

MEMORANDUM FOR RECORD

SUBJECT: Meeting Summary of River Resources Coordinating Team, February 14-15 2008.

1. A meeting of the River Resources Coordinating Team was held on February 14th 1:00-5:00 and February 15th from 8:30-12:00 in the Rock Island District, Conference Rooms ABC. The agenda is provided as Attachment 1. The following individuals participated in the meeting:

Eric Schenck	Ducks Unlimited
Jim Mick (via phone)	Illinois Department of Natural Resources
Bob Schanzle (via phone)	Illinois Department of Natural Resources
Mike Griffin	Iowa Department of Natural Resources
Mark McNally (via phone)	Mid-American Port Commission
Janet Sternburg	Missouri Department of Conservation
Bob Dean	Natural Resources Conservation Services
Doug Johnson	NRCS
Steve Higgins	NRCS
Brad Walker	Prairie Rivers Network
Roger Perk	USACE
Scott Whitney	USACE
Angie Freyermuth	USACE
Marvin Hubbell	USACE
Karen Hagerty	USACE
Chuck Theiling	USACE
Kenny Brenner	USACE
Chuck Spitzak	USACE
Ken Barr	USACE
Mark Cornish	USACE
Nicole McVay	USACE
Jodi Staebell	USACE
Sandra Brewer	USACE
Steve Johnson	USACE
Gary Swenson	USACE
Jon Klingman	USACE
Hank DeHaan	USACE
Tim Fiscus	USACE
Brad Thompson	USACE
Debi VanOpdorp	USACE
John Betker	USACE
Bob Clevestine	USFWS - RIFO
Jon Duyvejonck	USFWS - RIFO
Ed Britton	USFWS - Upper Mississippi River NW&FR
Jim Fischer (via phone)	Wisconsin Department of Natural Resources

2. **District Engineer perspective on the RRCT and organizational structure** (Col. Robert Sinkler) (handouts attached – Attachments 2, 3, & 4)

- a. The upper Mississippi basin is broken down into smaller hydrologic unit codes.
- b. 3 main areas along the Mississippi identified on the exhibit as interagency management units. The Illinois River will have one interagency management team called the Illinois River Coordinating Council (currently being created).
- c. Although the RRCT has historically concentrated on the Mississippi River, the guidance documents for RRCT suggest addressing issues on the Mississippi River tributary waterways. Would this be a logical niche for the RRCT?
- d. The RRCT should coordinate/consult upon activities along the Mississippi River and all insular activities.
- e. Should the RRCT be a leadership organization? RRCT has expanded over the years and the growth of the organization will continue. Look for the RRCT to be more heavily involved, broadened, and expanded. Its future membership may include having elected officials, university representation, and other agencies. RRCT will need to decide how it wants to expand.
- f. Questions and follow on comments
 - o Mike Griffin made the comment that the State of Iowa has hired a Watershed Coordinator. Although the position will concentrate on water quality interests and target small watersheds, there may be an opportunity for the coordinator to be involved with RRCT.
 - o Col. Sinkler provided a list of the watershed groups.
 - o Col. Sinkler explained the architecture of the Mississippi River Council.
 - o Col. Sinkler stated that he does not have a timeline for RRCT changes and stated that all of the interagency management groups are at different levels of maturity and organization.

3. NESP and Institutional Arrangements (Ken Barr/Chuck Spitzak)

(PowerPoint Presentation and handout attached – Attachments 5 & 6)

Ken Barr and Chuck Spitzak presented on NESP and the institutional arrangements for implementation.

- a. A question was asked if the institutional arrangements have changed. Chuck S. said that the composition of the River Council is as authorized but is not final. More discussion is to follow in the future. Ken B. gave the example of FWIC as an advisory committee.
- b. A comment was made that it seems that private interest and industry input would help in developing consensus. Chuck S. said that NGO's are allowed to participate at an advisory level.
- c. A comment was made that it would not be beneficial to 'retread' over already covered areas. Marv Hubbell commented that this is not 'retreading' but identifying the types of processes that are required in a geomorphic reach.
- d. A comment was made that this process could spend the entire budget asking if something should be done. Chuck S. said that projects need to be identified now in order not to hold up the process.
- e. Ken B. mentioned that RRCT and RRAT should be having a combined meeting in summer 08. The co-meeting should be able to identify inter-group arrangements. There

may be opportunities to also meet with the RRF and the new Illinois River Working Group. Although RRCT may not meet before the inter-group summer meeting, RRCT should work out proposed inter-group relationship before the summer meeting.

- f. TASK – Organize joint meeting between RRCT and RRAT. Ken Barr and Drew Savage Rock Island. Brian Johnson St. Louis.

4. Illinois 519 Program Update and Starved Rock Critical Restoration Project (Hank DeHaan) (PowerPoint Presentation attached – Attachment 7)

Hank DeHaan presented on the Illinois 519 program and gave an overview of the Starved Rock Critical Restoration Project.

- a. A question was asked of land ownership in the starved rock project. Hank answered that the land is mostly owned by the state. The Starved Rock project is focusing on restoring aquatic vegetation in the lower portion of the pool to improve waterfowl and fisheries habitat.
- b. A question was asked regarding the source of the turbidity. Hank answered that the turbidity in the project area is primarily due to wind fetch and waves caused by significant boat traffic,
- c. A question was asked if there are any construction funds available for the Illinois 519 Program. Brad Thompson answered that only planning money was available.

5. Side conversation

- a. Roger P. solicited feedback from RRCT on how the group could be more productive? Mike Griffin stated that project dollars will draw a greater level of attendance and interest from the RRCT partners. Janet S. stated that the RRCT may want to consider addressing problems for project implementation.
- b. Eric Schenck from DU stated that NGO's will become more involved and effective in bringing resources like land acquisition for restoration projects. Many NGO's have no idea of the level of complexity with the Corps organization. He feels there will be more opportunities in the future for NGO/public partnerships.
- c. Roger P. asked how the Corps and RRCT could make it easier to work with NGO's. Eric S. stated that there is a push by the State of Illinois for a wildlife action plan and NGO's are trying to find a place in this group. Eric S. also stated that there are a few umbrella groups that may be able to bring individual NGO's together. Bob C. stated that it may be as simple as expanding the mailing list. Scott W. stated that RRCT may be too eco-centric and this may exclude other interested parties.

6. Upper Mississippi River Stakeholder Conference (Angie Freyermuth)

- a. Angie introduced the upcoming conference to the RRCT. The conference will focus around river recreation, natural resources, urban waterfront needs and will include a land and water field trip. The conference will be on Aug. 21-23 in Moline. No questions.

7. FY 08 Funding (Roger Perk)

(Handout attached – Attachment 8)

Roger Perk presented on the FY 08 budget (A

- a. Roger outlined and discussed the district funding for FY 08. Rick M. noted that there seems to be a large increase in the O & M budget. Scott W. responded by saying that there is a backlog of O & M projects from previous budgetary shortfalls that need to be addressed. A question was raised regarding the ‘inspection of ecosystem projects’ item. Roger P. identified this item as an evaluation of completed ecosystem projects.

8. FWIC Update (Bob Clevestine)

- a. The FWIC last met in April 2007 to advance a set of EMP HREPs to the RRCT and Corps following sequencing exercises by the EMP System Ecology Team in March. CO-chairman Clevestine, SET member Griffin, EMP Program manager Hubbell, and Support Team member Chuck Theiling presented the results of that exercise. The HREPs advanced were Turkey River as amended, Steamboat Slough, Beaver Island, Boston Bay, Keithsburg, Huron Is., and Delair as amended.
- b. Status of 404 analysis – The 404 Team met prior to the RRCT this date. This subgroup of the FWIC was established over 10 years ago to assist the Corps in meeting the Clean Water Act, Section 404, permit conditions for the dredging program. Conditions included assessment of dredged material placement effects on fish vegetation and invertebrates, including mussels. The Corps was also asked to revisit sediment transport from placement sites, and most recently attempt to evaluate turtle use of placement sites, that is are placement sites actually "sinks" for turtle recruitment. Rock Island District staff volunteered to chair this subgroup, known as the 404 Team, and has ensured that necessary work was accomplished. Clevestine commended the Corps on their commitment to this effort, and noted that he is unaware of any similar effort by any other Corps District. The District has pulled together the results of these analyses and distributed a draft report for review and comment by March 29. FWIC role – FWIC will continue to expand and the work load will continue to increase. The current mailing list includes not only public agencies but landowners and private industry. This maintains contact with broader constituency.
- c. FWIC role - The FWIC is a key element in proposed institutional arrangements under the NESP. Clevestine felt that the Committee work load will continue to increase. He noted that proposed geomorphic reach objective-setting workshops are to be undertaken by the FWWG, FWIC, and RRAT. Each of these groups have distinctly different constituencies that need to be included in objective-setting, as the NESP study area below Rock Island includes the floodplain and much of this study area is in private ownership. The current FWIC mailing list includes not only public agencies but landowners and private industry, so crafting these workshops to include a broader constituency will require extra effort.
- d. A FWIC meeting will need to happen soon - although no dates have been established. The Chairman will attend the pilot reach objective workshop with the FWWG to gain insight into structuring workshops for the FWIC constituency.

- e. Administrative support - Clevenstine noted production problems with the Pool Plans and meeting minutes. While thanking the Corps for their previous co-Chair volunteer, the real need is more of an administrative function - meeting organization, note taking meeting summary preparation, etc. He noted that the website needs to be updated as it should be an information resource for interested constituents to be involved in restoration planning. Previous ad hoc assistance by the membership has been valuable, but consistency is needed. Roger P. said that he will look into staff support for FWIC.

9. USFWS – Cormorant Islands (Ed Britton)

- a. Over the years, pelicans have killed all of the vegetation on the islands through fecal waste and over-pruning vegetation for nesting material. The lack of remaining vegetation has lead to rapid erosion of the islands from exposure. Is there a Corps program that can helps save the islands? Nicole M. commented that this could be a candidate for a 204 CAP project or NESP. Scott W. commented that NESP will be challenged by finding enough qualified projects for the program and that this project could be a fit.
- b. TASK: Nicole M. will follow up with coordinating for a solution.

10. NRCS – Henderson 3 (Steve Higgins)

(Exhibits attached – Attachments 9, 10, & 11))

- a. Henderson 3 is a Wetland Reserve Program project. 2/3 of the site is cropland. The Illinois DNR acquired site in 2007 and in the process of acquiring more land. Kenny B asked if there are any plans to build up the levee. Steve responded saying that the Mississippi River levee is push up and the Henderson levee is sand. Engineers are looking into ways to strengthen the levees.
- b. Steve also commented that updated soil mapping is available for the State of Illinois and that that hydric soils are identified.

11. NRCS – Farm Bill (Doug Johnson)

- a. The 2007 Farm Bill has yet to be signed. Conference committee negotiations are occurring as we speak. The current Farm Bill will expire in May 2008. If the 2007 Farm Bill is not signed the 1949 Farm Bill will take over. Disagreement between the house and senate over conservation programs seem to be holding up the new bill. The house and senate disagree on funding but the programs are agreed upon. Working Lands Program - EQIP, CSP, and grazing lands conservation programs will be increased. WHIP will stay level. Land Retirement Programs - The CRP program will be reduced. The WRP will be increased by 250k ac/year nationwide. The GRP (grasslands) will see a big increase in the west part of the US.
- b. Johnson highlighted a recently formed partnership of government agencies and NGO's working to restore and protect wetlands in the lower cedar and Iowa rivers corridors in SE Iowa. This partnership has resulted in a WREP (Wetlands Reserve Enhancement Program) grant for \$3.4 million in 2007 and a commitment by the Iowa USDA technical committee for another \$5 -6 million in WRP funding over the next 3 years. Other partners (Iowa Department of Natural Resources, Iowa Department of Agriculture and Land

Stewardship, The Nature Conservancy, USFWS, Pheasants Forever, and the local soil and water conservation districts) have committed in excess of \$10 million over the next 3 years for technical and financial assistance in the project area.

12. Mid-America Port Commission – Mid-America Regional Port (Mark McNally)

(PowerPoint Presentation attached – Attachment 12)

Mark McNally presented on the Mid-America Regional Port.

- a. John Betker (Corps-OD) informed Mark M. that the Corps is in receipt of the Illinois Department of Natural Resources letter removing their objections to a permit for the project; however, the Corps does not have enough information to continue their permitting process. Mark M. was aware of this and will put the Port Engineer in contact with Mr. Betker. Some permitting issues will not be resolved until more project funding is obtained.

13. States Update – Missouri (Janet Sternburg)

- a. The State of Missouri Clean Water Commission is concerned with previously cropped soils being disturbed and filtering into natural waterways – it seems to be more of a water quality concern. So far, the area of concern has been near the Missouri River, but this concern may work its way to the Mississippi River. The issue recently came up regarding a tree planting project (concern of spoil material contaminants) and a slough dredging project. Be aware of this issue as projects are considered that will include previously cropped land. This may be political.
- b. Hydro-kinetic power. Several private companies are investigating potential sites in the Mississippi for hydro-kinetic (underwater wind farm) power potential. Several preliminary permits for feasibility have been issued. These underwater turbines could potentially have a significant fish habitat impact. Rick M. asked if the permit process has been expedited. Janet responded that they industry may be granted short term licenses to conduct studies although the industry may chose not to accept a short term license has it may be too financially risky. Mike G. inquired if RRCT should get someone from the industry to present the technology to RRCT. Janet committed to asking someone from one of the companies to present the information.

