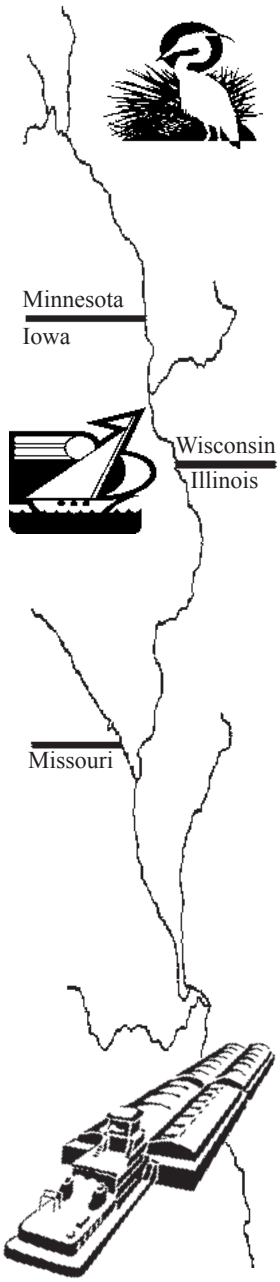
US Army Corps of Engineers

Upper Mississippi River - Illinois Waterway System Navigation Study

UMR-IWW System Navigation Study Newsletter September 2005 Vol. 11 No. 2



Groundwork Laid for Long-Term River Improvements

An unprecedented effort to restore the ecosystem of the Upper Mississippi River and improve navigation efficiency—at the same time—is underway as 32 project teams continue to lay the groundwork for future improvements.

"Lots of little successes that add up!" is how Regional Project Manager Charles Spitzack describes the results of the first fiscal year of pre-construction engineering and design.

"This has been a very successful year, both in terms of our accomplishments and in establishing or reinforcing a collaborative environment," he said. "All 32 teams did some very positive work."

The pre-construction, engineering and design work done on the program, currently dubbed the Navigation and Ecosystem Sustainability Program (NESP), is the transition phase between the Navigation Study of the Upper Mississippi River System, which was originally launched 15 years ago, and actual construction of the improvements recommended in the study. The study's purpose shifted midstream to a dual-purpose focus on navigation efficiency and ecosystem restoration. It concluded in December 2004 with a feasibility report recommendation that calls for $2.4 billion in navigation improvements and $5.3 billion in habitat restoration over the next 50 years.

Last year, Congress gave the project $11.3 million in General Investigations funding, a category that precludes construction until further authorization is given but allows for continued field planning, monitoring, investigation and coordination.

Work is moving ahead in anticipation of a similar allocation for next fiscal year (beginning October 1), but project managers are preparing for every possible scenario from no funding to full authorization.

A busy year

Last year's funding was provided in late January, well into the fiscal year, leaving teams little time to get up and running. But what they were able to accomplish defied expectations, said Scott Whitney, assistant regional project manager.

Projects continued the study's balanced approach between navigation efficiency and ecosystem restoration with priority given to projects from which the study team could learn the most with the goal of applying lessons learned to future projects, project managers said.

Highlights of the year's efforts included multiple coordination meetings between Corps teams and other agencies and organizations working on river improvement projects. The coordination effort also included the formation

continued on page 2

Inside this issue

Pool drawdowns.....3
Public weighs in.....4,5
Projects at a glance.....6-9
Upcoming meetings.....10

continued from page 1

of a Science Panel of experts who are looking at ways to quantify the success of individual projects toward improving the ecosystem and other system-wide challenges. Among those challenges is how to decide the most effective sequence or order for future improvements, said Dr. John Barko, the panel's co-chair.

Other ecosystem restoration project teams launched forest management plans, monitored biological response to a pool drawdown to spur plant growth, and continued research on fish passage and other systems.

One set of public meetings sought public input on plans for a new dam point control system, the construction of a fish passage system, and two new locks, while another was held on a plan for a future pool drawdown.

The early timing of the meetings will allow project teams to take into account the concerns of the communities most affected by changes before any detailed planning is done, said Kevin Bluhm, the public involvement team leader.

"What we really found out from the local people is that some of their priorities were very different from what we thought the priorities would be going into it," he said. "For example, in one location, a lot of people were concerned about an existing ferry crossing that many people use to commute to work. We'll be working very closely with them to make sure we don't disrupt that any more than necessary. Sometimes you don't find out how critical something like that is until you actually get out to the public and learn how they use that resource."

