



Upper
Mississippi River
Basin Association

ILLINOIS, IOWA, MINNESOTA, MISSOURI, WISCONSIN

**Comments
of the
Upper Mississippi River Basin Association
on the
May 10, 2002 Draft Interim Report
for the
Upper Mississippi River and Illinois Waterways
Restructured System Navigation Feasibility Study
(May 30, 2002)**

The Upper Mississippi River Basin Association (UMRBA) outlined its preliminary views on the restructured Navigation Study in a February 27, 2002 document entitled "Upper Mississippi River Basin States' Perspectives on Refocused UMRS Navigation Study." A copy of that document is attached and serves as the basis for these comments on the draft Interim Report. In short, the states support the direction being taken in the restructured navigation study, whereby the scope of the study has been expanded to include both navigation and environmental needs and a collaborative process is being employed for conducting the study and developing the plan.

Overview Comments

- The states are pleased that the draft Interim Report generally reflects the concepts set forth in the February 2002 states' perspectives document. It is clear that the Corps of Engineers has earnestly sought to respond to the concerns that have been expressed about this study and to develop a more integrated approach.
- Despite the fact that considerable progress has been made in reshaping the study, much of the most challenging work still lies before us over the next two years in the feasibility study. Unfortunately, the Interim Report does not clearly describe how those challenges will be met. The remaining tasks, the process for evaluating and resolving implementation issues, and the schedule of decision points and study milestones must all be clearly defined. In short, the Interim Report should describe the "pathway" for bringing this complex study to a successful conclusion.
- Contrary to expectations engendered by General Griffin's August 2001 study guidance, the report offers no recommendations for "interim measures to partially achieve the...objectives while the feasibility study is being completed." The states believe that the Interim Report offers an opportunity to advance some discrete near-term recommendations,

particularly regarding funding for existing programs, such as the Environmental Management Program and Operation and Maintenance, for which there is broad concurrence, or for small scale navigation improvements recommended 20 years ago in the Master Plan, but never implemented.

- Collaboration has been a central theme in the restructured study and a welcome approach to this complex study. Broad distribution of early drafts of study products has offered study participants opportunities to be more fully engaged in the process. Yet the success of the collaborative process will ultimately be judged not on the timing and quantity of review materials, but on whether there are meaningful ways in which the study participants can be involved in the decision-making process. Particularly as the study moves forward, it will be critical to clearly establish a mechanism for achieving consensus that is both timely and substantive. In addition, the states would note that the interagency and interstate coordination inherent in this collaborative process will take time. We would hope that the relatively short review time for preparation of comments on the Interim Report is not going to be the standard for the balance of the study process.
- The states recognize that restructuring the study to address environmental sustainability required expanding the scope of the study to include much broader consideration of ecosystem conditions, needs, and management issues. Yet this expanded effort seems to have resulted in a report that is not equally thorough in its treatment of navigation and environmental issues. Presumably this is not intended to suggest a departure from the commitment to equal consideration. However, the states urge the authors to keep navigation and environmental sustainability in balance.

In addition to the above general observations, the states offer the following specific comments on the May 10, 2002 draft Interim Report, including comments on sections of the report devoted to Plan Formulation, Implementation Issues, and Conclusions and Recommendations:

Plan Formulation

As described on pages 34-35 of the draft Interim Report, the feasibility study will be conducted using the Corps of Engineers' 6-step planning process. In general, the states acknowledge that this is a useful and rigorous planning framework to employ. However, it should be recognized that parties other than the Corps may not subscribe to all the assumptions or conditions. For example, from the states' perspective, the unconstrained funding assumption for both the future without and with project (p. 35) may not be a useful basis upon which to develop or evaluate implementation options. This assumption is particularly problematic with regard to the future without, which in many respects is an extension of existing practices that are, in fact, experiencing severe funding constraints. The unconstrained funding assumption may also prove difficult as applied to the concept of adaptive management and cost-shared ecosystem restoration.

Furthermore, in the states' view, a plan formulation process, similar to the one being used to identify and evaluate navigation and environmental alternatives, should be employed to consider implementation issues such as potential changes in authorities and institutional arrangements.

The following summarizes the states' comments on each of the major plan formulation steps described in the Interim Report:

Problems and Opportunities (pp. 35-36)

The states support the way in which the principal navigation, environmental, and floodplain problems have been articulated for the purposes of this study. In particular, both environmental and floodplain problems to be addressed in this study are defined in relation to the navigation system. This approach is consistent with the states' view that the study not attempt to address all river-related problems and needs, but focus on the fundamental, long-standing issues at the nexus of navigation and environmental management.

