

MONTHLY STATUS REPORT
NOVEMBER 2002
UPPER MISSISSIPPI RIVER – ILLINOIS WATERWAY
SYSTEM NAVIGATION STUDY



PURPOSE: These monthly status reports are intended to provide team members, partners, stakeholders, and other interested parties with a brief overview of significant events and activities occurring within the major components of the UMR-IWW System Navigation Feasibility Study. We welcome your comments and input on the status reports to ensure they provide timely and useful information. If you identify monthly events that we have overlooked, please let us know and we will correct it on the website. POCs: Denny Lundberg ph.: (309) 794-5632. or email address Denny.A.Lundberg@usace.army.mil or Scott Whitney ph.: (309) 794-5386. or email address Scott.D.Whitney@usace.army.mil

PROJECT MANAGEMENT (Lundberg and Whitney)

- **Feasibility Report:** Development of the Feasibility report outline and associated appendices is underway.
- **Independent Technical Review (ITR):** A tiered approach will be used to conduct the ITR of the main Feasibility Report and associated appendices. This would include at least three drafts of the report over the next year. This will allow for the review of various sections as they are developed instead of waiting for completion of the entire document. The ITR team is being identified and schedule being developed. This formal review will compliment the reviews anticipated from partners, stakeholders and public.
- **Regional Contact Database:** The regional contact database is still undergoing development and review. Anticipated completion and release in December. This will provide an up-to-date listing of individuals from the various Corps districts and disciplines along with Stakeholders actively engaged on this study.

ENVIRONMENTAL (Barr)

Environmental Sustainability Component

- **Stakeholder Workshops** – A series of four regional stakeholder workshops were conducted during November. The workshops, in Peoria, St. Louis, Moline, and La Crosse, were generally well attended, (30-40 participants each), with active involvement by stakeholders. The main goals of the workshops, to review and confirm UMR-IWW environmental objectives, and formulate management actions that best address the identified objectives, were met. Corps staff is currently working to compile and document the proceedings of the meetings, with the intention of having draft documents out for review by meeting participants in December.
- **Expert Panel:** Panel members have been selected and final contractual arrangements are being secured. A working group met in La Crosse, WI on 8 November to finalize the formation of the group and solidify panel objectives and a meeting schedule. The current schedule envisions an initial conference call in early December, followed by 4 panel meetings, each with a specific objective, to be held monthly in January-April 2003.

Environmental Impact Assessment Studies:

- ***Aquatic Plants*** – Field and laboratory experiments were conducted last summer to better calibrate and validate the models being used in the Navigation Study to assess the effects of navigation traffic on aquatic plants in the main channel borders. Dr. Elly Best of the Corps ERDC, Kevin Kenow of the USGS UMESC, Jim Fischer of the Wisconsin DNR, and Beth Rycysyn of Winona State University conducted experiments to determine the effects of current velocity and shading by epiphytes on aquatic plants. Dr. Best has updated the aquatic plant model source code. Dr. Yao Yin and others with the USGS UMESC surveyed aquatic plants in Mississippi River Pools 14 through 19 last summer, and have developed a GIS on aquatic plant distribution in the main channel borders of those pools. Last year was a good year for aquatic plant growth in the Mississippi River, and plants were found in all the surveyed pools. This new plant distribution information will be incorporated into the risk assessment of the effects of navigation traffic on aquatic plants.
- ***Adult Fish Entrainment*** – The second round of entrainment sampling was conducted on November 11-15. This collection effort, in Pool 26 and the lower portion of the Illinois River, yielded fewer fish overall than the September sampling. A summary of the results follows:
 - 48 trawls, which includes 10 upbound night trawls
 - Speed (4.5 mph) and Distance (0.8 mi/trawl) same as September
 - Total Number of individuals collected: 2,390 (68% collected in one trawl on the Illinois R. above Grafton)
 - Species composition (10 sp) same as September
 - Only two confirmed prop injuries: 1 gizzard shad and 1 skipjack herring
 - Acoustic sampling (Illinois River - Mile 0.9) was made concurrently with towboat trawling
 - Net-induced mortality has not been determined, but observations indicate it was significantly less than Sept. samples, it is possible that the large amount of leaf matter collected in the net provided cushioning and reduced impingement.
 - Discussions are ongoing regarding the need for another sampling period in December or January.
- ***Larval Fish Data Collection*** – Contractor Mactec Engineering and Consulting (formerly Harding-ESE) has completed identification of all samples of larval fish collected in Spring-Summer 2002 from Pools 16, 20 and 22. All raw data has been provided to the Rock Island District, and a summary report is due in mid-January 2003. For a total 146 samples, 148,611 larval fish were identified, consisting of 14 known families.
- ***Lock 25 Fish Mortality Study*** - Winter sampling period underway. A preliminary report of the results will be provided during the first part of December.
- ***Fish Towboat Avoidance Study*** – Additional fieldwork conducted in concert with the Nov 11-15 Adult Fish Entrainment sampling. This effort has generated a tremendous amount of data on individual fish movement patterns that are currently being analyzed. Preliminary results should be ready to report in the December status report.
- ***Underwater Noise/Fish Avoidance Study*** - If fish do have an active towboat avoidance cue, what is it? The thought is that towboats may be generating underwater noise that provides the cue for fish to move out of the way of passing towboats. An acoustic survey

to determine just how much underwater noise is generated by towboats will be conducted during early December.