Study teams visited sites on other rivers where new locks are being constructed to learn from their innovations and mistakes, and plans to locate moorings and switchboats near locks to relieve congestion also moved forward.

Most teams already have detailed their goals for the next fiscal year, but team leaders recognize the need to be flexible, Spitzack said. Neither the President nor the House of Representatives included funding for the project in the fiscal year 2006 budget or appropriations bill, but the Senate included an appropriation of $20 million. Teams are planning on a minimum work allowance of $12 million, which would allow the already initiated projects to continue, albeit at a slower pace than desired. Some projects would be ready for construction by the end of 2006.

Science Panel Develops Project 'Report Card'

A Science Panel comprised of 10 independent experts and supported by representatives of three districts of the U.S. Army Corps of Engineers is developing ways to "grade" future projects on how well they actually improve the river's ecosystem.

One of the panel's missions over the past fiscal year has been development of a "Report Card" framework that will be used to regularly report progress toward restoration to the public as Navigation and Ecosystem Sustainability Program (NESP) missions move forward. The report card should be able to indicate how well the given project, be it a pool drawdown or forest management program, did in changing the system condition from "x to y," based on certain indicators, said Dr. John Barko, technical director for comprehensive environmental management with the U.S. Army Corps of Engineers' Engineering Research and Development Center.

The panel now is narrowing down those report card indicators as well as the overall project goals, Dr. Barko said, to make sure they are both clear and achievable. The initial list of 1,200 has been refined to a solid list of some 60 specific project aims.

"For example," he said, "a phrase like 'We're going to improve connectivity between main channel backwaters' might become, 'We've got to improve the connectivity of X points along the river to do such and such."

The panel also is developing sequencing criteria to help the Corps of Engineers and other partner agencies determine the best order for future ecosystem improvement projects on the river since the results of some projects set the stage for the success of others.

The panel, which held five full team and several sub-group meetings, is led by Dr. Barko and co-chair Dr. Barry L. Johnson, chief of the aquatic sciences branch of the U.S. Geological Survey's Upper Midwest Environmental Services Center. Other panelists include Mr. Michael Davis, a river ecologist whose work includes surveys of freshwater mussels; Dr. Larry Weber, a specialist in environmental hydraulics and water resources management; Dr. John Nestler, a leader in the development of environmental modeling and assessment tools; Dr. Steven Bartell, who brings expertise in environmental assessment and adaptive management; Dr. R.C. Berger, a research hydraulic engineer with expertise on vessel effects on waterways; Mr. Robert Clevenstine, a fish and wildlife biologist with the U.S. Fish and Wildlife Service; Dr. Ken Lubinski, a river ecologist with the U.S. Geological Survey; and Dr. David Galat, an ecologist with the University of Missouri whose work centers on the restoration of large rivers and floodplain wetlands.

Lowering Water to Reinvigorate an Ecosystem

A project that lowered the water level in Pool 5 near Buffalo City, Wisconsin this summer and early fall, exposing more than 1,000 acres of mudflats to sunlight for the first time in more than 60 years, was deemed a success as vegetation grew lush and the challenges faced by commercial and recreational users of the river proved manageable.

But a plan for a similar pool drawdown further downriver faced a concerned audience at a pair of public meetings in late August. Some 133 people attended a meeting in Burlington, Iowa, and another 86 attended the following day in Keithsburg, Illinois. Before learning of the many ecological benefits of a drawdown, some meeting attendees expressed concern that the plan for a short-term lowering of the water level in Pool 18 by up to two feet could interrupt recreational uses of the river and limit access to already shallow backwater areas. Hearing concerns like this was the reason for the meetings, said Kevin Landwehr, team leader for the Pool 18 Water Level Management Project.

A portion of Pool 5 before the drawdown (above) and after (below).

"We asked them to help us identify what would be affected so the team could examine ways to implement the drawdown in a way that would reduce those affects," Landwehr said. "In planning how to implement a drawdown, we would look for opportunities to provide continued recreational access through potential clean-out of shallow access points, such as marinas or boat ramps."

The positive impacts of a drawdown are relatively straightforward. Lowering the water in a pool allows the edges to dry up so the mudflats are exposed to sunlight. Plants grow and provide food for migrating birds and other animals and spawning habitat for fish; in some cases, they even help with water clarity, Landwehr said. Summer drawdowns, conducted in Pool 8 near LaCrosse, Wisconsin in 2001 and 2002, generated more than 50 species of plants on newly-exposed mudflats.