Goals and Objectives (pp. 36-41)

- The states support the over-arching (tier 1) goal of sustainability, as described on page 33. In so far as that goal was collaboratively derived, it should be prominently quoted in the Goals and Objectives section of the report, beginning on page 36.
- Tier 2 and 3 goals have not yet been specifically defined as part of the navigation study collaborative process. While the Interim Report acknowledges that tier 3 ecosystem goals still need to be identified, it leaves the question of tier 2 goals ambiguous. For example, ecosystem goal statements developed in other venues (i.e., 1994 Large River Conference, UMRCC Report, and EMP HNA) are set forth on page 40, thus implying that they are the 2 ecosystem goals upon which this study will be based. However, they have not yet been identified as the consensus tier 2 goals of study participants. Similarly, the status of the navigation goals is not clearly described. For instance, the navigation goals described on page 39 are presumably tier 2 goals. Yet it remains unclear if more quantitative or locationally-specific tier 3 navigation goals are going to be identified as part of this study. If, in fact, the conceptual framework of tiered goals is a useful construct for the navigation study, then the Interim Report should clearly describe how those goals will be developed as part of the feasibility study.

Inventory and Forecast (pp. 42-80)

- The description of existing conditions presented on pages 42-63 includes a wide variety of excellent information.
- To define the without project condition for navigation, scenarios are used to forecast traffic under a variety of alternative future policies and conditions. As explained on page 63, this approach was taken to help address the uncertainty of forecasting in a 50-year planning horizon. While scenarios offer a useful tool for forecasting traffic, they will also play an important role in evaluating the alternatives. It would be helpful to explain this dual role for the scenarios when they are first described in the context of without project conditions. In particular, understanding how the scenarios are to be used in evaluating alternatives would be helpful.

- The Interim Report does not describe the merits or feasibility of assigning probabilities to the scenarios. However, this has been an on-going topic of discussion among study participants. Despite whatever reservations the Corps may have regarding assigning probabilities, those who review the analysis and are asked to make investment decisions based on the analysis are undoubtedly going to seek to understand what factors are most important in producing the different scenario forecasts and the relative likelihood of the various scenarios actually occurring. A probability analysis would be a helpful addition.
- The without project condition for the ecosystem appears to be addressed in two separate sections of the report. The “without project operation and maintenance for the ecosystem” section (p. 74) describes environmental enhancement features currently being pursued under the Corps’ O&M authority, including off-bank revetments, water level management, and fish passage. In contrast, the “without project ecosystem conditions” section (p. 79) describes desired and projected future ecosystem conditions. The reason for this dichotomy is unclear.
- If the section describing the without project O&M of the ecosystem is intended to convey that these actions are part of the without project, that should be clearly stated because it will have a major impact on alternative formulation. Many of the actions currently described in the without project are also included in the environmental alternatives to be considered in the planning process. If it is simply a matter of degree, with some actions being done in the without project (no action alternative) and more of the same being done as a potential future alternative, then it would appear to be inconsistent with the assumption of unconstrained funding for the future without.
- Figure 19 (p. 75) offers a schematic representation of ecosystem degradation over time. Rather than being included in the section describing the without project O&M for the ecosystem, it would seem more appropriate to discuss this conceptual framework in the section on without project ecosystem conditions. More importantly, the figure requires further explanation of the line indicating “desired state.” It is not clear if this desired state has already been defined, and if so what it is, or whether it remains to be defined as part of the ecosystem tiered goal-setting process. Furthermore, the discussion on p. 43 describes the need to define reference conditions for the desired state and presents a range of possibilities. But the collaborative study process has not yet defined reference conditions.

Identification of Measures (pp. 81-106)

- **Navigation Improvements** — The process for identifying potential large-scale navigation improvement measures (pp. 89-94) fails to describe why 16 lock sites (Locks 11-25 on the UMR and Peoria and LaGrange on the IWW) are the focus of evaluation. Such an explanation would be particularly helpful in understanding the later discussion of navigation improvement alternatives, which groups improvements by waterway segments and introduces consideration of lock sites further north on the system than had previously been contemplated in this study.
- **Mitigation** — The discussion of site-specific environmental costs (pp. 94-95) includes a detailed table of costs at each lock site. Yet there is no description of what measures constitute those costs. Similarly, the section describing systemic mitigation planning

(pp. 94 –96) refers to the fact that a draft mitigation plan was developed, but fails to provide the reader with an understanding of what types of measures are under consideration. The description of these systemic mitigation measures provided later in the report (p. 113) would be more appropriately included in the section devoted to identification of measures.

