

MINUTES
OF THE
UPPER MISSISSIPPI RIVER SYSTEM
FLOW FREQUENCY TASK FORCE MEETING
10 OCTOBER 2002 – ST. LOUIS, MISSOURI

The meeting began with welcoming remarks, introductions, and a discussion of the schedule by the Chairman, Mr. S. K. Nanda. A complete list of the speakers is provided in the transcript, which is available on request from the Rock Island District, Corps of Engineers. These minutes highlight principal speakers and issues addressed.

Dr. David Goldman, Hydrologic Engineering Center, provided a summary of the study up to the time of the meeting, the progress that had been made, and some of the general descriptions of the issues remaining in finalizing stage frequency estimates. He explained that a regional study and split record testing was performed to avoid the high sampling errors obtained during single site analysis. The methodology was reviewed by the TAG and the Inter-Agency Advisory Group. By combining the flow frequency curve, the relationship between unregulated and regulated flows, and the rating curve, the Districts have obtained stage frequency curves at cross sections along the various waterways. The 100-year profile can be obtained by plotting the one percent stages for each cross section location. Problems with the methodology include the interpolation of statistics and difficulties at confluences. The Districts are applying some trial approaches to find if better results can be obtained.

Mr. Rolf Olson, Corps of Engineers Water Resources, spoke in place of Dr. Stakhiv. Mr. Olson discussed climate change and land use variability changes to determine impacts on the flow frequency estimations. Future climate change models showed conflicting results for the Mississippi region and land use models were hard to quantify. Therefore, there was not enough evidence to deviate from the Bulletin 17B methodology.

Mr. Pat Foley, St. Paul District, gave a brief background on the hydrology presented at the last meeting. He summarized some problems that the St. Paul District had been having with surveying and discussed issues and results of modeling with UNET and RAS.

Mr. John Burant, Hydraulic Engineer with the Rock Island District, discussed the progress of implementing the stage frequency methodology and producing the stage frequency profiles for Rock Island District. He said that the HEC-RAS model was originally used for base calibrations of the cross sections, but the model was changed to UNET, which had all the capabilities. He said the storage area approach was used for modeling leveed areas.

Mr. Dan Pridal, Omaha District, talked about flow issues yet to be resolved. He said that interpolation of statistics at Omaha District is complicated by the fact that the unregulated and regulated relationship changes dramatically. He also summarized the calibration procedures performed with the UNET Model.

Mr. Gordon Lance, Kansas City District, summarized calibration procedures with the UNET Model. He said there were other studies currently involving various levees in the area, and that the studies should be compared with the Flood Frequency Study to ensure compatibility.

Mr. Dennis Stephens, St. Louis District, said results from the UNET modeling showed flows decreased due to skews and therefore stages decreased at most locations around St. Louis and points south compared with current values. To the north of St. Louis on both the Mississippi and Illinois Rivers, stages increased compared with current values.

Mr. Arlen Feldman, Hydrologic Engineering Center, Corps of Engineers, explained what the expectations are of the final report. His concerns included completing an executive summary, summarizing public involvement and the federal and state overview, making plates of the profiles, and adding the appendices.

Ms. Laura Abney, Public Involvement Group, summarized public comments and concerns about the study. Specifically, she said the public would like to know about any uncertainty regarding the study's results, how the study would directly affect them, ways of communicating the study results, and lessons learned. The public also expressed interest in having more consistency between states on regulatory issues.

Mr. Jerry Skalak, Project Manager from the Corps, and Mr. Bill Blanton, team leader from FEMA, discussed events and issues that will be of importance after the flow frequency study is finished. The next steps include developing a revised scope of work for remapping, coordination of floodways, and Level One mapping. Budgeting issues were also discussed.

Each state had a representative that discussed various issues regarding the study. The comments of those representatives are as follows:

Mr. Don Vonnahme, Director of the Illinois Department of Natural Resources, Office of Water Resources, talked about problems with confluences and surveying.

Mr. Charlie Ducharme, Missouri Department of Natural Resources, explained that the same issues affected Illinois as mentioned by Mr. Vonnahme were relevant in Missouri.

Mr. George Riedel, Missouri State Emergency State Management Agency, spoke for Nebraska. He was appreciative of what the Corps had done, although he expressed concerns whether final product will be one that is useful to states and locals.

Ms. Julie Grauer, Kansas Department of Agriculture, raised concerns about stating uncertainty about the study to the public. She also mentioned doing studies of the Kansas River area in the future.

Various federal agencies had a representative that discussed various issues regarding the study. The comments of those representatives are as follows:

Mr. Mike Eiffe, Tennessee Valley Authority, represented Greg Lowe and gave his appreciation to the Task Force.

Mr. Al Schulz, FEMA Regional Center, raised concerned about how each District was taking a slightly different approach to the study. He felt that there should not be inconsistencies between Districts.

Mr. Ken Bullard, Bureau of Acclimation, expressed interest in setting probabilities for stage elevations at confluences based on downstream flows.

Mr. David Wingred, Corps of Engineers Headquarters, stressed the importance of making new FEMA maps as a result of the Flood Frequency Study. He also discussed how the new profiles will be implemented when an existing levee design is based on older profiles. Some options that were being considered were raising the levees so sponsors could stay in the PL 84-99 program, or downgrading the level of protection and allowing the sponsor to continue in the program at a lesser amount or level. A period of time could be given to sponsors to get any levee raising done, or the raising could wait until flood damage had occurred.

Mr. Bob Occhipinti, Mississippi Valley Division, gave his appreciation to those involved on the study and encouraged the further resolution of technical and scheduling problems.

Mr. Al Swoboda, Northwestern Division, gave his appreciation.

Ms. Holly Stoerker, Executive Director Upper Mississippi River Basin Association, stressed the importance among all agencies of having a plan for processing the study results and other information after the study is complete..

Mr. Jerry Skalak, Project Manager, discussed budgetary challenges and potential sacrifices that might need to be made.

The meeting concluded with short questions and comments from the task force members. Mr. S.K. Nanda thanked everyone for their hard work and for coming. He then ended the meeting.