Pool 5 results

The 1 1/2 foot drawdown of Pool 5 in the St. Paul District began June 13, 2005, and concluded the end of September following three years of planning and extensive involvement of agency stakeholders and the public. The drawdown was conducted as part of Corps of Engineers operations and maintenance activities, but ongoing monitoring and evaluation is part of the Navigation and Ecosystem Sustainability Program (NESP). Research teams will document the vegetative response as well as the impact on mussel populations, eagles, migrating waterfowl, recreational boating, commercial navigation and more. Lessons learned will be applied to other proposed drawdowns, including the one proposed in Pool 18.

The extensive monitoring data collected will be compiled and interpreted over the next several months. However, it is clear that a significant vegetative response was achieved. "New plants began to emerge within weeks of the initiation of the drawdown," said Jeff DeZellar, St. Paul District Project Manager. "Now, there is lush vegetation in areas where there once was just mud." In addition, community response to the drawdown was extremely positive. A few minor challenges arose regarding commercial navigation and recreational boating access, but prompt and effective response by the project team handled those issues as they arose over the summer, DeZellar said.

"Much of the interest in the drawdown comes from people who live on the river, who play on the river," he said. "They realize the health of the river can be improved, whether they be bird watchers or hunters or fishermen. Improving the habitat is something they want."

Pool 18 Plans

In Pool 18, a proposed drawdown of two feet would expose 760 more acres to sunlight, and plans include necessary dredging to allow for continued commercial and recreational access to the river. After listening to citizen concerns, team leaders started looking at other alternatives—including creative ways to alleviate concerns while accomplishing other ecosystem goals at the same time. For example, one project outlined in the Feasibility Report provides for over-wintering habitat for fish, a project that could possibly provide continued access to some prized local fishing holes, Landwehr said. The team is looking at other ways to alleviate local concerns that might remain.

"For now, we're asking people to give us feedback on what would be potentially affected," he said. "We'll develop alternatives and then come back with our plan."

Public Input Helps Shape Lock Construction Process

Project teams are moving ahead with innovative design and location planning for new locks and fish passage systems, taking into account input they received at some well attended and particularly well-timed public meetings.

Some 45 people attended a meeting in Saverton, Missouri, on the potential Lock 22 and fish passage construction. Another 75 attended a similar meeting in Winfield, Missouri, where strong local concerns were voiced about the potential interruption to a popular ferry across the Mississippi if a new Lock 25 is built.

Other concerns voiced at the two meetings centered around possible disruption to eagle nests, limited access to popular docks and the potential spread of pesky Asian carp, being frequently spotted near Lock 22.

The early timing of these May meetings is allowing work teams to more easily take those and other concerns into consideration in planning.

"If we would have gone out a year later, we'd have been much farther down the road, and the impact of the comments would be more significant in terms of time and cost," said Jeff Stamper, navigation program manager.

The Plan

The proposal for Lock 22 calls for a new fish passage system and a bigger, 1,200-foot lock next to the existing

600-foot lock. The new lock would allow quicker passage for today's longer tows, which now have to go through the lock in a time-consuming, two-part process. The fish passage system would allow some 30 species of migratory fish access to more of the river and its backwaters.

Concerns raised at the Saverton meeting centered upon potential impact to tourism since the new lock lies near Hannibal, Missouri, a popular tourist destination best known as Mark Twain's birthplace, and Saverton itself boasts a "Mark Twain" lake. Some audience members suggested the new lock and approach include river viewing markers and be

continued on page 5

Fish Passage project moves ahead

Over the past year, a project team looking at creating a fish passage system at Lock 22 has met with both private citizens and technical experts in an effort to make sure the project ultimately succeeds. In addition to the public meetings detailed above, a Fish Passage Summit was held in Alton, Illinois, on March 9-10. Here, technical experts shared their ideas on construction and potential concerns. In addition, a contract was awarded in August to initiate fish tracking and monitoring studies in the Lock and Dam 22 area.

The fish passage system would be constructed to improve upriver passage of native fish and would use nature-like bypass channels to allow fish unimpeded access to more than 243 miles of river and tributary streams.

Planned work for the next fiscal year includes implementing a monitoring plan to evaluate the ecological engineering and cost effectiveness of each fish passage structure. Design work will begin for a fishway, and a project report is slated for final approval in December 2006.

continued from page 4

promoted as an ecotourism destination. Others were concerned that the process could take up to 13 years and made comments including, "Enough study. Get to construction!"

Even concerns about the potential spread of Asian carp and other invasive species through fish passage were minimal.