- **O&M for the Environment** — Presumably, the section entitled “Modifications to Navigation System Operation and Maintenance for the Environmental Benefits” (pp. 96-103) is intended to describe the types of measures that can be used to operate and maintain the ecosystem, as opposed to those that could be considered to be ecosystem restoration measures (p. 103) or ecosystem enhancement measures (p. 105) described later in the report. Yet, Table 26, which is included in the O&M section, covers a broad variety of habitat actions, many of which are also restoration and enhancement measures. Furthermore, the list of potential channel maintenance modifications (pp. 99-100) includes not only management actions, such as side channel dredging and island creation, but also institutional and funding options, such as the Regional Dredging Team and increased funding for Section 206 programs. Mixing measures and implementation options contributes to the overall lack of clarity in this section.
- **Ecosystem Restoration** — Measures identified as ecosystem restoration alternatives on p. 103 include backwater, secondary channel, and island restoration. Yet many seemingly similar actions (side channel dredging and island creation) are listed as O&M actions. In addition, “traffic management for environmental benefits” (p. 104) is identified as an ecosystem restoration measure, even though it is more appropriately described later in the report (p. 113) as a mitigation measure.
- **Ecosystem Enhancements** — It appears that the primary criteria for considering an ecosystem action to be an “enhancement” is that it involves floodplain terrestrial areas rather than aquatic habitats. Yet the basis for this distinction is not described. If it is important to distinguish between restoration and enhancement at all, then those distinctions must be made clear. It also appears that land acquisition falls in the ecosystem enhancement category. Given the fact that land acquisition has been one of the major needs under discussion to date in the feasibility study, it should be more fully described in this section.

In general, it appears that an attempt has been made to define ecosystem measures in four different categories — mitigation, O&M, restoration, and enhancement. Yet, given the examples above, the distinctions remain unclear. Specific measures or actions could, for instance, be undertaken in more than one category, i.e., for more than one purpose. Presumably, the Interim Report uses these categories because they will have significant implications in the plan formulation process, particularly in considering implementation options. Yet categorizing the measures in this way contributes to the faulty perception that they can only be used to address one type of management goal.

It is also critical that the alternative measures, particularly for ecosystem O&M, be clearly distinguished from the earlier discussion describing the “without project operation and maintenance for the ecosystem.” In making these distinctions, it will be equally important to describe the existing limitations of the Corps’ O&M authority with regard to environmental

actions. If, in fact, one of the recommendations under consideration is to provide the Corps with an additional or expanded authority to operate and maintain the ecosystem, it will be necessary to understand what types of actions would be included under such an authority and why existing authorities are insufficient.

- **Floodplain and Recreation (p. 106)** — It is unclear why floodplain and recreation opportunities are included in the section of the Interim Report devoted to identification of measures, if in fact, there is no intention of developing alternative plans to address these issues in the feasibility study. The states agree that these issues are beyond the scope of this study and would thus suggest that these two sections be eliminated.

Formulation of Alternatives (pp. 106 – 110)

- **Navigation Improvement Alternatives** — Presumably, one of the purposes of the Interim Report is to describe the analysis to date and help readers understand the implications of changes in the restructured approach to the study. One of the most significant changes is the shift from use of the ESSENCE model to the Corps' more traditional economic model that assumes demand is inelastic. As noted at the May 14, 2002 Governors' Liaison Committee meeting, this change in economic models will result in a larger base of potential benefits and thus require consideration of more expansive alternatives to realize gains in efficiency. Presumably this accounts for the fact that the navigation improvement alternatives described on page 107 include potential new or extended locks as far north as Lock 11. Previously in this study, it appeared that lock improvements would not be justified north of Lock 14. Given that this issue has been controversial in the past and represents a major change in the potential outcome of the study, it should be clearly explained in this section.
- **Environmental Restoration Alternatives** — The environmental alternatives are grouped by types of actions and then assumed to be additive or nested, such that any given alternative includes all the measures in previous alternatives as well. The rationale for such an approach is not described. The fact that it is a fundamentally different approach to formulating alternatives than that employed in the navigation alternatives may not in and of itself be problematic. However, it does not appear to be a particularly useful way to structure environmental alternatives, in so far as it suggests a hierarchy of measure effectiveness, implies that the alternatives are interdependent, and seems to preclude evaluation of different combinations of alternatives. As another approach, the Corps should consider formulating environmental alternatives so they seek to achieve different levels of ecosystem integrity. Such an approach was discussed by the Navigation Environmental Coordinating Committee, but not definitively resolved. In short, the states believe that additional discussion of the environmental alternatives is warranted as the feasibility study moves to its next phase.

