was the main forum for communicating study information to the general public. The website included maps; study-related documents, reports, and other related links; announced the public open houses and provided a summary of the open houses; and listed contact information for team members. The website address is www2.mvr.usace.army.mil/UMRCP/.

2. Collaboration Team. Interaction with the Collaboration Team (CT) provided a source of extensive public involvement. In August 2002, the CT was formed, consisting of representatives from Federal and State Government agencies and certain non-governmental organization representatives who have significant responsibilities for or interest in various aspects of floodplain management, particularly flood damage reduction, economic development, natural resources, and recreation.

The team has worked with the Product Development Team throughout the duration of the study. The CT provides comment and input on identifying, validating, and prioritizing system-level problems, needs, and opportunities; measures and strategies (called philosophies); and alternative plans. The members of the CT help to facilitate project coordination and communication efforts, particularly with respect to their particular agencies, organizations, and publics.

a. Current UMR Comprehensive Plan Collaboration Team. The current Upper Mississippi River Comprehensive Plan Collaboration Team is presented below.

Federal Representatives

- Ken Hinterlong, Federal Emergency Management Agency (FEMA), Region V, Chicago, IL*
- Richard Leonard, FEMA, Region VII, Kansas City, MO *
- DaveEllis, U.S. Fish and Wildlife Service (USFWS), Annada, MO
- Bob Clevenstine, (USFWS), Rock Island Field Office, Rock Island, IL*
- Dick Steinbach, USFWS, Quincy, Illinois
- Jon Kauffeld, USFWS, Region 3, Fort Snelling, MN *
- Tim Yager, USFWS, Region 3, Fort Snelling, MN
- Bill Franz, U.S. Environmental Protection Agency, (USEPA)Region 5, Chicago, IL *
- Larry Shepard, USEPA, Region 7, Kansas City, MO
- Bob Goodwin, U.S. Department of Transportation, Maritime Administration *
- Rich Worthington, U.S. Army Corps of Engineers (USACE) – Headquarters, Washington, D.C. *
- Greg Ruff, USACE, Mississippi Valley Division, Vicksburg, MS *
- John Barko, USACE - Engineer Research and Development Center, Vicksburg, MS *

State Representatives

- Gary Clark, Illinois Department of Natural Resources (DNR) *
- Arlen Juhl, Illinois DNR *
- Paul Osman, Illinois State Floodplain Management, Illinois DNR *
- Bill Cappuccio, Iowa DNR *
- Tim Schlagenhaft, State of Minnesota *
- George Riedel, Missouri State Emergency Management Agency *
- Mike Wells, Missouri DNR
- Charlie DuCharme, Missouri DNR
- Gretchen Benjamin, Wisconsin DNR *

Non-Governmental Organization Representatives

- Kim Robinson, Upper Mississippi, Illinois, and Missouri Rivers Association *
- Mike Klingner, Upper Mississippi, Illinois, and Missouri Rivers Association *
- Dave McMurray, Upper Mississippi, Illinois, and Missouri Rivers Association *
- Heather Hampton-Knodle, Upper Mississippi, Illinois, and Missouri Rivers Association
- Holly Stoerker, Upper Mississippi River Basin Association *
- Mark Beorkrem, Mississippi River Basin Association *
- Jennifer Frazier, American Land Conservancy *
- Michael Reuter, The Nature Conservancy *
- Owen Dutt, American Heritage Rivers *

Primary Collaboration Team members are identified with an asterisk. Alternate members also receive Comprehensive Plan information.

b. Collaboration Team Meetings and Conference Calls. A total of seven meetings and three conference calls have been held with the CT. Major topics of discussion at the CT meetings and conference calls are as follows:

- August 2002 Status update, problems, and objectives (conference call)
- October 2002 Status update, problems, objectives, and flood damage reduction measures
- December 2002 Status update, objectives, and measures
- April 2003 Status update, plan philosophies, and flood damage reduction measures
- June 2003 Status update, philosophies, screening, and ecosystem measures
- October 2003 Status update, existing conditions of levees (conference call)
- December 2003 Status update (conference call)
- February 2004 Alternative plans and Emergency Action Scenarios
- April 2004 Emergency Action Scenarios and alternative plans
- January 2005 Emergency Action Scenarios and alternative plans
- September 2005 Discussion of draft conclusions (conference call)
- 2006 Discussion of draft conclusions and recommendations (conference call)