One attendee warned the project team to watch out for carp on the upstream side of the lock on the Illinois side. "I had one jump in my boat in the summer of 2004, and saw many more," he said. But another person who wrote in comments said it's already a system-wide problem not likely to be much affected by one fish passage.

"They're already below and above lock 22," the person wrote. "They're going to get through one way or another."

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Answer
Overall, I was very satisfied with this meeting.	36%	28%	3%	0	0	33%
Meeting provided opportunity to gain information & better understanding of the projects.	33%	34%	0	0	0	33%
Meeting provided opportunity for everyone to offer comments about the projects.	36%	33%	0	0	0	31%
I had a chance to talk to a study team member.	31%	33%	3%	0	0	33%
Overall, attending this meeting was worth my time.	36%	33%	0	0	0	31%

At Lock 25, where the proposal includes a new larger lock and a new dam point control system, concerns centered around a point of land where a ferry system is based that shuttles tourists and commuters to and from Calhoun County, Illinois. Early plans would impact that ferry and some homes and other facilities located nearby, but this is still being studied.

One alternative supported at the meeting could include building the lock upstream of the dam instead of downstream, Stamper said. "We'll study that, do cost comparisons, and see which is a better way to go," he said.

Meanwhile, the lock construction team is conducting geotechnical investigations below the water surface to determine the soil type and rock strength upon which new locks will sit. To avoid closing down navigation traffic during the construction process, they're also looking at prefabricated units made of pre-cast concrete that could be placed on prepared foundations in the water during the winter when there's little navigation traffic.

A scale model of the two new locks has been created at the Corps' Engineering Research and Development Center in Vicksburg, Mississippi. The models are being used to help the team learn what channel improvements may be necessary to keep navigation safe and efficient.

1:20 scale model of Lock and Dam 22

Projects at a Glance

All project teams moved forward with planning and have ambitious schedules for the next fiscal year. Following are a few examples of what work teams accomplished in fiscal year 2005 and are planning for 2006 if the project receives funding.

A: Feasibility Wrap-up

FY 2005: Feasibility Study completion, submittal and closeout were accomplished. Wrap-up activities included: Division Commanders Notice, Mississippi River Commission Briefing and transmittal of final report package by Chief of Engineers to the Assistant Secretary of the Army for Civil Works. Meetings and briefings were held with the Assistant Secretary and the Office of Management and Budget, pending delivery to Congress. The Feasibility Study was officially closed.

B: Program Management

FY 2005: Work included successful initiation and execution of a $10.5 million Pre-construction Engineering and Design effort that included more than 34 new projects. Several dozen presentations were conducted to a variety of groups. The team responded to numerous inquiries for study information and fact sheets from media, Congressional staff, stakeholders and the public.

C: Program Management Plan (Pgmp) Development

FY 2005: The program management document is a "living document" that will be updated on an ongoing basis, subject to annual formal review and approval. The objective of the 2005 Program Management Plan was to introduce the overall program and give a general idea of the structure for management and implementation.

FY 2006: The management plan will be updated with more refined descriptions of the various management processes and tools and lessons learned during the first year of implementation. Expected authorization in the Water Resources Development Act in coming months will provide more definitive program description and requirements that will be incorporated into the fiscal year 2006 version.

D: Institutional Arrangements

FY 2005: Two meetings involving 30 individuals from federal, state, non-governmental organizations and public groups were held. Comments were incorporated into a Concept Paper, which has been extensively reviewed by the Corps, the Fish and Wildlife Service and stakeholders. It will undergo further review for the implementation of a River Council if the full project is authorized.

FY 2006: A workshop will be held in St. Louis on October 20-21 to revise the draft model for the River Council. With authorization, there is a need to formalize understanding of the participating organizations for participation in the River Council. An Implementation Workshop to initiate the River Council activities will be held. Also, formation of the fourth River Team for the Illinois Waterway will be addressed.

E: Public Involvement

FY 2005: The team produced two newsletters, developed a program brochure, reviewed the web site and made recommendations for potential improvements. The team developed a communications network with stakeholders, assisted project teams with meetings and mailings and traveled to the Everglades to study that project's outreach program.

FY 2006: Projects will involve a continuation of 2005 efforts to revise the web site and develop a close working relationship between the communications network and the River Council to assist the team with future public outreach efforts. The team will produce additional newsletters and fact sheets, and it will assist with meetings as needed.