14. States Update – Iowa (Mike Griffin)

- a. The State of Iowa has hired a watershed coordinator: Allen Bonini (515) 281-5107.
- b. Increasing crop values has had a significant impact to the CRP program. 28 square miles lost this year and that is expected to increase in the future if crop values stay high. The loss of CRP lands will increase soil deposition into the river system. The good news is that NRCS financial disincentives (penalties) have helped to keep lands in the CRP program. The crop-based renewable energy push could end up causing more unforeseen problems than are being fixed.
- c. Lake Odessa: A Louisa County supervisor has been asserting that Lake Odessa should be managed for recreation (primarily for financial/economic stimulus reasons). Currently,

Lake Odessa is drawn down during the summer for wildlife management. The county supervisor is pushing at the State of Iowa and at the federal (congressional) level to keep water levels high for boating and other recreation activities. Mike G. would like RRCT to support a resolution affirming the State of Iowa's current wildlife management plan for Lake Odessa. The resolution of support should read as follows:

-"The River Resources Coordinating Team supports the management of Lake Odessa as prescribed in the Cooperative Agreement between the United State Army Corps of Engineers, the United States Fish and Wildlife Service, and the State of Iowa Department of Natural Resources."

Roger P. said that the Corps supports the way that Lake Odessa is currently being managed and will have the Corps Office of Counsel review the resolution for approval. A call for approval of the resolution was made by Mike G and 100% of RRCT members in attendance affirmed the resolution as written.

15. States Update – Wisconsin (Jim Fischer)

- a. The State of Wisconsin will be listing part of the Mississippi River as an impaired waterway for sediment. This is the first time that it has been listed for anything but mercury and PCBs. This represents a change for the WDNR central office that was hesitant to list the river for sediment impairment in the past.
- b. In January the State of Wisconsin responded to a FERC preliminary permit for a hydropower facility on the Mississippi at LD 11. There is also currently an application for a preliminary permit for hydropower at LD 5.
- c. Jim commented that he does not believe that there needs to be any major changes made to the RRCT as it currently functions well. However, the rapid changes that seem to be taking place on the river require solid institutional arrangements and the role of RRCT needs to be clearly identified. Should RRCT draft a document to position RRCT for future changes (similar to the RRF)? Scott W. commented that RRCT is central to NESP business arrangements and that the institutional arrangements are not final. Ken B. commented that this is a unique time for RRCT, RRAT, and RRF to work together and learn from each other.

16. Side Conversation

- a. Jim M. supports 3 group meeting and the sooner the better. Commented support for having two separate meetings – the boat trip meeting between RRAT and RRCT in June, and a tri-group meeting in July. Two meeting were agreed upon by the group.
- b. TASK: Get copies of RRCT and RRF charter to members.
- c. TASK: Set up coordinated meeting between RRCT, RRAT, and RRF. July 9-10 may be a good time to meet. Contact Lisa Lund (RRF) and Brian Johnson (RRAT).

17. States Update – Illinois (Jim Mick)

- a. ILCREP – Illinois Conservation Reserve Enhancement Program: cooperative agreement program between US Department of Agriculture, Illinois Department of Agriculture and Illinois DNR; voluntary and incentive based program for water quality and habitat increases; beneficial to fish and wildlife populations; establishes 15yr, 30yr, or permanent easements; sediment loads into waterways have shown to be down since implementation. Last ten years about 129,000 acres of Illinois River basin land has been protected and restored.
- b. LOIP – Land Owner Incentive Program. USFWS grant to land owners that helps protect habitat for species of concern; currently in a pilot stage; incentive based.
- c. Fish and Farmers Partnership – Currently in the formation/study phase under the US Fish and Wildlife Service; part of a national fish habitat action plan; will concentrate on restoration of waterways in the upper Mississippi valley.

18. EMP Program (Marv Hubbell)

(PowerPoint Presentation attached – Attachment 13)

Marvin Hubbell presented on the EMP Program

- a. Roger P. commented that zinc levels are too high for construction work on the Illinois. Marv H. commented that modifications of plans and designs may be a work around for the high zinc levels.
- b. A question was asked if there is Corps of congressional funding guidance for EMP. Marv responded congressional.
- c. Jim F. asked if the EMP system goals are going to be endorsed at EMPCC. Marv responded that he will be looking for the establishment of goals and an endorsement at EMPCC. Ken B. responded that the system goals have been worked out and would like an endorsement at EMPCC. Jim F. commented that he would like to see some refinements to the system goals. Marv H. responded that members will have opportunities to make comments.

18. Operations (Nicole McVay)

(PowerPoint Presentation and handouts attached – Attachments 14 & 15)

Nicole McVay presented on Channel Maintenance

- a. Ed B. asked if any dredge placement sites are on private land. Tim F. responded that all placement sites are Corps owned. Jon K. responded that the Corps is always looking for ways to partner with groups on dredge material placement. Roger P. commented that the Cormorant Islands could be a good dredge placement project.
- b. Mike G. commented that municipal and county public works departments are always scratching for sand for road maintenance.
- c. A question was asked as to why historical data for the river gages was no longer available. Scott W. said that he would look into it. FOLLOW UP: MVR does not manage the content of the rivergages.com website. The content is managed regionally by each

participating District overseeing its portion of the site. MVP is in the process of converting data from their old river gage website to the new river gages website as mandated by MVD. As such, not all historical river gage data may be currently available. If anyone experiences any problems on the web site, they should click on the "Contact Us" link on the upper right side of the opening page. Then simply state your problem and someone will respond to it. The river gage website is available at:

<http://www2.mvr.usace.army.mil/WaterControl/new/layout.cfm>; or
<http://www.rivergages.com>

19. New Corps Leadership (Denny Lundberg)

- a. The Rock Island district will have a new DPM – Gary Meden. Gary will start mid-March.
- b. Brig Gen. Robert Crear will be retiring. The new Division commander will be General Walsh.

20. ChaMPP (Steve Johnson)

(PowerPoint Presentation attached – Attachment 16)

Steve Johnson presented on ChaMPP

- a. Steve J. requested that RRCT comment on the group's level of support for the ChaMMP program (deal/no deal) based on the partner agency review draft. RRCT declared, as an advisory committee, that they do support the continuation of the ChaMMP.

21. DMMP (Jerry Skalak)

(PowerPoint Presentation attached – Attachment 17)

Jerry Skalak presented on the DMMP Program

- a. Janet S. asked how the dredge material will be placed at the DMMP site near LD 22. Tim F. responded that the placement will go to the DMMP site by going under the railroad bridge. Janet S. asked how this placement may impact a nearby mussel bed. Steve J. responded by saying that the mussel bed site was addressed in the DMMP plan.
- b. Bob C. commented that the Lock 21 DMMP (near Mid-America Regional Port) site is problematic because it was originally considered for a USFWS environmental project site. Jerry S. commented that the project is moving along quickly. Tim F. commented that the Port Authority has already purchased the site. Jerry S. commented that the Port Authority will take sand from the Corps DMMP area.

22. Comprehensive Plan (Roger Perk)

(PowerPoint Presentation attached – Attachment 18)

Roger Perk presented on the Upper Mississippi Comprehensive Plan

- a. Bob C. asked what is meant by 'risk reduction'. Jerry S. responded that it refers to land owner risk – really more of an educational effort.

- b. A question was asked if buyouts can benefit FWS programs/projects. Rick M. commented that the buyout of land on the middle Mississippi River (Illinois side) is beginning. Roger P. commented that the levee districts have to want to be bought out.

23. Next Meeting of the RRCT

The next meeting will be a coordinated joint meeting with RRAT. A tri-group meeting with RRAT, RRF, and RRCT will be planned as well. Meeting dates to be determined.

24. Following are some action items from the meeting.

Action Items	
Coordinate upcoming meetings with RRCT and RRF	Barr, Savage
Cormorant Island project/program follow-up	McVay
RRCT Resolution - Coordinate with Corps Office of Counsel	Perk
Provide RRCT and RRF charter to RRCT group for review	Savage
Determine issue(s) with access historical river gage data	Whitney
Provide completed/updated list of watershed groups	Perk
Provide name of Iowa watershed coordinator	Griffin
Determine if hydro-power representatives can present to RRCT	Sternburg
Provide/determine Co-chair for FWIC	Perk

Attachments (20)

Drew Savage - RRCT Coordinator

CF (w/ attachments):

PM-F (Perk, Thompson, Staebell, Freyermuth, Knollenberg, Plumley, Karnish)

PM-M (Hubbell, Skalak, Whitney, DeHaan)

PM-A (Barr, Bollman, Cornish, Brewer, Theiling, Johnson)

OD-I (Cox)

OD-T (Klingman, Brenner, McVay, Schmitz, Graham)

OD-M (Gretten)

EM (Stenmark)

RE (Fiscus, VanOpdorp)

External Distribution:

See Distribution List (Attachment 20)

RIVER RESOURCES COORDINATING TEAM (RRCT) Meeting

Date: February 14-15, 2008

Time: Thursday, February 14, 1:00–5:00 P.M.

Friday, February 15, 8:30-Noon

Location: Rock Island, IL, US Army Corps of Engineers, Rock Island District,
Conference Room ABC, Clock Tower Building.

February 14

<u>Agenda Item</u>	<u>Speaker</u>	<u>Time</u>
Approve Agenda	Roger Perk & Mike Griffin	1:00-1:10
RRCT <ul style="list-style-type: none"> • DE Perspective 	Col. Sinkler	1:10-1:30
NESP <ul style="list-style-type: none"> • Institutional Arrangements • Joint IL River focused RRCT and RRAT meeting in May 	Chuck Spitzack & Ken Barr	1:30-2:30
Illinois River Basin Restoration Program <ul style="list-style-type: none"> • Program Update • Starved Rock Critical Restoration Project 	Hank DeHaan/ Angie Freyermuth	2:30-3:00
BREAK		3:00-3:15
FY08 District Funding	Roger Perk	3:15-3:30
FWS <ul style="list-style-type: none"> • Cormorant Islands 	Ed Britton	3:30-3:50
FWIC	Bob Clevensine	3:50-4:00
NRCS Update <ul style="list-style-type: none"> • Henderson 3 (if available) 	NRCS Representative	4:00-4:10
Mid-America Port Commission <ul style="list-style-type: none"> • Regional port update 	Mark McNally	4:10-4:30
States Update <ul style="list-style-type: none"> • Illinois • Iowa • Wisconsin • Missouri 	States Representatives	4:30-5:00

February 15

<u>Agenda Item</u>	<u>Speaker</u>	<u>Time</u>
EMP <ul style="list-style-type: none">• FY08 Budget and Workplan• HREP Status Report• EMP / NESP Goals and Objectives• LTRMP Strategic Plan	Marvin Hubbell	8:30-9:00
Operations	Nicole McVay	9:15-9:30
ChaMPP	Steve Johnson	9:30-9-45
BREAK		9:45-10:00
DMMP	Jerry Skalak	10:00-10:15
Floodplain Management	Jerry Skalak	10:15-10:20
Comprehensive Plan <ul style="list-style-type: none">• Overview/Update	Roger Perk	10:20-10:35
Summary, Administrative Issues - Set Next Meeting Date – Assign Co-Chair	Roger Perk & Mike Griffin	10:35-11:00

Read Ahead Information:

River Resources Forum Integration document

OBJECTIVES

The objectives of the River Resources Coordinating Team (RRCT) are to:

- (1) Provide a mechanism for all Federal and State agencies with management or regulatory responsibilities along the Mississippi River and tributaries in the Rock Island District area to facilitate the coordination of their programs and activities.
- (2) Allow other interested parties to express their concerns and views to the agencies.

Call-in information

Thursday and Friday

Phone Number: 888-889-6348

Pass code: 40363

River Resources Forum Integration with the Navigation and Ecosystem Sustainability Program

The Issue: The River Resources Forum (RRF or Forum) has actively been involved in Mississippi River management within the St. Paul District of the Corps of Engineers since 1980. This partnership has allowed State and Federal agencies to solve important river issues in an open and collaborative format to balance the needs of commercial navigation with the needs of sustaining the vital river ecosystem. With the passage of WRDA 2007, and the authorization of the Navigation and Ecosystem Sustainability Program (NESP), Forum members believe that the role of the RRF in river management will not only continue but that RRF input will be an important factor in the decision making process for any new partnership that may emerge as a part of this legislation.

History of the River Resources Forum:

The River Resources Forum has a long history as an advisory group to the Corps of Engineers, St. Paul District, dating back to 1980 when the group was known as the Channel Maintenance Forum (CMF). From 1980 to 1990, the CMF continued the interagency coordination that began with the Great River Environmental Action Team (I) for resolving issues associated channel maintenance management activities, mostly dredging and disposal, in an environmentally sound manner. By 1990, most of the controversial channel maintenance issues had been resolved and required less staff time and resource commitment but new issues of habitat degradation, recreation, navigation and a new federally funded program called the Environmental Management Program (EMP) needed the insight of the interagency coordination that the CMF provided.