Preliminary Evaluation (pp. 110-112)

- It is the states' understanding that navigation and environmental alternatives will be combined to form an array of "integrated alternatives." Such an approach is consistent with the integrated management philosophy to which the states subscribe. A helpful and important clarification of how this process will work would be to explain that the

environmental and navigation improvements, although integrated, are not intended to be interdependent. However, the environmental and navigation improvements that are combined into a single integrated alternative must be compatible, such that the alternative is internally consistent and no component constrains the ability to implement another. It is the states' understanding that, while various navigation and environmental options will be combined into an alternative package, it is not necessarily the case that a particular navigation option automatically carries with it a fixed suite of environmental options, with the exception of mitigation requirements.

- Although the scenarios are described earlier in the report, as they relate to traffic forecasts, it would be helpful to again briefly describe what those scenarios are and how they will be used in evaluating alternatives. In particular, the relevance of the scenarios to the evaluation of environmental alternatives is unclear.
- In addition to the NED and NER criteria, four other evaluation criteria are described, including robustness, risk, acceptability, and flexibility/adaptability. As presented, the risk criterion is intended to address the fact that alternatives may vary widely with regard to how well they perform under each of the scenarios. There will likely be an additional dimension to the risk assessment that involves the likelihood or probability of each of the scenarios. As previously mentioned, a probability analysis would be a helpful addition to the analysis.
- Early in the feasibility study, the states requested that a regional economic analysis be done, in addition to the required NED analysis. While a regional economic analysis was included prior to the study restructuring, it is not addressed in the Interim Report, thus raising the question of whether a regional economic analysis will, in fact, be part of the restructured study.

Implementation Issues

Authorizations (pp. 114-116)

- The description of the Corps' authorities is almost entirely focused on its environmental projects, programs, and requirements. The states recommend broadening this description to provide a more complete picture of the Corps' authorities related to UMRS management, particularly those related to navigation.
- The Coast Guard is not included in the list of federal agencies involved in UMRS management. Consistent with our comment above, this section should not be limited to ecosystem management-related authorities. As the agency charged with marine safety, maintaining aids to navigation, and regulating commercial operators, the Coast Guard should be described here.
- A brief description of the states' river-related authorities should be added. This could be done generically, rather than writing separate descriptions for each state. Consideration of the states' roles will be important to an overall evaluation of authorities, especially with regard to the relationship between state and federal authorities.

- This section needs to describe the limitations associated with current authorities. Without such an assessment, there is no basis for conclusion/recommendation #1, which speaks to the Corps' need for an integrated authority.

Funding (pp. 116-117)

- The draft report cites Section 906(e) of the 1986 Water Resources Development Act as the basis for positions that environmental restoration on the UMRS should be accomplished at 100 percent federal expense. More specifically, the report claims such positions are based primarily on criteria 3 — i.e., projects providing national benefits, such as anadromous fish or treaty species, are 100 percent federal. In point of fact, the states' perspectives on cost-sharing are based on considerations far broader than the particulars of Section 906(e). As articulated in the states' February 2002 perspectives document, factors affecting the states' ability and willingness to cost-share on the UMRS include fiscal, policy, and legal constraints. This includes a very real limit to assuming responsibility for financing projects within a federally managed river system, the character of which has largely been shaped by federal actions to create and sustain a nationally significant commercial navigation system.
- The Interim Report suggests that the Section 906(e) cost-sharing criteria are broadly applicable to the Corps' environmental restoration authorities. We suggest modifying this section to more precisely describe cost-sharing criteria as they relate to the authorities in use on the UMRS.
- The draft report excerpts a list of cost-sharing questions from an issue paper developed for the Environmental Management Program Report to Congress. These questions are not all applicable to the broader questions of environmental restoration funding being explored in the Interim Report. For example, the question of skewing projects toward refuges is specific to the EMP. Overall, Chapter 3 would benefit from more of the analysis and evaluation that the questions are designed to elicit. However, in this particular instance, the questions are not appropriately framed.
- The operation and maintenance discussion is unnecessarily general. Rather than describing efforts to operate the system in an “environmentally friendly manner,” this section should explain the current standard (i.e., least cost environmentally acceptable) and the implications of that standard.