F: Navigation Adaptive Management Project

FY 2005: Activities mostly involved tracking research by the Institute for Water Resources under the Corps' Navigation Economics Technologies (NETS) Program regarding market forecasting, economic modeling, inter-modal relationships, appointment scheduling, and tradeable permits and making stakeholders aware of this research.

FY 2006: The project team will begin evaluating the appropriateness of NETS outputs to the Upper Mississippi River System and initiate work on a notification report to Congress.

G: Systemic Environmental Mitigation Program

FY 2005: The Systemic Environmental Mitigation program team formed; it consists of biologists from three Corps districts and has involved staff from the Engineering Research Development Center, five states and the U.S. Fish and Wildlife Service. Work components include fisheries, mussels, submersed aquatic vegetation, and bank lines and islands.

FY 2006: A variety of activities have been proposed including the monitoring of aquatic plant beds, mussel beds, main channel fisheries, and banklines, which would be affected by increased navigation. Monitoring refers to the oversight activity necessary to ensure that the required mitigation measures work as designed.

H: Navigation Appointment Scheduling

FY 2005: The team participated in Navigation Economics Technologies (NETS) development of appointment scheduling and GIS analysis and hired the University of Missouri-St. Louis to prepare a report for five locks. It also tracked tradable permit work.

FY 2006: Plans include the completion of a technical review of the University of Missouri-St. Louis report and determination if follow-up is necessary.

continued on page 7

U.S. Army Corps of Engineers, Rock Island
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT No. 28534 ROCK ISLAND, IL

POSTAGE WILL BE PAID BY ADDRESSEE

U.S. Army Engineer District, Rock Island
ATTN: Planning Division (PM-A)
Clock Tower Building
P.O. Box 2004
Rock Island, Illinois 61204-9908

Fold here and tape ends

US Army Corps of Engineers

September 2005

UPPER MISSISSIPPI RIVER - ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY
COMMENT SHEET

Name _____ Telephone _____

Address _____

City _____ State _____ ZIP _____

note: Name, Telephone, and Address are optional and can be left blank

(Please provide your comments in the space below)

_____
_____
_____
_____
_____
_____
_____

- (fold here, and return to addressee) -

_____
_____
_____
_____
_____

Please check **ONE** category below that represents your primary interest in the study.

____ Waterborne Industry
____ Other Business/Industry
____ Environmental Group
____ Agriculture
____ Media

____ Federal Government (Congressional)
____ Federal Government (All Other)
____ State Government
____ City/County Government
____ Education

____ Regional Planning
____ Recreation
____ No Particular Affiliations;
____Personal Interest
____ Other (specify)
_____

Privacy Act Statement:

In accordance with the Privacy Act of 1974 (Authority: Chapter 4, ER 1105-2-100), routine uses of the information obtained from this form include compiling official mailing lists for future informational publications and recording additional views and public participation in studies.

continued from page 6

I: Moorings

FY 2005: Moorings to provide closer waiting points at lock approaches have been proposed at Locks 11, 14, 15, 18-21 and 24 and LaGrange with upper approaches utilizing sheet pile mooring cells and lower approaches generally utilizing mooring buoys. Accomplishments include establishing final mooring locations, mooring buoy testing, mooring buoy design and initiating an environmental review.

FY 2006: The plan includes finalizing any remaining buoy locations, design of Lock and Dam 14 Mooring Cell and additional buoy testing and design. A continuing environmental review will include public meetings at high visibility sites.

J: Switchboats

FY 2005: The solicitation for the implementation of a test switchboat contract is in draft form and will be sent to district decision-makers for review and approval.

FY 2006: Plans include contracting for a short-term test switchboat to determine logistics, problems and industry issues associated with a switchboat.

K: Lock 22 – New 1200-Foot Lock

FY 2005: The team initiated lock concept design, geotechnical investigations, hydraulic modeling, a concrete condition survey, land survey, mussel survey, 3D project animation model and habitat assessment. Lessons learned from other lock projects were collected and a public meeting was held.

FY 2006: Lock concept and approach walls will be determined, and detailed design will be initiated. Other activities will include continuation of hydraulic modeling, supplemental environmental assessment (NEPA), cultural surveys, civil design, materials investigations, electrical design, mechanical design, steel structure design and completion of cost estimates.

L: Lock 25 - New 1200-Foot Lock

FY 2005: Work included lock and guidewall concept designs, geotechnical borings, an initial public meeting, hydraulic modeling and field surveys. A habitat assessment team was formed and initiated work.