In December, 1990, the CMF was renamed the River Resources Forum signaling the change in scope and diversity of the work the partnership would oversee in the future. The name change was followed by a strong commitment from RRF agencies in the form of a Partnering Agreement, which was signed by agency dignitaries on September 19, 1991. The document outlined two major objectives; (1) provide a mechanism for all Federal and State agencies with management or regulatory responsibilities along the Mississippi River and tributaries in the St Paul District area to facilitate the coordination of their programs and activities; and (2) provide an opportunity for other interested parties to express their concerns and views to the agencies (The entire Partnering Agreement and Operating Procedures are attached). The participating members include the following Federal and State agencies; US Coast Guard, U.S. Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. National Park Service, NRCS and the Iowa Department of Natural Resources*, Iowa Department of Transportation, Minnesota Department of Natural Resources*, Minnesota Department of Transportation, Minnesota Pollution Control Agency, Wisconsin Department of Natural Resources*, and the Wisconsin Department of Transportation. (* Denotes the voting member for the State, all Federal agencies receive one vote.)

Since 1980 the Forum has held 80 meetings and produced a list of accomplishments within the Corps of Engineers - St. Paul District on the Mississippi River that shows the dedication of all the member organizations. The Forum members are supported by technical experts that work on the On Site Inspection Team, the Fish and Wildlife, Recreation and Navigation Work Groups, and the Water Level Management Task Force. These groups work out solutions and bring them to the Forum for endorsement and future implementation. Some of the accomplishments are highlighted below:

- * Completed and implemented individual dredge material management Pool Plans completed by 1986
- * Developed and implemented Beach Plans for Pools 7-10 by 1987
- * Selected and prioritized habitat projects for the Environmental Management Program (EMP) beginning in 1988 and continued to update the list since that time, with 25 projects implemented to date.
- * Completed the Channel Maintenance Management Plan in 1996, which served to streamline all routine Mississippi River dredging and disposal in the St. Paul District.
- * Planned and implemented large pool-scale drawdowns to reinvigorate aquatic emergent vegetation.
- * Developed and completed the Environmental Pool Plans describing a desired future condition for each navigation pool, September 2004.
- * Designed and built islands out of dredge material for environmental benefit.
- * Identified and published the 4 critical areas where the erosion of railroad tracks adjacent to the commercial navigation channel has the potential of causing serious problems for derailment and spills.
- * Determined the best location for mooring cells above and below the locks and dams in the St. Paul District.
- * Conducted and evaluated data from recreational boating studies using aerial photography along much of the St. Paul District corridor of the Mississippi River.
- * Provided a forum for public and private interests related to river management

With these accomplishments it is easy to understand the pride that RRF members have in their work. However, equally important is the fact that this long-standing partnership provides a format for honest discussion of issues due to trust that has grown between agencies over many years of working together. This trust allows the Forum to continue to build on past accomplishments and provides an avenue to work on issues that were once thought to be impossible to resolve and implement.

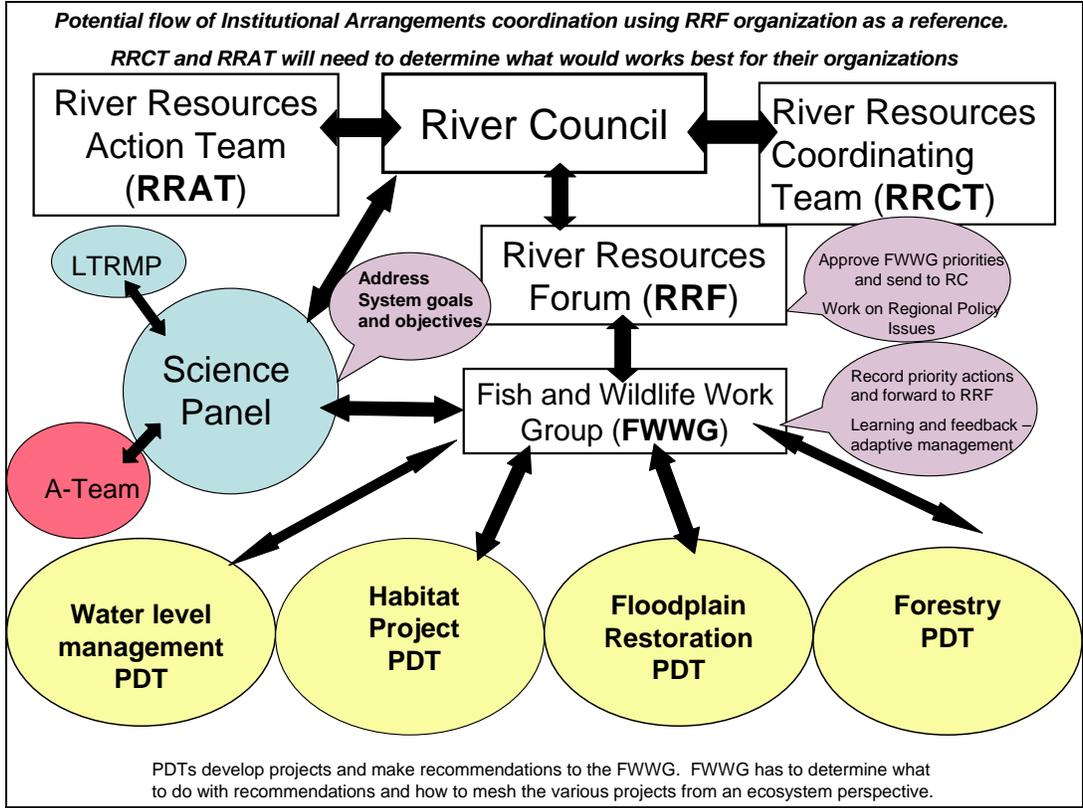
Vision for NESP Integration with the River Resources Forum

The River Resources Forum has a well-established and highly effective system for resolving issues, and planning and implementing projects, whether it is for maintenance of the nine-foot navigation channel, recreation research, or habitat restoration projects. In the case of NESP, the Forum organization and access to scientific and management expertise through the technical work groups is particularly well suited for the project/reach planning and selection for future implementation. Therefore, it is to the benefit of the Corps of Engineers and the Mississippi River that the Forum be an intricate connection in river navigation, ecosystem restoration, and adaptive management for NESP implementation.

Due to the long standing commitment of the Forum to the Mississippi River within the St. Paul District of the Army Corps of Engineers, the Forum, believes it can significantly contribute its experience and knowledge in forming Institutional Arrangements under NESP.

- * The Forum and member work groups can provide the foundation for NESP project/reach ecosystem planning, selection and implementation in the St. Paul District.
- * Recommendations by the RRF will be fully considered by the River Council.
- * Project Delivery Teams (PDTs) can effectively coordinate with the Forum and member work groups on all project development in the St. Paul District.

- * The Forum and member work groups have the ability to provide input to the River Council (or other similar group) to help determine systemic prioritization and sequencing of project/reach ecosystem planning and restoration projects and measures.
- * The RRF should be provided the opportunity to review and comment on Science Panel recommendations and findings.
- * A representative from the River Resources Forum will be appointed to the River Council, and will attend each River Council meeting to provide input and take information back to the Forum.
- * The Forum is willing to forward important issues to be placed on the River Council agenda for discussion.
- * The Forum is willing to address the Council upon their request on river issues.
- * The Forum and member work groups will actively share information and work toward common understanding regarding navigation efficiency, reliability, and safety.
- * The Forum has the ability to be actively involved in all navigational and ecosystem issues in the St. Paul District.
- * The Forum will continue to conduct business in the standard operating protocol that has been established over the past 27 years.
 - o Meetings will be held three times a year.
 - o Meeting minutes and agenda are sent out before the meeting.
 - o Any issue which needs Forum endorsement will be sent out at least 30 days in advance for inter-agency consideration and coordination.
 - o The Forum will seek consensus on river issues, but when necessary issues may be settled by the voting members.
 - o All decisions of the Forum are recorded in the meeting minutes.
 - o The Fish and Wildlife, Recreation and Navigation Work Groups, and the Water Level Management Task Force will consist of appointed river resources managers from the Federal and State agencies.
 - o The Corps co-chairs the meetings with a state representative.
 - o The Corps will provide support staff to document meeting minutes and agendas

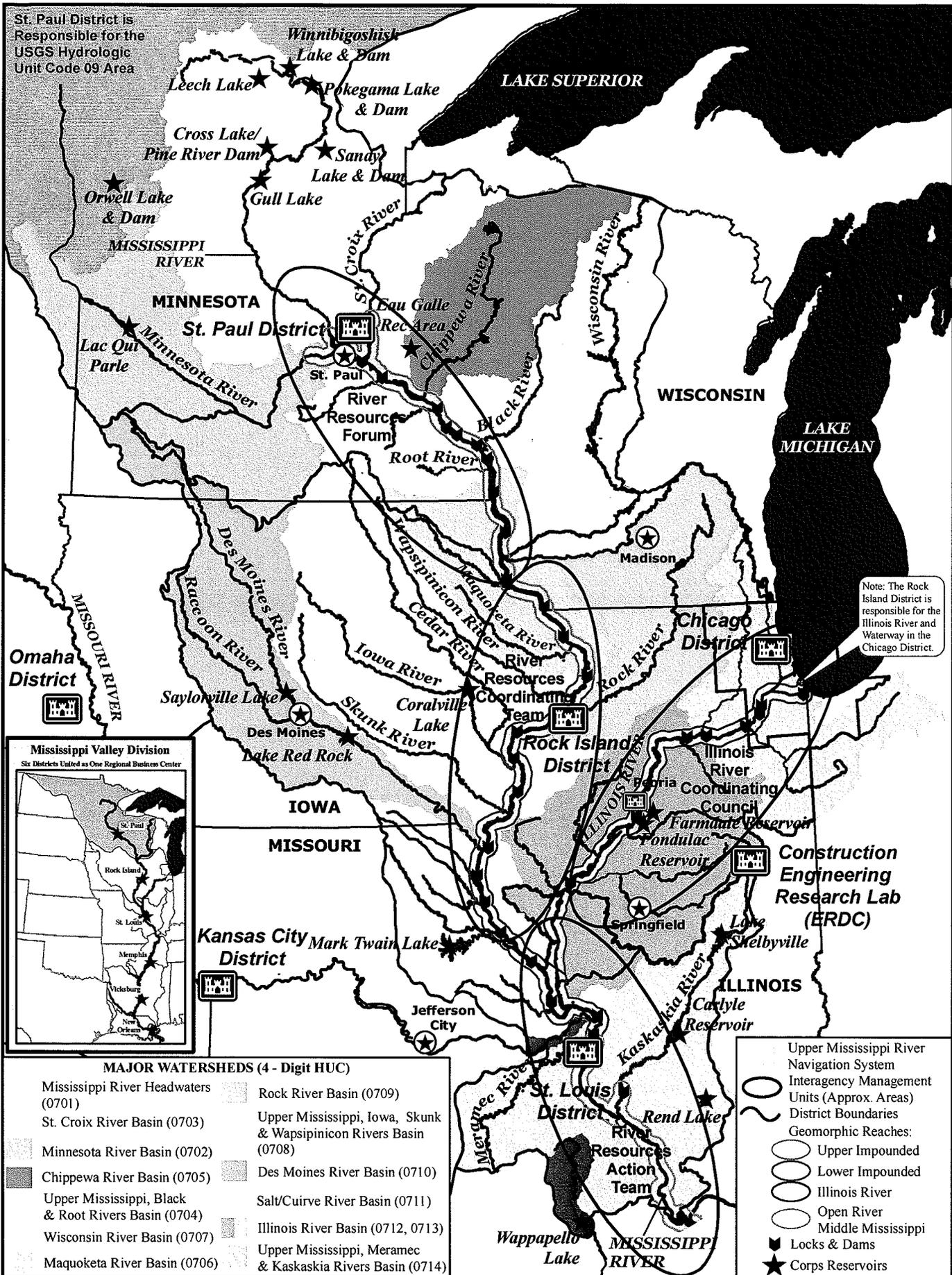


DRAFT

The Upper Mississippi River Basin

USGS Hydrologic Unit Code (HUC) 07

St. Paul District is Responsible for the USGS Hydrologic Unit Code 09 Area



Note: The Rock Island District is responsible for the Illinois River and Waterway in the Chicago District.



MAJOR WATERSHEDS (4 - Digit HUC)

Mississippi River Headwaters (0701)	Rock River Basin (0709)
St. Croix River Basin (0703)	Upper Mississippi, Iowa, Skunk & Wapsipinicon Rivers Basin (0708)
Minnesota River Basin (0702)	Des Moines River Basin (0710)
Chippewa River Basin (0705)	Salt/Cuirve River Basin (0711)
Upper Mississippi, Black & Root Rivers Basin (0704)	Illinois River Basin (0712, 0713)
Wisconsin River Basin (0707)	Upper Mississippi, Meramec & Kaskaskia Rivers Basin (0714)
Maquoketa River Basin (0706)	

- Upper Mississippi River Navigation System
- Interagency Management Units (Approx. Areas)
- District Boundaries
- Geomorphic Reaches:
 - Upper Impounded
 - Lower Impounded
 - Illinois River
 - Open River
 - Middle Mississippi
- Locks & Dams
- ★ Corps Reservoirs

O. Mississippi River Research Consortium
(<http://www.umesc.usgs.gov/mrrc.html>)

The Upper Mississippi River Basins (Watersheds)

The Mississippi River cannot be preserved and protected by focusing on the Mississippi River floodplain alone. Sedimentation and water quality issues must be addressed up in the watersheds. Nearly ninety percent of the flood damages during the great flood of 1993 occurred up in the watersheds. This is one of the reasons why the Rock Island District is encouraging the formation of organizations focused on Interagency Integrated Water Resources Management for each of the major watersheds in the Upper Mississippi River Basin. In the Rock Island District there are five 300-mile multi-state watersheds (See Figure 2). All five have a need for effective Interagency Integrated Water Resources Management to preserve and protect our valuable Upper Mississippi River water resources for future generations.