3. Newsletter. An Upper Mississippi River Comprehensive Plan newsletter was developed in August 2002 and mailed to over 10,000 individuals, including congressional representatives; Federal, State, county, and city agencies/representatives; levee and drainage districts; environmental groups; businesses; the media; and the general public. The newsletter provided a study background, described the study area, announced the upcoming public scoping open houses, and listed the study's website address. A comment sheet was attached to the newsletter for those who would not be able to attend one of the open houses and wished to provide comments. A copy of the newsletter is provided at the end of this section.

4. Open Houses. In September 2002, the St. Paul, Rock Island, and St. Louis Districts hosted a series of four public open houses relating to the Upper Mississippi River Comprehensive Plan Study. The objectives of the open houses were to meet with the public to discuss the scope and purpose of the study; to obtain input to further identify floodplain problems, needs and opportunities; to help refine the list of potential flood damage reduction measures and alternatives that will be considered during the study; and to fulfill the National Environmental Policy Act's scoping requirements.

The open houses were held on September 9th in St. Louis, Missouri; September 10th in Quincy, Illinois; September 11th in Peoria, Illinois; and September 12th in Dubuque, Iowa. The open houses were announced in the study newsletter, on the study's website, and in a news release, which was distributed to broadcast and print media in the study area. A copy of the news release is provided at the end of this section.

Two identical open house sessions were held at each location from 2-4 p.m. and from 6-8 p.m. Providing two sessions allowed ample opportunity for the public to visit, and for attendees to come and go as they wished.

Photograph F-1. September 9, 2002, Open House held in St. Louis, MO.

Study team members from the project management/plan formulation, hydraulic and hydrologic engineering, economics, and environmental work groups were present at the open houses to provide information and to answer questions on a one-to-one basis. Numerous displays provided a general study overview; highlighted problems and opportunities identified to date; and presented hydraulics and hydrology, economics, and environmental information. Handouts with additional study-related information also were available.

Total attendance for all locations was 105 (St. Louis, 30; Quincy, 26; Peoria, 21; Dubuque, 28).

Comments received before, during, and after the open houses are discussed in Section 6.1.1 below.

B. Public Views and Comments

Opportunities for public input were made available via the study newsletter comment sheet, the open house comment sheet, by email, and by correspondence through the postal service. All written comments submitted were sorted by theme and organized into 11 categories: erosion; siltation; sedimentation; ecology and natural resources; water quality; river issues; structural measures; non-structural measures; development; water control; other issues. These categories describe what, according to the public, were the major problems, opportunities and concerns that needed to be investigated as part of the Comprehensive Plan Study.

The 138 response forms received generated 827 separate comments. Table F-1 presents the number of comments submitted by category.

Table F-1. Response Summary by Issue Category

Category	No. of Responses
Erosion	21
Siltation	22
Sedimentation	19
Ecology and Natural Resources (wildlife & aquatic habitat, wetlands, backwater restoration, bottomland forests)	167
Water Quality (pollution)	31
River Issues (dredging, channelization)	33
Structural Measures (add or eliminate - levees, floodwalls, locks & dams, wing dams, reservoirs, upland ponds, containment areas)	187
Non-structural Measures (buyouts, easements, farming & conservation practices, crop programs, mitigation, upland treatments, buffer strips)	116
Development (restrict, relocate, remove structures in floodplain)	56
Water Control (backwater storage, runoff in watershed, water level management)	48
Other Issues (general opinions and study issues)	127
Total	**827**

Overall, feedback obtained from this public outreach effort indicated that:

1. the following major problems and opportunities need to be addressed by the study:
   - ecology and natural resource issues (loss of wetlands and wildlife areas, or the opportunity to restore and increase wetland and habitat areas)
   - structural measures (enhance levees, floodwalls, containment areas protecting floodplain areas, or the opportunity to remove them and improve the environment)
   - non-structural measures (problem of obtaining funding for buyouts, easements, etc., which is also an opportunity to acquire more land to set aside for floodplain and habitat use)
   - water control (problems of backwater storage, runoff in watershed, water level management, or opportunity to develop methods for handling flood water distribution)

- development (restricting, relocating, removing structures in the floodplain, which in turn allow for more land to be returned to floodplain use)

2. methods for reducing flood damages within floodplain areas should be investigated and center around:

- structural measures (raise or lower levees, build new levees; or remove and reconnect river to natural floodplain)
- ecology and natural resources (restore natural habitats to act as buffers, store flood water, and improve water quality)
- non-structural measures (buyouts, easements, farming and conservation practices, crop programs, upland treatments, mitigation)
- floodplain development (restrict, relocate, or remove)
- water control (backwater storage, runoff in watershed, water level management)

Table F-2 following **II. Summary,** presents every public comment of methods and measures for reducing flood damages which was used to develop the summary list of flood damage reduction measures presented in the Main Report.

3. structural measures for reducing flood damages were viewed as the most detrimental to the ecosystem, followed by issues of river dredging and channelization.

4. non-structural measures were viewed as having mostly positive effects on the ecosystem, followed by ecology and natural resources with restoration of wetlands and habitat. Structural measures viewed as being positive reflect the opinions that removing them would increase the floodplain and create more wetlands.

5. major environmental concerns in the floodplain areas are ecology and natural resources, water quality, sedimentation and siltation.

II. Summary

The recommended plan for the Upper Mississippi River Comprehensive Plan Study was influenced by the public involvement process. Throughout this study, the techniques selected in the public involvement plan—newsletter, website, and open house, in conjunction with the CT meetings—allowed for coordination with the public and provided an opportunity for valuable public input.