FY 2006: Lock and guidewall conceptual designs will be completed and transitioned into final design. Physical and numeric hydraulic modeling will continue. Pile-load testing quantities and cost estimates, and channel alignment needs will be analyzed. Supplemental environmental (NEPA) and cultural (NHPA) work will be conducted.

M: LaGrange Lock - New 1200-Foot Lock

FY 2005: The team completed a project management plan, contracted for a lock alignment study, evaluated hydraulic models and data, contracted for topography work, established Federal property boundary, completed a site assessment and obtained rights of entry for surrounding properties.

FY 2006: The team will continue design and documentation efforts, including determining lock alignment, geotechnical investigation, hydraulic numeric modeling, hydraulic physical (navigation) modeling, lock concept determination and design, approach wall concept determination and design, materials investigation, land survey, and supplemental environmental assessment (NEPA).

N: UMRS Ecosystem Restoration Plan

FY 2005: Efforts focused on completion of a Draft Reach Planning Process Report, and reach implementation and monitoring plans. The team conducted eight stakeholder and Project Delivery Team meetings concentrating on the development of a coordinated planning process, identification of monitoring needs and establishment of restoration targets. It also established a communications plan, assessed reach information needs, developed an initial priority monitoring plan, conducted inventory and forecast of ecosystem conditions and more.

FY 2006: The team will work with stakeholders and the Science Panel to develop a final coordinated ecosystem restoration and management planning process. Monitoring and modeling efforts will be expanded. Three reaches were defined: Pool 5, Pool 18, and Harlow Island area, south of St. Louis.

O: Adaptive Management

FY 2005: The Science Panel held five full team meetings, including one in concert with the Middle Mississippi River coordination trip of the River Resources Action Team and a number of other workshops. The Science Panel initiated work on five objectives: develop ecosystem restoration evaluation and sequencing criteria; develop ecosystem restoration monitoring protocols; develop a "report card" framework; refine goals and objectives; integrate numerical models; and define projected ecological outcomes in terms of "goods and services."

FY 2006: Work started in 2005 will continue in FY 2006 with a focus on interactions with the project team and stakeholder groups.

P: Systemic Cultural Resource Stewardship

FY 2005: The team surveyed 20 known archeological sites, identified erosion rates, and established priorities for near-term testing and mitigation. It also assessed potential island/shoreline erosion sites, completed archeological site and survey GIS data development for 10 counties, and conducted workshops on use of a GIS tool used to analyze cultural resources.

FY 2006: The work will focus on shoreline surveys, monitoring, testing, geomorphology mapping and updating archeological data.

Q: Systemic Forestry Management

FY 2005: The project will establish a foundation for a regional management plan for the forests of the river system for the Corps of Engineers and other entities that own or are involved in environmental stewardship of the forests. Early efforts included writing of a draft systemic forest management plan, with several reviews by partner agencies and groups. Three additional projects were implemented including a forest inventory, a survey of sediment depth, and classification of more than 200,000 acres of vegetation on the Illinois River floodplain.

FY 2006: Completion of the systemic forest management plan would include Science Panel and public review; the project team will work with the Science Panel to develop a floodplain vegetation succession model.

R: Systemic Fleeting Plan

FY 2005: The team completed a project management plan and conducted a plan formulation workshop in September 2005. The team consists of over 40 individuals representing the three Corps districts, U.S. Fish and Wildlife Service, Maritime Administration, Coast Guard, five state resource and transportation departments, industry, and non-governmental organizations. The workshop was the first opportunity to bring the team together to chart a future course for this plan.

FY 2006: Work started in 2005 will continue in FY 2006.

S: Island Building – Pool 11

FY 2005: The team met with agency sponsors to develop project goals, objectives, features and a preliminary site plan. Geotechnical investigations were undertaken to locate feasible sources for island construction materials. Preliminary hydraulic modeling of the project is underway. Endangered species coordination with the U.S. Fish and Wildlife Service was continued and a mussel survey was conducted.

FY 2006: The team will conduct a biological assessment; develop a final site plan, conduct additional geotechnical investigations and hydraulic modeling and seek independent review of its definite project report.

T: Fish Passage – Lock 26

FY 2005: A regional team was set up from members of three Corps districts and several agencies. A fish passage summit meeting was held in March to educate the team on fish passage issues. Preliminary alternatives were identified. Several members traveled to the Fargo, North Dakota, area to see fish passage structures in place. Preliminary engineering and biological information was gathered.

FY 2006: The team will further evaluate alternatives and prepare a feasibility report, including costs, benefits and a recommended plan.