For decades the Rock Island District has pioneered Interagency Integrated Water Resources Management concepts in the Upper Mississippi River Valley. Through our experience, we have identified fifteen components of effective Interagency Integrated Water Resources Management at the major watershed level. They are:

- 1) **A common, shared, long-range, interagency vision.** Example: Illinois Rivers 2020 which was developed in 1997.
- 2) **An implementation plan or family of interagency implementation plans** to achieve the interagency watershed vision. Example: the Illinois River Basin Restoration Comprehensive Plan
- 3) **Federal authority to integrate federal, state, local and non-governmental water resources efforts.** Examples: the Illinois River Coordinating Council authority in Section 519 of the Water Resources Development Act of 2000; and the Des Moines Recreational River and Greenbelt Program authority in Section 604 of the Water Resources Development Act of 1986.
- 4) **State authority to coordinate federal, state, local and non-governmental water resources efforts.** Example: the state legislation that created the Illinois River Coordinating Council and the Illinois Mississippi River Coordinating Council.
- 5) **A watershed Interagency Integrated Water Resources Management Council or Committee** that meets periodically. Examples: the Des Moines Recreational River and Greenbelt Advisory Committee; the Illinois River Coordinating Council; and the Mississippi River Resources Coordinating Team.
- 6) **Involvement by state leaders.** Examples: the bi-annual Governor's Conference on the Management of the Illinois River held in Peoria, Illinois; and the membership from

the Governor's office on the Des Moines Recreational River and Greenbelt Advisory Committee.

7) A geographic information and decision support system for the watershed.

Example: the Illinois Rivers Decision Support System maintained by the Illinois Water Survey.

8) Involved coalitions and associations that are organized around the watershed.

Examples: the Illinois River Carriers Association and the Wisconsin Rock River Coalition.

9) Periodic interagency conferences on the watershed. Examples: the Upper Mississippi Stakeholders conference held in the Quad Cities, and the Governor's Conference on the Management of the Illinois River held in Peoria, Illinois.

10) Corporate sponsors and partners of the watershed who can assist the interagency team in achieving their common, shared, long-range, interagency vision. Examples: Caterpillar, Inc on the Illinois River; the EXELON Corporation on the Mississippi River; and Pella and the Principal Financial Group on the Des Moines River

11) Sponsorship of the watershed by one or more universities. Examples: the involvement of the University of Illinois and Bradley University on the Illinois River; the involvement of University of Iowa and Western Illinois University on the Mississippi River; and the University of Wisconsin involvement on the Rock River.

12) Federal and state legislative interest and involvement to coordinate legislative and policy efforts between State and Federal efforts. Examples: What is happening informally with the Des Moines Recreational River and Greenbelt project, and what is happening more formally with the Institute for Principled Leadership in Public Service at Bradley University in the Illinois River Basin.

13) A periodic watershed management report or newsletter to inform all stakeholders of progress, status and issues. Example: the Des Moines Recreation River and Greenbelt Annual Report.

14) A watershed website to share important interagency information. Example: the Wisconsin Rock River Coalition's website.

15) An interagency scientific panel to advise the watershed Interagency Integrated Water Resources Management Council or Committee. Example: the Fish and Wildlife Interagency Committee for the Mississippi River.

Some of the major watersheds in the Rock Island District's area have most of these components, others have very few. All of these components may not be absolutely necessary for Interagency Integrated Water Resources Management at the major watershed level to work effectively. But, the more of these components that do exist, the

1. Key Mississippi River Watershed Organization (Includes Arkansas, Missouri, Ohio and Tennessee Rivers)

A. Mississippi River Commission
(<http://www.mvd.usace.army.mil/mrc/index.php>)

D. The Mississippi Interstate Cooperative Resource Association (MICRA)
(<http://wwwaux.cerc.cr.usgs.gov/MICRA/>)

2. Key Mississippi River Organizations

A. The Great River Road Commission
(<http://www.experiencemississippiriver.com/>)

B. Mississippi River Congressional Caucus
(<http://www.hulshof.org/AboutKenny.aspx>)

C. Mississippi Valley Flood Control Association
(http://epw.senate.gov/hearing_statements.cfm?id=219913)

D. National Mississippi River Museum, Aquarium & Research Center
(<http://www.mississippirivermuseum.com/main.cfm>)

3. Key Upper Mississippi River Basin (USGC Hydrologic Unit Code 07) Organizations

A. Upper Mississippi River Congressional Task Force
(<http://www.nemw.org/UMtaskforce.htm>)

B. Upper Mississippi River Basin Congressional Caucus (http://www.vote-smart.org/bio.php?can_id=630)

C. River Industry Action Committee (<http://www.ribb.com/index.php>)

D. Midwest Area River Coalition (now part of Waterways Council, Inc.)
(<http://waterwayscouncil.org/newsreleases/2006/WCIMarc2000merger.pdf>)

E. Midwest Natural Resources Group (<http://www.mnrg.gov/>)

F. Audubon Upper Mississippi River Initiative
(<https://loon.audubon.org/payment/donate/MNMSRIGOS.html>)

G. The Nature Conservancy Upper Mississippi River Program
(<http://search.nature.org/wherewework/greatrivers/namerica/art21287.html>)

H. The Upper Mississippi Illinois and Missouri River Association
(<http://www.umimra.org/facts.html>)

I. The Upper Mississippi River Basin Association (<http://www.umrba.org/>)

J. Upper Mississippi Refuge
(<http://www.fws.gov/midwest/uppermississippiriver/>)

K. Navigation and Ecosystem Council – Economics Committee
(<http://www.mvr.usace.army.mil/>)

L. Environmental Management Program Coordinating Council
(<http://www.mvr.usace.army.mil/>)

M. Interagency Mussel Coordination Team
(http://www.fws.gov/Midwest/mussel/documents/status_higgins_eye_winged_mapleleaf_2005.pdf)

N. Upper Mississippi River Conservation Committee
(<http://www.mississippi-river/umrcc/>)

O. Mississippi River Research Consortium
(<http://www.umesc.usgs.gov/mrrc.html>)

4. Key Central Upper Mississippi River Basin Organizations

A. River Resources Coordinating Team
(<http://www.mvr.usace.army.mil/RRCT/index.asp>)

B. River Action
(<http://www.riveraction.org/nuke73/modules.php?name=News&file=categories&op=newindex&catid=3>)

C. Upper Mississippi River Conference
(<http://www.riveraction.org/nuke73/modules.php?name=News&file=categories&op=newindex&catid=3>)

D. Illinois Mississippi River Coordinating Council
(<http://www.ilga.gov/legislation/BillStatus.asp?DocTypeID=SB&DocNum=2360&GAID=8&SessionID=50&LegID=23065>)

E. Iowa Mississippi River Advisory Council (<http://www.iowadnr.com/>)

F. Central Upper Mississippi River Economic Development Forum
(<http://www.quadcities.org/>)

5. Key Illinois River Basin Organizations

A. Illinois River Coordinating Council
(<http://www.standingupforillinois.org/cleanwater/>)

C. Illinois Rivers Decision Support System (<http://ilrdss.sws.uiuc.edu/>)

D. Illinois River Carriers Association
(<http://www.waterwaysjournal.net/news030705.htm>)

E. USGS Upper Illinois River Basin Liaison Committee
(<http://il.water.usgs.gov/nawqa/uirb/liaison/agencies.html>)

F. Illinois River Road (the Route of the Voyageurs) Commission
(<http://www.dot.il.gov/press/r060607.html>)

G. Seneca Port Authority (<http://www.senecaport.com/>)

H. The Heart of Illinois Regional Port District (branded as TrandPORT)
(info@portdistrict.com) (309) 676-7500

I. Heartland Water Resources Council
(<http://www.heartlandwaterresources.com>)

J. Peoria Lakes Basin Alliance
(<http://www.tricountyrpc.org/goto/14>)

K. Illinois Natural History Survey
(<http://www.inhs.uiuc.edu/>)

L. Illinois State Water Survey
(<http://www.sws.uiuc.edu/>)

M. Ducks Unlimited
(<http://www.ducks.org/>)

N. The Wetlands Initiative
(<http://www.wetlands-initiative.org/>)

5. Key Des Moines River Basin Organizations

A. Des Moines Recreation River Greenbelt Advisory Committee
(<http://www.mvr.usace.army.mil/>)

B. Des Moines Waterworks
(<http://www.dmwww.com/>)

C. Iowa Natural Heritage Foundation
(<http://www.inhf.org/>)

D. Des Moines area Trail Councils

E. Red Rock Lake Association
(<http://redrocklakeassociation.org/rrlmain>)

F. North Raccoon River Watershed Association
(http://web.mac.com/mikedelaney1/North_Raccoon/Raccoon_River_Watershed_Association.html)

G. Water Level Management Group

5. Key Rock River Basin Organizations

A. Illinois Mississippi River Coordinating Council (Includes Rock River)
(<http://www.ilga.gov/legislation/BillStatus.asp?DocTypeID=SB&DocNum=2360&GAID=8&SessionID=50&LegID=23065>)

B. Wisconsin Rock River Coalition
(<http://basineducation.uwex.edu/rockriver/>)

C. Interstate Resource Conservation Development District
(<http://www.interstatercd.org/>)

D. River Action
(<http://www.riveraction.org/nuke73/modules.php?name=News&file=categories&op=newindex&catid=3>)

E. Lake Sinissippi Improvement District
(http://www.lakesinissippi.org/lid_home.asp)

F. Rock – Koshkonong Lake District
(<http://www.rkld.org/>)

6. Key Iowa River Basin Organizations

A. The Nature Conservancy

(<http://www.nature.org/wherewework/greatrivers/namerica/art21298.html>)

B. Iowa Natural Heritage Foundation

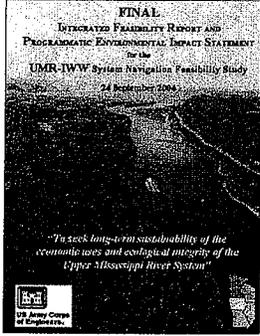
(<http://www.inhf.org/>)

RRCT
Implementation of NESP
Barr - Spitzack
14 FEB 2008



**Navigation & the Environment:
 Recommendations for a
 Sustainable Upper Mississippi
 River
 Navigation
 System**

Implementation of NESP
 River Resources Coordinating Committee
 (RRCT)
FEB 2008
Chuck Spitzack and Ken Barr
 Corps of Engineers



INTEGRATED FEASIBILITY REPORT AND PEIS

FINAL
 INTEGRATED FEASIBILITY REPORT AND
 PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
 for the
 UMR-IWW System Navigation Feasibility Study
 24 September 2004

*"To seek long-term sustainability of the
 economic uses and ecological integrity of the
 Upper Mississippi River System"*

US Army Corps
 of Engineers

One Team: Relevant, Ready, Responsive and Reliable



RECOMMENDED DUAL PURPOSE PLAN

- **\$2.4 Billion Navigation Efficiency Framework**
- **\$5.3 Billion Ecosystem Restoration Framework**
- **Adaptive Implementation – First Increment**
 - ✓ Navigation Efficiency = \$1.88 B
 - ✓ Ecosystem Restoration = \$1.46 B
 - ✓ Decision Checkpoints at 3, 7, and 15 yrs.