Table F-2. List of Measures from the Public for Flood Damage Reduction

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
All methods should be reviewed. Raising existing levees and constructing new ones in urban areas should be a high priority in combination with removal of certain levees that have important habitats behind them.
Focus should be on stopping the water before it gets out into the floodplain area.
Drainage area is vast area that feeds water to main rivers. This is where the water must be held-up or stored.
Raise the levees.
Require greater storm water retention in major urban areas.
Remove levees to allow the river to connect to it's "natural" flood plain.
Explore ways to slow down water velocities.
Investigate methods to contain water (storage) during flood periods and increase permeability of adjacent soils.
Eliminate or widen out any constrictions in the waterway (i.e.. Bridges and culverts).
Use of breaching areas or overflow levees to allowed heavy floods to escape the confines of the river and engulf low lying farm fields away from populated areas should be seriously considered. The cost to federal government to pay farmers for lost crops
Upland storage through wetland restorations and water control structures.
Raise all levees by dredging dirt from the channel; pumping onto islands only creates more problems.
I am considering at this time the return to the active floodplain large areas now protected by levees from floods.
The massive problems involved by large levees is again illustrated by the recent Chinese flooding.
Make the levees higher or make the farmland on the other side higher.
Lower levees and reconnect the backwater areas to the main river.
Lower or remove levees in selected rural areas
Raise levee heights.
Investigate slow-release water dams at water origin.
Investigate permanent water dams (lake formations).
Permit levees to be built to protect unleveed ground.
Refuse to permit current leveed districts to raise their levee; and don't allow sandbagging to temporarily raise levee height during high river stages.
Streams directly contributing to river flow should have bank stabilization projects (straightening, riprap, buffer areas).
Removing levees for restoration of storage of flood water in the floodplain.
Existing & proposed levees will, if constructed as planned, turn the last 50 miles of the Missouri River into a narrow channel with walls to the 500-yr flood level, creating an unnatural chute that will force floodwaters at the Illinois side of the Mississippi River
Structural measures are appropriate for certain areas, and in some cases might even be wise to increase height of existing structures.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
Ag levees in federal system should be capped at their current height; non should be raised to an industrial level or higher.
Riprap, revetments, stone dikes and wing dams should be considered as last resorts when all other methods have failed.
Oppose increasing size of locks & dams as they will not solve flood damage problems in the river systems.
Address impact of past, present and proposed river engineering projects on flood heights.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
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Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Urge Corps to diverge from traditional strategies of flood damage reduction with levees, floodwalls, and channelization in light of new scientific studies and understanding of the value of natural floodplains.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Remove levees-allow river to flood into its floodplains; less water will move downstream and into adjoining communities; set back industrial levees to 1500' from ordinary high water mark to allow for an escape valve for flood water.
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Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Corps has encouraged use of levees and structural flood control measures to promote floodplain development, thus creating "house of cards" which is waiting to fall.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Mississippi River ecosystem has been severely impacted by flood damage reduction and navigation structures. UMRCPS should recognize this and focus on preventing further degradation of the resource.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Flood damage reduction and navigation structures have severely impacted Miss. River ecosystem. UMRCPS should recognize this and focus on preventing further degradation of the resource.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Remove levees-allow river to flood into its floodplains; less water will move downstream and into adjoining communities; set back industrial levees to 1500' from ordinary high water mark to allow for an escape valve for flood water.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
Floodplain is being developed at alarming rate, adding to need to increase levee heights. Pressure to protect new investments will force Fed. Gov't to raise the L-15 levee to and 100-yr or 500-yr level.
Stop building wing dams and eliminate specific existing wing dams that are not significant to current navigation traffic. Do not build new locks and dams because of their systematic effects.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
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Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
River system on the Mississippi has been impacted a lot by flood damage reduction and navigation structures.
Mississippi River ecosystem has been severely impacted by flood damage reduction and navigation structures. UMRCPS should recognize this and focus on preventing further degradation of the resource.
Consider all impacts of raising the Missouri River Levee System Unit L-15 & impact of higher levees in the confluence area, and possibility of commercial and industrial development.
Don't raise ag levees to 100-yr flood protection or higher to allow industrial or residential development.
Existing infrastructure in metropolitan areas such as St.Louis should be maintained to protect existing infrastructure.
Increase funding for mitigation buy out and relocation.
Create an appropriation and staff that would purchase floodway properties as they come up for voluntary sale.
Appropriate funds to buy all current homes etc. within one mile.
Reduce silt by upland soil conservation.
Remove 100 ft. buffer strips of natural vegetation in UMR basin tributaries.
Property buyout of areas within the floodplain. Turn into recreational areas with no permanent structures and minimal paved area.
Widespread application of 2002 Farm Bill conservation practices.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
Move the idea of a floodplain area farther back in the river's bluff; extend it to the headwaters and drain area of tributaries.
More row crop acres, tiled out wetlands are major factors.
Pay farmers not to farm along the levees for a year and do the dredging; wildlife and trees will not be damaged.
Counties and communities in Wisconsin are being required to develop all hazard mitigation plans.
Flood proofing municipal services such as water and sewage systems would also help reduce flood damage in riverine communities.
Farmland tiling, inadequate use of cover crops, lack of use of conservation farming techniques, and urban paving all served to flush the watershed quickly and put more water in the system than it can handle.
High water holding areas in unleveed riverbottoms, with compensation to landowners.
Eliminate government subsidies for flood damage to crops and structures in floodplain.
Look for ways to enhance the buffering ability of the lowland areas-perhaps by building ponds in addition to the marshes or perhaps simply enlarging them.
Address flood damage reduction needs by embracing non-structural alternatives, such as creation, relocation, redesigning the levee system to allow the inundation of low-value lands and support the UMR basin's sustainability goals.
Non-structural methods of flood damage reduction should be considered the top priority of this comprehensive plan and the default method of flood damage reduction for the UMR.
Fund new programs for UMR that provide opportunities to purchase land and conservation easements from floodplain landowners.
Any proposal to protect and area using a levee or other structural method should be required to compensate by opening up a previously protected area to floodwaters.
As much as practicable, bank caving and erosion should be managed using natural bank vegetation and bottomland forest restoration.
Restoration of river backwaters is key part of flood damage reduction for floodplains of UMR & IWW.
Support government buyouts of flood prone properties-emphasize restoration of backwater areas and development of wildlife refuges to aid in flood water distribution.
Promote non-structural measures; acquisition of floodplain land; conservation easements.
Reinforce strict adherence to avoid/minimize/compensate hierarchy concerning impacts to wetlands.
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Reinforce strict adherence to avoid/minimize/compensate hierarchy concerning impacts to wetlands.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
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Reinforce strict adherence to avoid/minimize/compensate hierarchy concerning impacts to wetlands.
Put emphasis on management alternatives / non-structural means to handle water in the floodplains (i.e. wetland re-creation, relocation, redesigning levees to allow inundation of low-value lands, support UMRB's environmental sustainability goals)
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Promote non-structural measures; acquisition of floodplain land; conservation easements.
Reinforce strict adherence to avoid/minimize/compensate hierarchy concerning impacts to wetlands.
COE has ignored concept of using rivers natural floodplains as effective flood control; must make non-structural flood control measure integral part of UMRCP study.
Promote non-structural measures; acquisition of floodplain land; conservation easements.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
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Purchase ag lands in floodplains and do not levee them or farm them. Purchase easements through Wetlands Reserve Program. Use set-aside programs to eliminate development in sensitive areas. When possible, floodplains and riverine wetlands should be purcha
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Increasing flood damages, flood plain development.
Problem: building of levees and floodwalls in floodplains
Would flood damages described on displays be less without levees or with lower levees that allow flooding to occur at certain elevations.
Levee is too narrow and too low, and needs a 40-50-foot top.
Levees don't protect at a high enough level to allow industry to locate along this section of river. Providing protection helps industry plus the environment.
Problem: can't continue to build higher levees
Opportunity: develop program of control gates in levee.
Lower levees and reconnect the river to the floodplain.
Problem: deciding when it becomes uneconomical in the long-run to maintain and build levees
Solve problems by building bigger and better levees.
Too much of main channel is leveed.
Wing dams and other navigational structures expanding the navigation system.