U: Fish Passage – Lock 22

FY 2005: The team identified feasible alternatives for increasing and facilitating migration opportunities for native fish and developed studies to learn lessons that can be applied to other structures on the river. Among other activities, the team ventured to Fargo, North Dakota, to examine a fish passage structure built by the Minnesota Department of Natural Resources, completed a study on pre-construction monitoring, developed a project area map, studied fish passage alternatives, examined sub-surface conditions that might affect construction, participated in an Asian Carp control plan workshop, and conducted a public meeting.

FY 2006: The team will develop a monitoring plan to evaluate the ecological, engineering and cost effectiveness of each fish passage structure. It also will prepare engineering design of fishways, select a recommended plan and write a definite project report.

V-1: Floodplain Restoration

FY 2005: Four initial floodplain restoration sites were identified—Pierce County, Wisconsin; mouth of the Root River, Minnesota; Emiquon, Illinois River; and Emiquon-West, Illinois River. Project scoping and development of design agreements with cost-sharing partners got underway. Scoping of the Emiquon project is complete. Congressional authorization to allow non-government entities to be cost sharing partners is needed before a design agreement can be made with the Nature Conservancy.

FY 2006: Design agreements will be completed and work will commence on planning and design of the three floodplain restoration projects.

W-1: Water Level Management – Drawdown Pool 5

FY 2005: A pool-scale drawdown of Pool 5 on the Mississippi River was conducted during the summer of 2005 under the Operations and Maintenance authority of the Corps. Monitoring projects included hydrologic and weather, vegetation response, sediment, mussels, birds, amphibians, water quality, and navigation.

FY 2006: A drawdown of Pool 5 is planned for the summer of 2006. If construction funding is available, a 2-foot drawdown will be considered using NESP funding for supplemental main channel dredging. If NESP funding is given for pre-construction, engineering and design only, a 1.5-foot drawdown will be planned. In either case, a second year of project monitoring will be conducted.

W-2: Water Level Management – Drawdown Pool 9

FY 2005: The team identified potential problems including impacts on mussels and a local coal unloading operation as well as drawdown levels to be investigated. The team conducted a bathymetric survey of the rock ledge at the power plant; conducted a mussel survey; prepared the hydraulic analysis for drawdown levels of 1.5 and 2 feet; and determined acres exposed at various drawdown levels. It also identified pre-project monitoring needs.

FY 2006: In anticipation of a possible drawdown in

2007, two sets of public meetings will be conducted (fall 2005, spring 2006), and the team will continue collaboration and complete a project report.

W-3: Water Level Management - Drawdown Pool 18

FY 2005: Existing conditions of the area were documented and public scoping meetings were held in two locations.

FY 2006: Much is planned, including an effort to complete the definite project report, define rock extent at Mapes Island and Edward's River confluence, and define minimum requirements for boat ramps, marinas and commercial facilities to maintain access during drawdown. Drawdown alternatives also will be investigated.

X: Backwater Restoration Illinois River

FY 2005: Work included development of a calibrated hydraulics/hydrology model of the Peoria Pool using recently digitized Woermann data. Progress was made toward completing sediment characterization profiles of select Peoria Pool backwaters using several sediment cores collected by the Illinois State Water Survey.

FY 2006: Investigations and coordination necessary to select specific project areas within the eight mile reach are currently under investigation. A feasibility level scope of work was prepared for selected sites along with necessary management documents (i.e., project management plan and cost sharing agreement).

Z: Side Channel Buffalo Island

FY 2005: A habitat assessment and an initial government estimate for project alternatives have been completed. A monitoring plan was developed and first-year fisheries and water quality monitoring were completed.

FY 2006: Completion of the final plan and public review is planned for spring 2006. Pre-project monitoring will continue.

AA: Herculaneum Dike Alteration

FY 2005: A habitat assessment and cultural resource assessment were completed as well as an incremental cost analysis.

FY 2006: Tasks will include plan preparations, completion of first year monitoring and initiation of second-year monitoring.

AB: Wingdam And Side Channel Restoration

FY 2005: The project management plan was completed, along with documentation of existing conditions and completed design for wingdam notches.

FY 2006: Work needs include performing pre-construction surveys for side channel restoration, acquiring all necessary real estate easements for the restoration, developing plans and specifications to do eventual construction of restoration, performing fall fisheries sampling and providing project management oversight.