One Team: Relevant, Ready, Responsive and Reliable



**Water Resources Development Act
 of 2007
 TITLE VIII--UPPER MISSISSIPPI
 RIVER AND ILLINOIS WATER-WAY
 SYSTEM**

One Team: Relevant, Ready, Responsive and Reliable

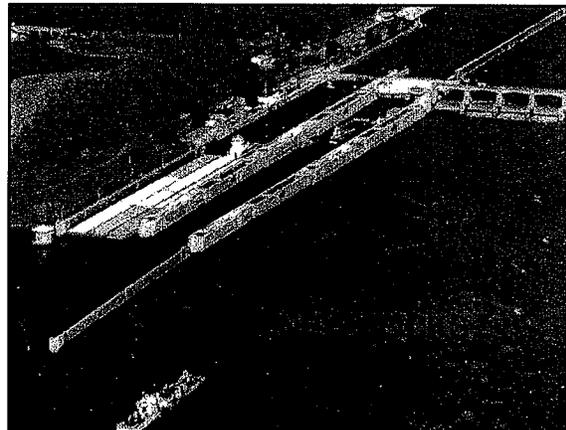


NAVIGATION IMPLEMENTATION

\$2.21 billion in First Increment (Oct 06)

- **Mooring Facilities @ Locks 12, 14, 18, 20, 22, 24 and LaGrange**
- **Switchboats @ Locks 20 through 25**
- **Adaptive Implementation of 1200' chambers at Locks 20, 21, 22, 24, 25, LaGrange and Peoria**
- **Mitigation for Site Specific and System Effects**
- **Continued Study and Monitoring**

One Team: Relevant, Ready, Responsive and Reliable



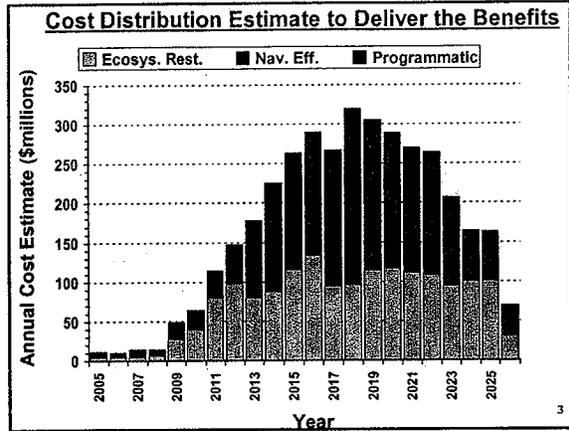
RRCT Implementation of NESP Barr - Spitzack 14 FEB 2008

ECOSYSTEM RESTORATION IMPLEMENTATION

\$1.717 billion in First Increment (Oct 06)

- Fish Passage @ Dams 4, 8, 22, and 26
- Changes in Water Level Control @ Dams 25 and 16
- Forest & Cultural Resources Management Plans
- Adaptive Implementation of 225 small projects of less than \$25 million each
 - Island Building
 - Water Level Management
 - Backwater/Side Channel Restoration
 - Wing Dam/Dike Alterations
 - Island Shoreline Protection
- 35,000 Acres of Floodplain Restoration
- Continued Study and Monitoring

One Team: Relevant, Ready, Responsive and Reliable



Total Ecosystem First Increment Plan (15 year)

Ecosystem Measures	Number of Projects	Costs (2003 millions) Measure
Adaptive Management	-	\$136.9
Cultural Stewardship	78	\$13.0
Cultural Mitigation	8	\$37.6
Forest Management	8	\$150.9
Island Building	23	\$209.0
Fish Passage	4	\$18.0
Floodplain Restoration (Pools 1-13)	10	\$140.0
Floodplain Restoration (Rest of UMR-IWW)	7	\$28.3
Water Level Management - Pool	13	\$145.8
Water Level Management - Backwater	5	\$80.8
Backwater Restoration (Dredging)	33	\$28.9
Side Channel Restoration	29	\$31.1
Wing Dam/Dike Alteration	19	\$37.6
Island Protection	33	\$13.8
Shoreline Protection	40	\$25.3
Topographic Diversity	9	\$136.0
Dam Point Control	2	\$146.0
Restoration Response Monitoring and Evaluation	-	\$1461.8
Total	227	\$1,315.8
Real Estate	-	\$146.0
Grand Total	-	\$1,461.8

One Team: Relevant, Ready, Responsive and Reliable

Establishing System-wide Goals & Objectives for the UMRS

NECC-EMPCC-NESP Science Panel
January 2008, Rock Island, IL; D. Galat representing Science Panel

One Team: Relevant, Ready, Responsive and Reliable

Upper Floodplain Reach (Pools 1-13) First Increment Plan

Ecosystem Measures	Number of Projects	Project Costs (Millions) Measure
Adaptive Management	-	\$34.0
Cultural Stewardship	52	\$8.0
Cultural Mitigation	3	\$9.4
Forest Management	8	\$52.4
Island Building	2	\$100.0
Fish Passage	2	\$18.0
Floodplain Restoration (Pools 1-13)	10	\$60.0
Floodplain Restoration (Rest of UMR-IWW)	3	\$28.3
Water Level Management - Pool	6	\$12.6
Water Level Management - Backwater	2	\$44.1
Backwater Restoration (Dredging)	12	\$19.7
Side Channel Restoration	4	\$10.5
Wing Dam/Dike Alteration	2	\$6.6
Island Protection	12	\$9.4
Shoreline Protection	10	\$4.6
Topographic Diversity	3	\$25.3
Dam Point Control	2	\$34.0
Restoration Response Monitoring and Evaluation	-	\$399.9
Total	72	\$399.9

One Team: Relevant, Ready, Responsive and Reliable

Lower Floodplain Reach (Pools 14-26) First Increment Plan

Ecosystem Measures	Number of Projects	Project Costs (Millions) Measure
Adaptive Management	-	\$34.0
Cultural Stewardship	5	\$1.0
Cultural Mitigation	3	\$9.4
Forest Management	8	\$52.4
Island Building	2	\$109.0
Fish Passage	2	\$18.0
Floodplain Restoration (Pools 1-13)	-	-
Floodplain Restoration (Rest of UMR-IWW)	3	\$60.0
Water Level Management - Pool	6	\$28.3
Water Level Management - Backwater	2	\$12.6
Backwater Restoration (Dredging)	10	\$44.1
Side Channel Restoration	7	\$19.7
Wing Dam/Dike Alteration	7	\$10.5
Island Protection	7	\$6.6
Shoreline Protection	10	\$9.4
Topographic Diversity	3	\$4.6
Dam Point Control	2	\$25.3
Restoration Response Monitoring and Evaluation	-	\$34.0
Total	67	\$464.5

One Team: Relevant, Ready, Responsive and Reliable

RRCT
Implementation of NESP
Barr - Spitzack
14 FEB 2008

Illinois River - First Inflow		
Ecosystem Measures	Number of Projects	Project Costs (Millions Measure)
Adaptive Management	-	\$34.0
Cultural Stewardship	18	\$3.0
Cultural Mitigation	-	\$3.3
Forest Management	-	\$9.4
Island Building	2	\$13.1
Fish Passage	-	-
Floodplain Restoration (Pools 1-13)	-	-
Floodplain Restoration (Rest of UMR-IWW)	2	\$40.0
Water Level Management - Pool	1	\$4.9
Water Level Management - Backwater	-	\$6.4
Backwater Restoration (Dredging)	8	\$35.3
Side Channel Restoration	7	\$19.7
Wing Dam/Dike Alteration	2	\$3.0
Island Protection	12	\$11.3
Shoreline Protection	10	\$9.4
Topographic Diversity	-	-
Dam Point Control	-	-
Restoration Response Monitoring and Evaluation	-	\$34.0
Total	44	\$226.8

One Team: Relevant, Ready, Responsive and Reliable 13

Authorization Issues of Interest

- 100% Fed Funds below Ordinary high water mark
- NGOs as Cost share partners
- Cooperative Agreement Act
- Ranking system and Advisory Committee

One Team: Relevant, Ready, Responsive and Reliable 14

Adaptive Management
 The U.S. Department of the Interior
 Biological Service

<http://www.doi.gov/initiatives/AdaptiveManagement/index.html>

One Team: Relevant, Ready, Responsive and Reliable 15

Science Panel Ecosystem Restoration

Science Panel

Dr. John Barko	ERDC Retired	Co-chair
Dr. Barry Johnson	EMTC/USGS	Co-chair
Dr. David Galat	Univ MO/USGS	Ecologist
Dr. Larry Weber	Univ of IA	Hydrologist
Dr. Ken Lubinski	TNC/USGS	Ecologist
Dr. Charlie Berger	ERDC	Hydrologist
Bob Clevestine	FWS	Ecologist
Mike Davis	MN DNR	Ecologist
Dr. John Nestler	ERDC	Ecologist
Dr. Steve Bartell	E2 Consulting	Ecologist

One Team: Relevant, Ready, Responsive and Reliable 16

Regional Support Team Ecosystem Restoration

Jon Hendrickson	Engineering	MVP
Dan Wilcox	Environmental	MVP
Kevin Landwehr	Engineering	MVR
Chuck Thelling	Environmental	MVR
Claude Strauser	Engineering	MVS
Tom Keevin/	Environmental	MVS
Ken Cook		

One Team: Relevant, Ready, Responsive and Reliable 17

Vision Statement

(Upper Mississippi River Summit 1996)

"To seek long-term sustainability of the economic uses and ecological integrity of the Upper Mississippi River System"

Proposed Overarching System-wide Goal
(Galat et al. 2007)

"To conserve, restore, and maintain the ecological structure and function of the Upper Mississippi River System to achieve the vision"

Proposed System-wide Goals
(Galat et al. 2007)

Manage for:

1. A more natural hydrologic regime (hydrology & hydraulics);
2. Processes that shape a diverse and dynamic river channel (geomorphology);
3. Processes that input, transport, assimilate, and output materials within UMR basin river-floodplains: water quality, sediments, and nutrients (biogeochemistry);
4. A diverse and dynamic pattern of habitats to support native biota (habitat), and;
5. Viable populations of native species and diverse plant and animal communities (biota).

Reach-scale Objectives
Relevant, Ready, Responsive and Reliable 18

RRCT Implementation of NESP Barr - Spitzack 14 FEB 2008

BOX 3 – Elements of Ecosystems

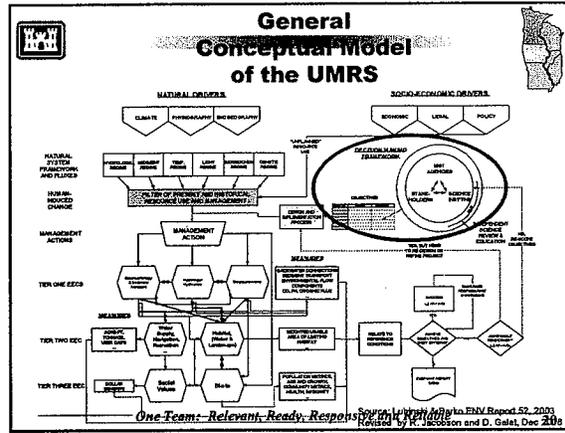
(adapted from Society for Ecological Restoration 2004)

Process refers to rates of essential ecosystem functions, such as population growth, photosynthetic rate, decomposition rate, dispersal rate. (e.g., effects of a 2-foot early-summer drawdown on production of annual moist-soil plants)

Function defines the dynamic attributes of ecosystems, including density organisms, interactions among organisms, and interactions between organisms and their environment. (e.g., effects of changes in winter dissolved oxygen levels on density of overwintering white crappie)

Structure refers to the parts of the whole or the architecture of a community. It includes the pattern of habitats, the frequency distribution of species-populations, and the sizes and life forms of the organisms that compose communities. (e.g., size-frequency distribution of largemouth bass in Pool 11)

One Team: Relevant, Ready, Responsive and Reliable
19



Outcome of workshop

- Use of 5 system-wide goals provided in Galat et al. 2007 report
- Use of Geomorphic Reaches and Attendant Lateral areas in Objective Setting
- Attention to process, function, structure and composition in Objective Setting
- 2 Program Goals (Guiding Principles ?)

One Team: Relevant, Ready, Responsive and Reliable
21

FY 08 workplan draft

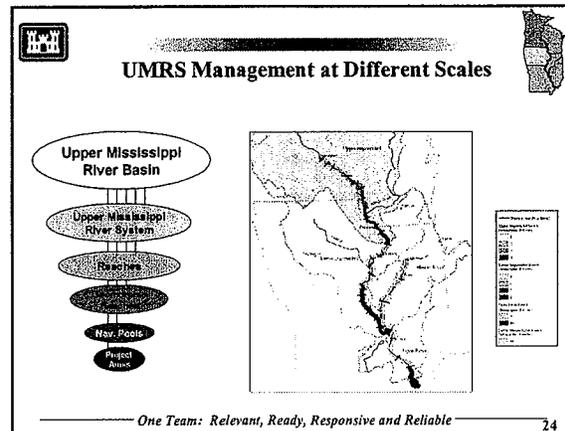
ECOSYSTEM RESTORATION PROJECTS	
J. UMRS Ecosystem Rest. Plan	\$250,000.00
K. Ecosystem Adaptive Management	\$963,000.00
L. System Cultural Stewardship	\$180,000.00
M. Forest Management	\$150,000.00
M1. Forest Mgmt. - Rose Bottom	\$100,000.00
M2. Forest Mgmt. - Embaque West	\$20,000.00
N. Flooding Plan	\$70,000.00
P. Fish Passage	\$1,077,000.00
P1. Fish Passage - L&D 26	\$464,000.00
P2. Fish Passage - L&D 22	\$613,000.00
Q. Floodplain Restoration	\$40,000.00
Q2. Floodplain Restoration - Root River, MN	\$20,000.00
Q3. Floodplain Restoration - Pierce County, WI	\$20,000.00
R. Pool Water Level Management	\$240,000.00
R1. Pool 5	\$90,000.00
R3. Pool 18	\$150,000.00