- **Field Data Collection For Backwater/Side Channel Sedimentation** - Another team from the Corps' Environmental Research and Development Center (ERDC) has been collecting additional data for verification of the models used previously to identify side channels and backwaters susceptible to tow-induced sedimentation. Successful deployments and collection of data have been performed at Frenchtown Lake site in Pool 10, Big Soupbone Island in Pool 13, and at Sugar Creek Island and Treadway Lake Chute, LaGrange Pool, Illinois River. Fieldwork at the three sites was completed on November 16. Instrumentation was placed near the head of backwater and side channel inlets, and records data on wave heights, sediment movement, current velocity and other parameters. Follow-on work in the next 2 months will process the data and use it to verify existing impact assessment model outputs.

ENGINEERING (Hughey)

- **Re-evaluation of Cost and Performance of improvement measures:** The re-evaluation of the cost and performance data for select structural small-scale and large-scale measures is partially complete. Completed portions have been forwarded to ORNL. The balance of performance of measures should be completed by Dec 6. Costs of the measures are not required until January 2003.
- **With-Project combinations of measures:** The EWG has identified that some measures can be combined at some lock sites resulting in greater timesavings. The resultant timesavings of two combined measures is being reviewed for possible overlapping effects on timesavings.
- **Without Project Industry Self Help information:** In the October status report, it was stated that there was a need to revisit Industry Self Help performance in the without-project condition. This has been completed and now includes a switchboat alternative in the without-project conditions. ORNL has the cost and performance data and is evaluating the procedure to model Industry Self Help.
- **Non-Structural Measures:** The EWG will assist in the site visit and familiarization process of the Volpe group (USDOT) that has been hired to analyze non-structural measures for reducing traffic congestion, such as permits and scheduling.

ECONOMICS (Manguno)

- **Independent Technical Review (ITR) of Sparks Scenario Report** – Harold Hommes, Iowa Dept of Agriculture; Dr. Darryl Ray, University of Tennessee; and Dr. John Urbanchuck, AUS Consultants have been selected as the ITR team. Comments have been received from all reviewers. A Sparks/reviewer discussion session is being coordinated.
- **TOW COST Model Development:** Model results for the without-project condition have been pushed back to December 20. Delay from original date of November 15 is to insure proper accounting of potential without-project industry actions (industry self-help and use of switch boats.)
- **Assessment of Scheduling and Traffic Management:** Contract with Volpe National Transportation Center was awarded in late November. A three-day meeting/site visit

between Volpe and Corps staff is scheduled for Dec 9-11. Tentative plan is to tour and meet with Corps operation staff, and grain terminals employees. Site visits are planned at LD25, La Grange LD, Naples Grain Terminal, Quincy Grain Terminal, LD 21.

- ***Economics Coordinating Committee (ECC) Conference Call:*** Primary topic of discussion will be ITR of Sparks scenario work. This call will be scheduled following completion of ITR of Sparks scenario work.
- ***Transportation Rate Analysis Review:*** A Scope of Work with the Tennessee Valley Authority is being negotiated for an update of a limited sample of grain movements. . The update will provide information on potential condition changes since the original rate analysis. This project will be initiated in January..

PUBLIC INVOLVEMENT (Bluhm)

- ***Existing Data analysis effort:*** An effort to analyze existing public opinion data on the river/region is being initiated. Analysis will be performed over the next three months to draw conclusions and look for public values, interests, and other variables that may be meaningful during project plan formulation.
- ***Newsletter:*** The next Nav. Study newsletter is under development in the Jan/Feb time frame. Main topics could include summaries of the Stakeholders workshops, w/o project preliminary findings, and study progress.

SIGNIFICANT EVENTS

- ***MARC 2000 Annual Meeting Presentations*** – (7-8 November 2002) Details provided in October status report.
- ***GLC Meeting:*** (Nov 19) BG Donald Riley, new MVD Commander, introduced himself to the GLC members and provided his perspective and support for the ongoing study and collaboration. Major topics of discussion included study schedule, major milestones, Env. Sustainability workshops, and economic activities.
- ***EMPCC Meeting:*** (Nov 20) - Greg Ruff discussed the linkage between the Upper Miss Nav Study and the UMRS Environmental Management Program at the November meeting of the Environmental Management Program Coordinating Committee. A primary point of discussion was the importance of the EMP-CC being involved in the environmental component process of the Nav study. The EMP will likely be one of the tools for implementing some of the recommended management measures from the Nav study. The process for the EMP Report to Congress is ongoing concurrently with the development of the Nav study feasibility report.
- ***River Resources Forum (RRF):*** (Dec 4) Jeff De Zellar (MVP) provided an update on the Nav Study stakeholder workshops, expert panel, study schedule and development of the Feasibility Report.

UPCOMING MEETINGS OR SIGNIFICANT EVENTS

- NECC Meeting (Dec 10, 2002) Davenport, IA.
- Status update for River Resource Alliance (Dec 11, 2002), St. Paul, MN.
- Regional Taskforce Conference Call (Dec 12, 2002)
- Federal Principals Task Force Meeting (December 17, 2002) Washington, DC.