AC: Island Shoreline Protection

FY 2005: The team worked toward selecting initial sites for erosion protection. Site visits were made to 15 possible cultural sites. An August 11 workshop was attended by 23 people. A topographic survey of a Pool 13 site and a mussel survey of Pool 10 sites were completed in September.

FY 2006: Plans include final selection of initial sites to be made in October, with the next meeting of the project team and stakeholders in November. GIS mapping of all sites will be completed in December. Field work will commence in March 2006. Supplemental NEPA documentation for initial sites will be completed in August, with the Feasibility Report completed in September.

AD: Lock And Dam 25 Dam Point Control

FY 2005: Draft documentation of the historic calibration of hydraulic conditions from Lock and Dam 25 Pool to Lock and Dam 24 Tailwater should be completed. An initial public meeting was conducted.

FY 2006: An inventory of all remaining structures and property lines will be included in a GIS. A planning tool model will be prepared, assessing how proposed changes to the flow regime will impact animal and aquatic habitat. Hydrologic and hydraulic data will be used to help predict biological response in rivers and adjoining floodplains, wetlands and estuaries.

AE: Lock And Dam 8 Embankment Lowering

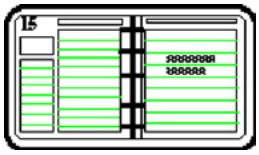
FY 2005: A project delivery team was formed and hydrodynamic monitoring in Reno Bottoms and water surface elevation in the floodplain began.

FY 2006: Pre-project monitoring will occur in a variety of areas. Project alternatives will be identified and two sets of public meetings conducted, one in the fall of 2005 and the other in the spring of 2006.

AF: Reduce Water Level Fluctuation – IWW

FY 2005: The team evaluated aquatic vegetation conditions in the Upper Illinois Waterway channel borders and backwaters; developed operating system requirements for remote dam gate control; further refined goals and objectives of this project with the Fish and Wildlife Service and the Illinois Department of Natural Resources; and began development of a tool to help decision-making in the setting of dam gates to reduce short-term water level fluctuations.

FY 2006: Plans include finalization of goals and objectives; translation of those objectives into operational targets; identification of additional gage locations and types; operational testing of decision support tool; completion of definite project report (decision document); and the conducting of an independent technical review of the draft report.



Upcoming Meetings

Nov. 15, 2005 (7:30 a.m.-7 p.m.)
Upper Mississippi River Basin Association

Nov. 16, 2005 (8 a.m.-4:30 p.m.)
Environmental Management Program Coordinating Committee

Nov. 17, 2005 (8 a.m.-3 p.m.)
Navigation Environmental Coordination Committee/ Economics Coordinating Committee

Radisson Riverfront Hotel
11 East Kellogg Boulevard
St. Paul, MN 55101
651-292-1900

For more information:
www.umrba.org/meetings.htm

Questions?

- For general study information, call Chuck Spitzack, regional project manager, at 651/290-5307 or visit our home page at:
http://www2.mvr.usace.army.mil/umr-iwwsns/

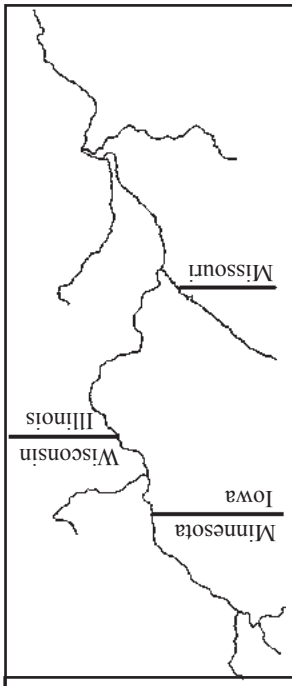
- For information on Public Involvement meetings, call the toll-free telephone number, 800/USA(872)8822. Meeting announcements will be in the Public Involvement menu. Or call Kevin Bluhm, public involvement coordinator, at 651/290-5247, or write to the address below, ATTN: CEMVR-PM-A.

- To be added to the mailing list for future newsletters, study updates, and meeting announcements, write to the address below, ATTN: CEMVR-PM-A, or call the toll-free telephone number and leave your information in the Public Involvement menu.

U.S. Army Corps of Engineers, Rock Island
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

This newsletter is printed on recycled paper. When you are finished with it, recycle it or pass it on to a friend.

U.S. Army Corps of Engineers, Rock Island
PM-A (Simmons)
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Return Service Requested

PRSRT STD
U.S. POSTAGE PAID
MINNEAPOLIS, MN.
PERMIT NO. 3395