One Team: Relevant, Ready, Responsive and Reliable
22

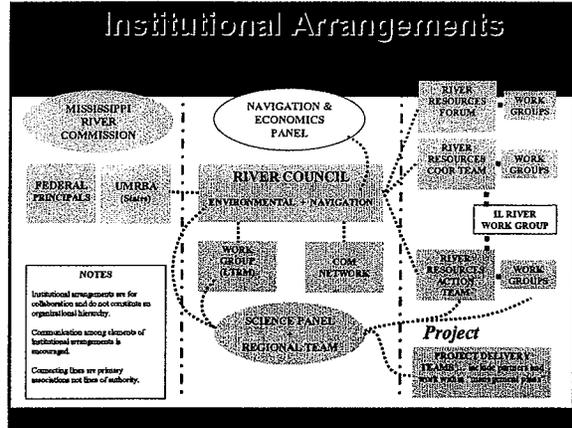
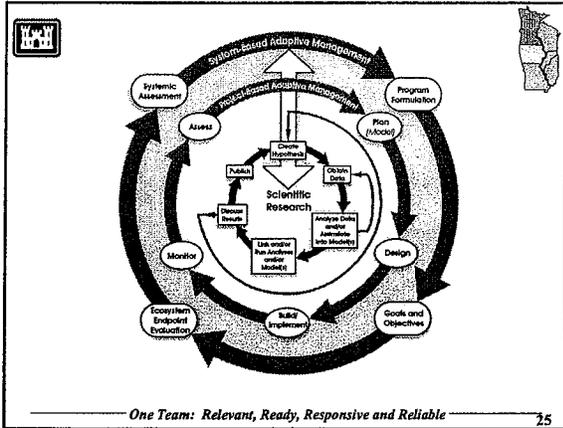
Backwater Restoration - IWW Peoria Reach

S. Backwater Restoration - IWW Peoria Reach	\$180,000.00
U. Side Channel Restoration -	\$300,000.00
U1. Buffalo Chute	\$220,000.00
U2. Schendman Chute	\$80,000.00
V. Wing Dam/Dike Alteration	\$230,000.00
V1. Herculaneum	\$210,000.00
V2. Pool 2	\$20,000.00
W. Island Shoreline Protection	\$138,000.00
X. Dam Point Control - L&D 25	\$155,000.00
Y. Dam Embankment Lowering - LD 3	\$110,000.00
SUBTOTALS	\$4,053,000.00

One Team: Relevant, Ready, Responsive and Reliable
23



RRCT Implementation of NESP Barr - Spitzack 14 FEB 2008



INSTITUTIONAL ARRANGEMENTS RIVER COUNCIL as advisory panel

- **Composition**
 - 5 State (IL IA MN MO WI resource agencies)
 - 5 Federal (DA DOT GS FWS EPA)
 - 1 Landowner representative
 - 2 Environmental representatives
 - 2 Industry representatives
- **Purposes** is to provide independent guidance to Corps on
 - Developing each Implementation report to Congress
 - Developing a system to rank proposed projects

One Team: Relevant, Ready, Responsive and Reliable 27

INSTITUTIONAL ARRANGEMENTS Adaptive Management

• System Monitoring and Research	
- Project	River Teams
- Reach	River Teams
- System	River Council
• Reach Planning	
- 12 - Geomorphic Reaches	River Teams
- 4 - Floodplain Reaches	River Teams + River Council
• System Planning	River Council
- Report to Congress	
- Prioritization Process	

One Team: Relevant, Ready, Responsive and Reliable 28

INSTITUTIONAL ARRANGEMENTS RIVER COUNCIL

- **Verify satisfaction with draft provisions**
 - USACE & USFWS (Oct 07)
 - Partners & stakeholders (Dec 07)
- **Meet with MVD - collaboration framework (Jan)**
- **Submit to USFWS & USACE for approval (Feb)**
- **Confirm compatibility with guidance**
- **USFWS & USACE make joint request to States to approve, sign MOU, and assign representatives**
- **Stand up River Council (Nov 08)**

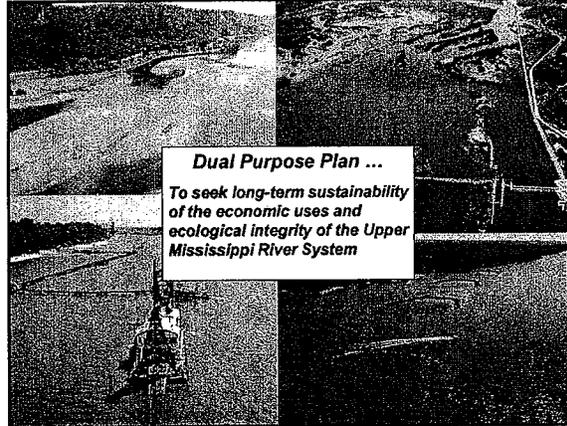
One Team: Relevant, Ready, Responsive and Reliable 29

NESP Implementation Factors for Success (15-Years) (\$\$ in Oct 2006)

- **Two or three year ramp up**
 - 1st year (2009) -- \$ 50+ mil (\$25 NAV and \$25 ER)
 - 2nd year (2010) -- \$ 65+ mil (\$32.5 NAV and \$32.5 ER)
 - 3rd year (2011) -- \$ 115+ mil (NAV and ER)
- **Followed by reliable, ample & steady funding**
 - Navigation Efficiency - \$ 150,000,000 per year
 - Ecosystem Restoration - \$ 115,000,000 per year
- **Construction contracts that allow and reward contractor driven innovation and efficiencies**

One Team: Relevant, Ready, Responsive and Reliable 30

RRCT Implementation of NESP Barr - Spitzack 14 FEB 2008



TOPICS Discussed at RRATT

- NESP authorization next steps
- River Council RRAT and NGOs
- Illinois River Team
- Reach Objectives workshops
- Draft NESP integration paper

One Team: Relevant, Ready, Responsive and Reliable

Upper Floodplain Reach - (Pools 1-13) First Increment Plan

Ecosystem Measures	Number of Projects	Project Costs (Millions)	
		Measure	Cost
Adaptive Management	-		\$34.0
Cultural Stewardship	52		\$8.0
Cultural Mitigation			\$3.3
Forest Management			\$9.4
Island Building	8		\$52.5
Fish Passage	2		\$100.0
Floodplain Restoration (Pools 1-13)	10		\$18.8
Floodplain Restoration (Rest of UMR-IWW)	-		-
Water Level Management - Pool	6		\$28.4
Water Level Management - Backwater	3		\$19.1
Backwater Restoration (Dredging)	12		\$52.9
Side Channel Restoration	4		\$11.3
Wing Dam/Dike Alteration	2		\$3.0
Island Protection	12		\$11.3
Shoreline Protection	10		\$9.4
Topographic Diversity	3		\$4.5
Dam Point Control	-		-
Restoration Response Monitoring and Evaluation			\$34.0
Total	72		\$399.8

One Team: Relevant, Ready, Responsive and Reliable

Upper Floodplain Reach - (Pools 14-20) First Increment Plan

Ecosystem Measures	Number of Projects	Project Costs (Millions)	
		Measure	Cost
Adaptive Management	-		\$34.0
Cultural Stewardship	5		\$1.0
Cultural Mitigation			\$3.3
Forest Management			\$9.4
Island Building	8		\$52.5
Fish Passage	2		\$109.0
Floodplain Restoration (Pools 1-13)	-		-
Floodplain Restoration (Rest of UMR-IWW)	3		\$60.0
Water Level Management - Pool	6		\$28.4
Water Level Management - Backwater	2		\$12.8
Backwater Restoration (Dredging)	10		\$44.1
Side Channel Restoration	7		\$19.7
Wing Dam/Dike Alteration	7		\$10.5
Island Protection	7		\$6.6
Shoreline Protection	10		\$9.4
Topographic Diversity	3		\$4.5
Dam Point Control	2		\$25.3
Restoration Response Monitoring and Evaluation			\$34.0
Total	67		\$464.5

One Team: Relevant, Ready, Responsive and Reliable

Middle Mississippi River First Increment Plan

Ecosystem Measures	Number of Projects	Project Costs (Millions)	
		Measure	Cost
Adaptive Management	-		\$34.0
Cultural Stewardship	3		\$1.0
Cultural Mitigation			\$3.3
Forest Management			\$9.4
Island Building	5		\$32.8
Fish Passage			-
Floodplain Restoration (Pools 1-13)	-		-
Floodplain Restoration (Rest of UMR-IWW)	2		\$40.0
Water Level Management - Pool	-		-
Water Level Management - Backwater	-		-
Backwater Restoration (Dredging)	3		\$13.2
Side Channel Restoration	11		\$30.1
Wing Dam/Dike Alteration	6		\$12.0
Island Protection	2		\$1.9
Shoreline Protection	10		\$9.4
Topographic Diversity	3		\$4.5
Dam Point Control	-		-
Restoration Response Monitoring and Evaluation			\$34.0
Total	44		\$225.6

One Team: Relevant, Ready, Responsive and Reliable

RRCT
Implementation of NESP
Barr - Spitzack
14 FEB 2008

Illinois River - First Increment		
Ecosystem Measure	Number of Projects	Project Costs (Millions Measure)
Aquatic Management	-	\$34.0
Cultural Stewardship	18	\$3.0
Cultural Mitigation	-	\$3.3
Forest Management	-	\$9.4
Island Building	2	\$13.1
Fish Passage	-	-
Floodplain Restoration (Pools 1-13)	-	-
Floodplain Restoration (Rest of UMR-WW)	2	\$40.0
Water Level Management - Pool	1	\$4.9
Water Level Management - Backwater	-	\$8.4
Backwater Restoration (Dredging)	8	\$35.3
Side Channel Restoration	7	\$19.7
Wing Dam/Dike Alteration	2	\$3.0
Island Protection	12	\$11.3
Shoreline Protection	10	\$9.4
Topographic Diversity	-	-
Dam Point Control	-	-
Restoration Response Monitoring and Evaluation	-	\$34.0
Total	44	\$226.8

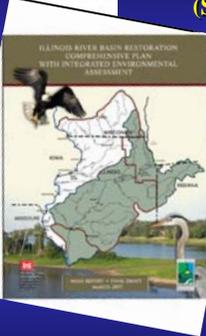
One Team: Relevant, Ready, Responsive and Reliable

NESP FY2008 WORKPLAN - \$8.856M

LAST UPDATE January 25, 2008

P2 Code	Projects Activities	FY2008	Lead District	Project Manager (Team Leader)	District Program Manager
PROGRAMMATIC PROJECTS					
121643	A. Program Management	\$450,000.00	MVR	Whitney, Scott	Whitney, Scott
121825	B. Institutional Arrangements (PED)	\$50,000.00	MVP	Soileau, Rebecca	DeZellar, Jeff
121823	C. Systemic Public Involvement	\$150,000.00	MVP	Bluhm, Kevin	DeZellar, Jeff
	SUBTOTALS	\$650,000.00			
ECONOMIC RE-EVALUATION					
121673	D. Navigation Adaptive Management	\$100,000.00	MVS	Astrack, Rich	Astrack, Rich
	SUBTOTALS	\$100,000.00			
NAVIGATION EFFICIENCY PROJECTS					
121827	E. Systemic Env. Mitigation	\$355,000.00	MVR	Cornish, Mark	Whitney, Scott
121828	F. Traffic Management Concepts	\$90,000.00	MVS	Gordon, David	Astrack, Rich
	G. Mooring Cells and Buoys	\$95,000.00			
121850	G1. L&D 14	\$50,000.00	MVR	Fleischman, Jon	Whitney, Scott
141195	G2. L&D 24	\$5,000.00	MVS	Moeller, Bill	Astrack, Rich
141200	G3. L&D LaGrange	\$40,000.00	MVR	Fleischman, Jon	Whitney, Scott
121846	H. Switchboat	\$55,000.00	MVS	Gordon, David	Astrack, Rich
	I. NEW 1200' Locks	\$3,458,000.00			
121847	I1. Lock 22	\$1,445,000.00	MVR	Tarpey, Michael	Whitney, Scott
121848	I2. Lock 25	\$1,858,000.00	MVS	Hobbs, Steve	Astrack, Rich
121824	I3. Lock La Grange	\$155,000.00	MVR	Hunemuller, Toby	Whitney, Scott
	SUBTOTALS	\$4,053,000.00			
ECOSYSTEM RESTORATION PROJECTS					
122280	J. UMRS Ecosystem Rest. Plan	\$250,000.00	MVR	Theiling, Charles	Whitney, Scott
	K. Ecosystem Adaptive Management	\$963,000.00			
121677	K1. Ka, Kb, Kc	\$913,000.00	MVR	Barr, Ken	Whitney, Scott
150943	K2. Report to Congress	\$50,000.00	MVR		Whitney, Scott
121679	L. System Cultural Stewardship	\$180,000.00	MVR	Ross, Jim	Whitney, Scott
	M. Forest Management	\$120,000.00			
121826	M1. Forest Mgmt. - Reno Bottoms	\$100,000.00	MVP	Urich, Randy	DeZellar, Jeff
129945	M2. Forest Mgmt. - Emiquon West	\$20,000.00	MVR	Hythecker, Troy	Whitney, Scott
121680	N. Fleeting Plan	\$70,000.00	MVR	Bollman, Dorene	Whitney, Scott
	P. Fish Passage	\$1,077,000.00			
125620	P1. Fish Passage - L&D 26	\$464,000.00	MVS	Atchley, Tamara	Astrack, Rich
125617	P2. Fish Passage - L&D 22	\$613,000.00	MVR	Cornish, Mark	Whitney, Scott
	Q. Floodplain Restoration	\$40,000.00			
129911	Q2. Floodplain Restoration - Root River, MN	\$20,000.00	MVP	Petersen, Jon	DeZellar, Jeff
129922	Q3. Floodplain Restoration - Pierce County, WI	\$20,000.00	MVP	Petersen, Jon	DeZellar, Jeff
	R. Pool Water Level Management	\$240,000.00			
131873	R1. Pool 5	\$90,000.00	MVP	DeZellar, Jeff	DeZellar, Jeff
131874	R2. Pool 9	\$0.00	MVP	Jutilla, Scott	DeZellar, Jeff
131876	R3. Pool 18	\$150,000.00	MVR	Landwehr, Kevin	Whitney, Scott
125647	S. Backwater Restoration - IWW Peoria Reach	\$180,000.00	MVR	Plumley, Marshall	Whitney, Scott
	U. Side Channel Restoration -	\$300,000.00			
125658	U1. Buffalo Chute	\$220,000.00	MVS	Slattery, Kevin	Astrack, Rich
125644	U2. Scheniman Chute	\$80,000.00	MVS	Markert, Brian	Astrack, Rich
	V. Wing Dam/Dike Alteration	\$230,000.00			
125643	V1. Herculaneum	\$210,000.00	MVS	Lamm, Dawn	Astrack, Rich
125642	V2. Pool 2	\$20,000.00	MVP	Stefanik, Elliott	DeZellar, Jeff
125640	W. Island Shoreline Protection	\$138,000.00	MVR	Kirkeeng, Thomas	Whitney, Scott
125639	X. Dam Point Control - L&D 25	\$155,000.00	MVS	Knep, Michelle	Astrack, Rich
	Y. Dam Embankment Lowering	\$110,000.00			
125614	Y1. L&D 8	\$110,000.00	MVP	Stefanik, Elliott	DeZellar, Jeff
	SUBTOTALS	\$4,053,000.00			
	TOTALS	\$8,856,000.00			