What methods for reducing flood damages within the floodplain area (between riverbank and bluff) do you think should be investigated as part of this comprehensive study?
Coordinated flood damage reduction program for whole system can properly assess system-wide benefits of non-structural options.
Problem: finding funds for buyouts, easements & wetland restoration.
Opportunities: more buyouts, easements and habitat programs
Opportunity: develop agreements with farmers to flood land for payment
Opportunity: land acquisition/set aside for floodplain
Opportunity: reduction in governemtn subsidies for land and buildings that are repeatedly flooded
Opportunity: how to keep more water upland (and out of the river).
Ways to remove water from areas protected by levees when the river is high for extended periods of time.
Raise levees to 500-year elevation.
The Corps of Engineers knows exactly what needs to be done.
Raise levees to 500-year elevation.
Use dredged material from river on levees.
Limit insurance and government aid availability within the protected area; those who build there do so at own risk.
Raise the levees equally on both sides.
All the locks and wind dams need repaired or redone.
The fast runoff caused by additional concrete and asphalt.
Investigate the Corps' Missouri River Plan that would crease disaster for landowners along the Mississippi River during spring flooding.
Evaluate increasing dredge work in backwater areas to both increase floodwater conveyance and promote habitat areas.
Evaluate floodway by-passes at locks & dams and other restrictions with secondary levees set back from existing levees.
Retrieval of lost water storage where siltation has filled in these areas through dredging.
Raising or strengthening levees; setback levees
Dredging of main or side channel.
For sustainable protection, measures in the upstream and downstream part of river need to be
Statistical analysis of river flow chart every 5 years will be a good idea.
Evaluate methods to improve collection and disposal of storm water runoff to prevent interior flooding.
Consider improving the construction of levees to prevent huge sand deposits from ruining land in the event of overtopping.
Stockpile flood fighting materials for both protected and non-protected areas of the waterway. Items such as temporary dikes, barriers and related materials, if readily available, would prevent damage in many areas, especially communities.
Improvement in barge fleeting areas and tow waiting areas would reduce streambank erosion and improve stability of other flood prevention systems.