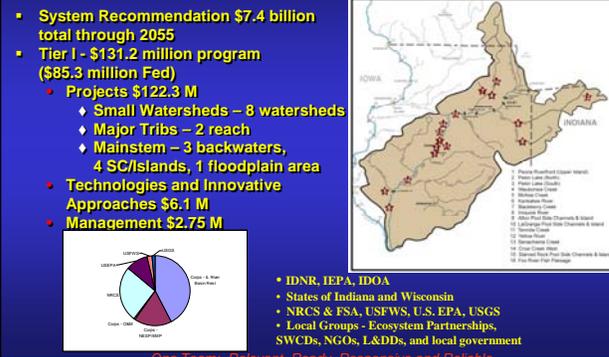
Illinois River Basin Restoration Program (Sec 519 WRDA 2000)



- **System - Comprehensive Plan (Approved May 2007)**
 - ◆ Program/Process for Ecosystem Restoration Implementation
 - ◆ Long Term Resource Monitoring
 - ◆ Computerized inventory & analysis system
 - ◆ Program for sediment removal & use
- **Site Specific - Critical Restoration Projects**
 - ◆ Authority to plan, design and **construct**
 - ◆ \$20 million per project limit (WRDA 2007)
- **Requirements – Program**
 - ◆ 65/35 Cost share
 - ◆ WIK up to 80% of Sponsor Share

One Team: Relevant, Ready, Responsive and Reliable

Program Future



- System Recommendation \$7.4 billion total through 2055
- Tier I - \$131.2 million program (\$85.3 million Fed)
 - Projects \$122.3 M
 - ◆ Small Watersheds – 8 watersheds
 - ◆ Major Tribs – 2 reach
 - ◆ Mainstem – 3 backwaters, 4 SC/Islands, 1 floodplain area
 - Technologies and Innovative Approaches \$6.1 M
 - Management \$2.75 M

• IDNR, IEPA, IDOA
 • States of Indiana and Wisconsin
 • NRCS & FSA, USFWS, U.S. EPA, USGS
 • Local Groups - Ecosystem Partnerships, SWCDs, NGOs, L&DDs, and local government

One Team: Relevant, Ready, Responsive and Reliable

Draft FY08 Workplan

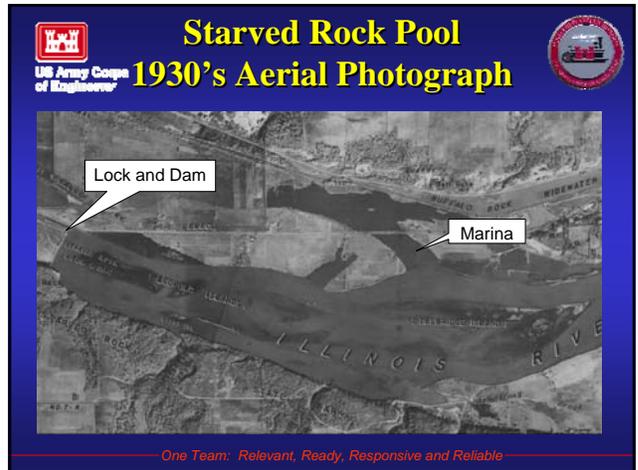
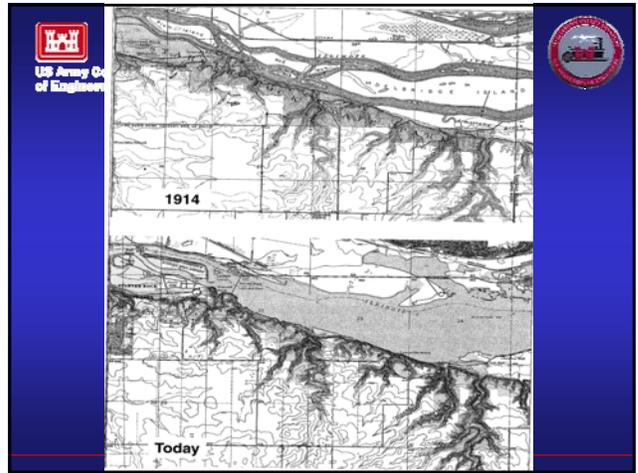
519 Program		FY08 Revised Work Plan (Jan)
System Study/Mgmt	Hank DeHaan	\$145,000
Kankakee Riffles	Chris Haring	\$78,000
Waubesaie Creek	Jodi Staebell	\$5,000
Blackberry Creek	Drew Savage	\$125,000
Senachwine Creek	Chris Haring	\$150,000
Tennille Creek	Chris Haring	\$5,000
Crow Creek West	Chris Haring	\$0
Yellow River - (LRE & LRC)	Carl Platz (LRE)	\$50,000
Fox River Dams (LRC)	Chuck Shea (LRC)	\$25,000
Starved Rock Pool	Marshall Plumley	\$170,000
Alton Pool (MVS)	Tamara Atchley (MVS)	\$140,000
McKee	Tamara Atchley (MVS)	\$0
MS Sed. Gage	Hank DeHaan	\$80,000
		\$973,000

One Team: Relevant, Ready, Responsive and Reliable

STARVED ROCK CRITICAL RESTORATION PROJECT



One Team: Relevant, Ready, Responsive and Reliable



Starved Rock Pool
2000 Aerial Photograph

US Army Corps of Engineers

Lock and Dam

Marina

Starved Rock Pool

1 inch equals 1,000 feet

One Team: Relevant, Ready, Responsive and Reliable

Existing Conditions

US Army Corps of Engineers

One Team: Relevant, Ready, Responsive and Reliable

SAV- Existing Conditions

US Army Corps of Engineers

Small SAV beds near project site

Close-up of SAV taken from near project site

One Team: Relevant, Ready, Responsive and Reliable

1989 Land Cover

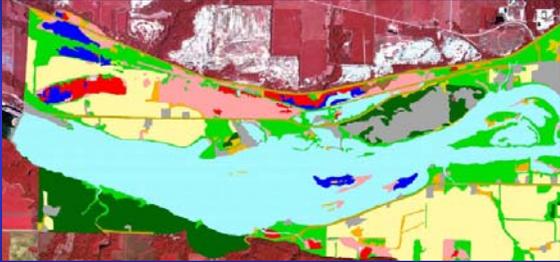
US Army Corps of Engineers

- NOTE: Dark Blue= Submerged Aquatic Vegetation

One Team: Relevant, Ready, Responsive and Reliable




2000 Land Cover



- NOTE: Dark Blue= Submerged Aquatic Vegetation

One Team: Relevant, Ready, Responsive and Reliable




Resource Problems

- Lack of topographic diversity- loss of islands and associated sheltered aquatic habitat
- Lack of submersed aquatic vegetation
- Excessive wind fetch, sediment resuspension, and turbidity



One Team: Relevant, Ready, Responsive and Reliable




Goals

- Restore Submerged Aquatic Vegetation in Lower Starved Rock Pool
- Increase Area And Quality Of Resting And Feeding Habitat For Migratory Waterfowl
- Improve Spawning And Nursery Habitat For Centrarchids

One Team: Relevant, Ready, Responsive and Reliable




Objectives

- 1. Provide suitable water quality within sheltered aquatic habitat for the growth of submerged aquatic vegetation (TSS < 25 mg/l, Turbidity < 20 NTU)
- 2. Increase area of shallow, low velocity areas and improve water quality conditions for fish for nursery and spawning habitat
- 3. Reduce wind fetch lengths and provide areas that are sheltered from wind and wave action to promote growth of SAV

One Team: Relevant, Ready, Responsive and Reliable

Water Quality Parameters

US Army Corps of Engineers

Water Quality (growing season values, May 15-Sept 15)

	DESIRED	OBSERVED (6/07- 9/07)
- Light extinction coefficient	3.42/m	4.6- 7.34/m
- Secchi disk depth	0.5 m min	0.4- 0.59 m
- Total Suspended Solids (TSS)	25 mg/L max	12-96 mg/L; often < 30 mg/L at upstream location and < 20 mg/L at downstream location
- Turbidity	20 ntu max	10-25 ntu
- Shear stress (plant)	1.4 m/s	?
- Shear stress (bottom sediments)		?
- Atrazine	> 50 µg/L Inhibitory; > 100 µg/L Lethal	?

One Team: Relevant, Ready, Responsive and Reliable

Potential Features

US Army Corps of Engineers

- Restore islands and associated sheltered habitat by constructing islands or other features

Example: Pool 8 Islands EMP Project

October 1961 August 1994 August 2000

One Team: Relevant, Ready, Responsive and Reliable

- Other Potential Features**
- US Army Corps of Engineers
- Place rock to protect existing islands
 - Construct a rock breakwater parallel to navigation channel to protect area from current velocities and waves from wind and boats
 - Construct a closure structure along left descending bank
 - Construct "seed islands," by placing rock in locations that would encourage natural deposition of sediment behind the rock
 - Place rock or geotubes to form outline of island, and fill with dredged material
 - Plant submersed aquatic vegetation species
- One Team: Relevant, Ready, Responsive and Reliable





US Army Corps
of Engineers

Issues:



- Real Estate: Land Credit/Navigation Servitude
- Risk and uncertainty of growing SAV
- Flood impacts- hydraulic analysis
- HTRW?

One Team: Relevant, Ready, Responsive and Reliable

(\$000)	FY 2008 ENERGY & WATER DEVELOPMENT APPN MARKUPS						(See footnotes) Language (H=House; S=Senate; C=Conference)	FY09 Pres's Budget	FY09 Capability
	FY07 Approved Work Plan	Pres's Budget	House	Senate	Conference				
GENERAL INVESTIGATIONS									
NAVIGATION STUDY PED	14,000	0	2,200	12,000	8,856	S1			
PEORIA PED	125	0	0	250	107				
D. M./RACC. PED	300	0	0	440	295				
DAVENPORT, IA	80	0	0	0	0				
COMP PLAN	500	0	0	386	166				
IL R BASIN RESTOR (Feas)	750	400	600	1,000	725		400		
KEITH CREEK/ALPINE DAM	0	0	0	0	197				
HUMBOLDT	0	0	0	0	98				
CEDAR RAPIDS(Time Check)	0	0	0	150	98	S2			
IWW CAL-SAG MOD PROJ	0	0	0	0	98				
GI Subtotal	15,755	400	2,800	14,226	10,640		400		
MISC GI			Total Corps						
SPECIAL INVESTIGATIONS			0	0	0				
FERC LICENSES			0	0	0				
INTERAGENCY W.R. DEVEL.			0	0	0				
N.A. WATERFOWL MGT.			0	0	0				
COORD. W/OTHER AGYS.			0	0	0				
PAS			9,624	5,742	6,396	H1, S3			
FPMS			11,000	10,196	8,856	S4			
TECH SERVICES			0	0	0				
QUICK RESPONSE			0	0	0				
SPECIAL STUDIES			0	0	0				
HYDROLOGIC STUDIES			0	250	246				
NAT'L INVENTORY OF FDR			0	0	0				
Misc GI Subtotal									
GI Total	15,755	400	2,800	14,226	10,640		400		
CONSTRUCTION, GENERAL									
EMP	12,000	23,464	23,464	18,000	16,851	C1	20,000	(FY07 work plan is MVR) (FY08/09 is total EMP)	
IL R BASIN RESTORATION	0	0	0	0	0				
DAVENPORT, IA	0	0	0	1,000	653				
GREENBELT	1,190	0	6,000	3,000	4,124				
L/D 11 (incl IWTF)	23,020	6,300	6,300	5,000	5,141		2,750	(Budgeted in O&M)	
L/D 19 (incl IWTF)	6,271	698	698	698	1,447				
LOCKPORT	TBD	20,445	30,400	20,445	20,118		28,600		
CG Subtotal	42,481	50,907	66,862	48,143	48,334		51,350		

		FY 2008 ENERGY & WATER DEVELOPMENT APPN MARKUPS									
(\$000)							(See footnotes)				
	FY07						Language (H=House;	FY09			
	Approved	Pres's					S=Senate;	Pres's	FY09		
	Work Plan	Budget	House	Senate	Conference	C=Conference)		Budget	Capability		
CONTINUING AUTHORITIES PROGRAM (TOTAL CORPS)											
	MVR										
SEC 206	(25,000)	11,278	25,000	25,000	29,520	S5, H3, C2					
SEC 204	(6,000)	0	4,000	5,000	5,292	S5, H3 , C2					
SEC 14	(12,000)	907	10,000	12,000	9,840	H2					
SEC 205	(27,000)	11,716	43,000	45,000	42,312	S5, H4, C2					
SEC 107	(9,000)	477	4,000	10,000	7,380						
SEC 1135	(25,000)	11,190	25,000	25,000	29,520						
SEC 208	(450)	10	0	500	0						
CAP Total	2,849	35,578	111,000	122,500	123,864						
OPERATIONS & MAINTENANCE, GEN											
MISSISSIPPI RVR	37,756	48,425	*	49,970	45,653	S6, H5, C3		63,207			
ILLINOIS WATERWAY	26,374	31,379	*	31,379	29,029			36,287			
SAYLORVILLE L	4,268	4,308	*	4,308	3,985			3,909			
RED ROCK DAM	4,069	3,650	*	3,650	3,377			3,278			
CORALVILLE L	3,176	3,169	*	3,169	2,931			2,887			
FARM CRK RESV	261	396	*	396	366			203			
INSPEC OF COMPL WORKS	327	275	*	857	254			1,973			
SUNSET BOAT BASIN	0	0	*	0	98			98			
INSPEC OF ECOSYS. PROJ.					57			65			
O&M Total	76,231	91,602		93,729	85,750			111,907			
* - House markup for appns is by region, not by individual projects.											
Region 7 (Upper Miss Basin) -											
Budget = \$243,843k; House = \$235,741k											
H1										With the funds provided, the Corps is directed to undertake the following studies with the amounts allocated: City of Perry, IA \$23k	
H2										CAP - Emergency Streambank Restoration - For FY08, the Committee has recommended \$10,000,000 for this program and recommended no congressionally directed projects. This program provides authority for the Corps to design and construct emergency streambank and shoreline protection works to protect public highways and bridges, and other public works, and nonprofit services such as hospitals and schools. The Committee is concerned that by directing specific projects, there may be instances where true emergencies are not addressed. However, should the Corps fail to properly manage this program, the Committee will reconsider this position. The Corps is reminded that this authority is for emergency situations where imminent failure of the streambank or shoreline would adversely impact public facilities.	
H3										Clear Lake, IA \$2.6M Lake Belle View, WI \$100k	
H4										Indian/Dry Creek & Time Check Levee, IA \$150k Winnebago River Levee Improvement, IA \$100k	
H5										Sunset boat basin, Illinois - The Committee has recommended \$100,000 for this project. Mississippi River Project (MVR) - The Committee has recommended \$150,000 for Mill Creek South Slough, Illinois, in addition to the budget request for the Mississippi River project.	
S1										The Committee recommendation includes \$12,000,000 for continuation of preconstruction engineering & design studies. The Committee recognized the need to modernize this ore than 60-yr-old navigation system and has provided continued funding for both structural design and environmental restoration work.	
S2										The Committee provided \$150,000 to initiate a cost-shared feasibility study. Reconnaissance level studies were completed under the CAP, however, the scope of the proposed project exceeds the limites of the CAP.	
S3										Within the funds provided the following studies are to be given priority	

FY 2008 ENERGY & WATER DEVELOPMENT APPN MARKUPS									
(\$000)	FY07					(See footnotes)			
	Approved	Pres's				Language (H=House;	FY09		
	Work Plan	Budget	House	Senate	Conference	S=Senate;	Pres's	FY09	
						C=Conference)	Budget	Capability	
									if cost sharing funds are available from the local sponsors; Sac & Fox Tribe, IA
S4									Within this amount the Corps attention is directed to the following studies: Wapello, IA; IA Levee Certification; Maquokete Riner Flood Warning, IA; IA Multi-Site Dam Safety Analysis
S5									Even though the Committee is providing a listing of projects that are of interest, the Corps should develop the program based on all of the projects, in each section whether named or not. Priorities should be based on the factors outlined above and should not consider prior year earmarks or a listing in this report. The Corps is directed not to initiate any new CAP project without explicit congressional direction. Only projects that have been named in prior appropriation bills or received prior year funds or are listed in this bill should be considered for funding.
									Sec 204 Blackhawk Bottoms
									Sec 205 Indian Creek, Cedar Rapids, IA Mad Creek, Muscatine, IA Winnebago River, Mason City, IA
									Sec 206 Emiquon Preserve, Fulton Co., IL Duck Creek, Davenport, IA IA River/Clear Creek, IA City, IA Storm Lake, IA Ventura Marsh Habitat Restoration, IA Whitebreast Creek Watershed, IA
S6									The Committee recommendation includes \$49,970,000. Add'l funds are provided for backlogged maintenance.
C1									Upper Mississippi Restoration, Illinois, Iowa, Minnesota, Missouri and Wisconsin. - Funding included for this activity shall be available only to continue ongoing design and construction projects and shall not be available to initiate new construction projects.
C2									CAP projects named and dollar amounts identified: Sec 204 Blackhawk Bottoms (no dollar amount) Sec 205 Indian Creek, Cedar Rapids, IA (no dollar amount) Mad Creek, Muscatine, IA (no dollar amount) Winnebago River, Mason City, IA (\$98,000) Sec 206 Duck Creek, Davenport, IA (no dollar amount) IA River/Clear Creek, IA City, IA (no dollar amount) Storm Lake, IA (no dollar amount) Ventura Marsh Habitat Restoration, IA (\$2,558,000) Whitebreast Creek Watershed, IA (no dollar amount) Emiquon Preserve, Fulton Co., IL (no dollar amount)
C3									Mississippi River Project (MVR), Illinois. - Within the funds provided, \$148,000 is provided for Mill Creek South Slough, Illinois.

Draft

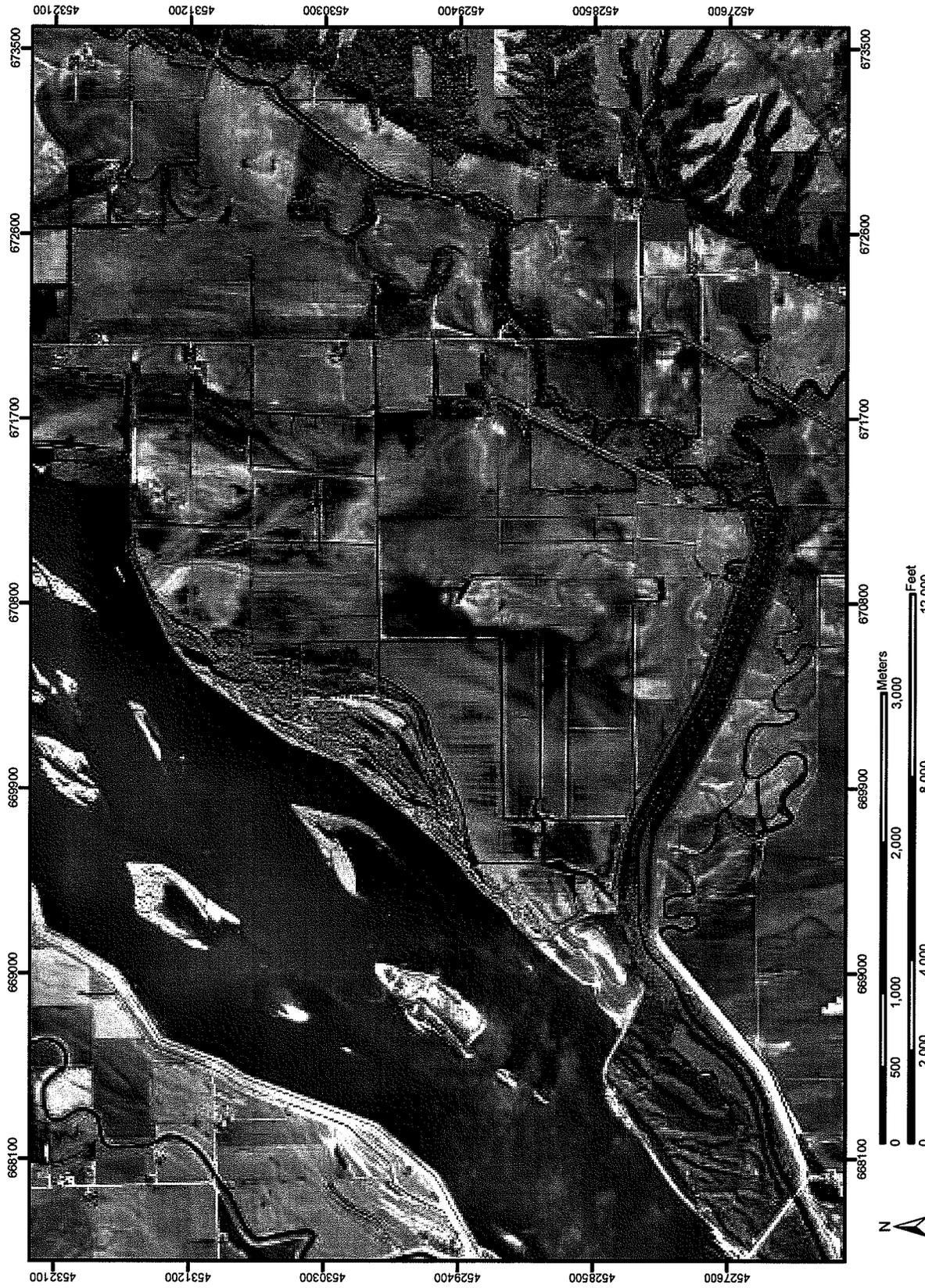
Customer(s): STATE OF ILLINOIS



- * Prairie acres total 718.4 ac
Cost estimate based on planting only 553.4 ac
- *Firebreaks = 30' wide
- *Shrubs = 15" wide
- *Proposed structure sites need investigation for feasibility



Soil Map—Des Moines County, Iowa, and Henderson County, Illinois
(Henderson #3)



Engineering Properties

Henderson County, Illinois

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
7070A:												
Beaucoup	0-16	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	85-100	37-57	18-24
	16-43	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	85-100	37-49	19-25
	43-60	Silt loam, Stratified very fine sandy loam to silty clay loam	CL, CL-ML	A-4, A-6, A-7-6	0	0	100	100	95-100	60-100	26-43	10-21
	50-60	Silt loam, Stratified very fine sandy loam to silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	60-100	22-43	6-21
7083A:												
Webash	0-15	Silty clay	CH	A-7-6	0	0	100	100	95-100	95-100	50-75	30-50
	15-60	Clay, Silty clay	CH	A-7-6	0	0	100	100	95-100	95-100	52-78	30-55
7183A:												
Shaffton	0-19	Loam	CL, SC	A-4, A-6	0	0	100	82-100	63-87	43-71	27-37	10-17
	19-27	Loam	CL, SC	A-4, A-6	0	0	100	82-100	63-87	43-71	27-37	10-19
	27-37	Clay loam, Loam, Silty clay loam	CL, SC	A-6, A-7-6	0	0	96-100	77-100	60-95	41-86	35-43	16-24
	37-60	Sr to gravelly sandy loam to silty clay loam, Stratified sandy clay loam to sandy loam	CL, ML, SC	A-2-6, A-6, A-7-6	0	0	82-100	50-100	44-94	22-86	29-41	13-23

Engineering Properties

Henderson County, Illinois

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
7302A:												
Ambraw	0-20	Clay loam	CL	A-6	0	0	100	100	85-95	55-80	30-45	10-20
				A-7-6								
	20-36	Clay, Clay loam, Loam	CH ₁	A-6	0	0	100	100	80-90	60-80	35-55	15-30
			CL	A-7-6								
	36-45	Clay loam, Sandy clay loam	CL ₁	A-6	0	0	100	90-100	85-95	40-80	30-50	10-25
			SC	A-7-6								
	45-60	Stratified clay loam to sandy clay loam	CL ₁	A-4	0	0	100	90-100	80-90	40-80	20-40	NP-17
			ML ₁	A-6								
			SC									
			SM									
7674A:												
Dozaville	0-14	Silt loam	CL	A-4	0	0	100	100	95-100	85-100	30-35	10-15
				A-6								
	14-54	Silt loam	CL ₁	A-4	0	0	100	100	90-100	80-100	30-35	10-15
			CL-ML	A-6								
	54-61	Loam, Silt loam, Very fine sandy loam	CL ₁	A-4	0	0	100	100	90-100	60-100	20-35	5-15
			CL-ML	A-6								
	61-80	Stratified fine sandy loam to very fine sand	CL ₁	A-4	0	0	100	100	85-100	20-60	0-20	NP-5
			SC	A-6								

This report shows only the major soils in each map unit. Others may exist.