Institutional Arrangements (pp. 117-119)

- The current institutional arrangements discussion consists largely of a list of coordination groups that various agencies and organizations use. This reflects an overly narrow approach. The questions surrounding institutional arrangements needed to support integrated river management extend far beyond the choice of coordination bodies and are considerably more complex. Among other things, these questions relate to gaps and overlaps in authorities, agency decision-making and budgeting processes, opportunities for stakeholder involvement, collective agenda setting, etc. A more thorough, substantive assessment will clearly be needed as part of the feasibility study, if, in fact, the issue of

institutional arrangements is going to be a meaningful part of the study. As the states have previously said, consideration of institutional arrangements should be undertaken only after the recommended plan has been identified. For purposes of the Interim Report, the states recommend revising this section to describe the general scope of the institutional assessment that will be undertaken. Conclusions regarding the current coordination groups should await completion of that assessment.

- The list of coordination groups is largely focused on those used by, and in most instances created by, the Corps. Just as the institutional arrangements assessment needs to be extended beyond the simple listing of groups, it also needs to be extended beyond those arrangements relevant to the Corps. The assessment must consider the full range of institutional arrangements relevant to integrated UMRS management. Moreover, there are inaccuracies in the matrix as presented.
- Three attributes are suggested in the Interim Report as the basis for evaluating a successful institutional arrangement: collaborative, adaptive, and integrated. However, these are all process characteristics. The states recommend adding “operationally relevant” to the list of desired attributes.

Preliminary Conclusions and Recommendations

In general, the draft Interim Report’s preliminary conclusions and recommendations address the issues of primary concern that the states articulated in our February 2002 perspectives document. Fundamentally, this involves taking an integrated approach to meeting the navigation and ecosystem needs of the UMRS. However, the states are disappointed that the draft report does not include any recommendations for near-term actions. General Griffin’s August 2001 study guidance clearly allows for the possibility of such interim recommendations. As we have noted previously, some small scale structural and non-structural measures appear to be justifiable in the near-term and are, in fact, pending recommendations from the 1982 UMRS Master Plan. Similarly, the draft makes no mention of the study participants’ broad concurrence that vital programs such as the Environmental Management Program and operation and maintenance should be fully funded in the near-term, and that important corollary study efforts such as the Flow Frequency Study and the Comprehensive Plan should proceed on schedule. If such recommendations are not included, the states urge that the Interim Report explain why it does not contain any near-term measures.

As a general observation, the states suggest that the preliminary conclusions and recommendations could be better framed and organized. In particular, some of the recommendations focus on the remaining feasibility study process while others relate more to the substantive questions before us, such as what authorities are needed and the importance of adaptive management. Expanding the Chapter 4 introduction to explain this and then grouping the conclusions and recommendations accordingly would assist readers.

With regard to the 11 specific conclusions and recommendations in the draft Interim Report, the states offer the following comments and observations:

Conclusion/Recommendation #1

- It is our understanding that this conclusion/recommendation relates to integrating UMRS management activities *within* the Corps—i.e., the recommendation is to explore options for the Corps to integrate its work related to navigation improvements, O&M, ecosystem restoration, and floodplain management. Interagency integration is addressed in the second conclusion/recommendation #2. This should be made clear in conclusion/recommendation #1.
- This discussion combines both authority and funding issues. For example, it talks about the need for an integrated O&M authority and then identifies potential funding mechanisms for both “traditional” O&M and O&M designed to address the navigation system’s cumulative ecosystem impacts. We recommend confining conclusion/recommendation #1 to the consideration of how to integrate the Corps’ authorities, leaving discussion of funding mechanisms to conclusion/recommendation #5.
- The basis for this conclusion/recommendation in the preceding chapters is not clear. In particular, Chapter 3, the report’s implementation issues discussion, does not clearly describe the limitations in the Corps’ current authorities and the way in which the integrated approaches recommended here would address those limitations. Moreover, the conclusion statement is rather long and includes information that would appear to be more appropriate in Chapter 3. We recommend shifting and revising this discussion so that there is a clear basis for this conclusion/recommendation in the report.
- The opening paragraph identifies two options—i.e., modifying existing authorities to establish equal project purposes for navigation and ecosystem restoration or establishing a new multi-purpose system authority. However, the balance of the discussion focuses on the multi-purpose authority; and later, recommendation #5 states that “a system authority will be recommended.” If both options are to be considered in the feasibility study, the Interim Report should describe both and identify any important distinctions. This discussion needs to include sufficient information for readers to understand the potential implications associated with both options.
- The feasibility study will include an evaluation of options for Corps authorities. In evaluating these options, the states urge the Corps to identify and address any broader implications for how the Corps manages other components of the inland waterway system. Of particular interest to the five states are ways in which changes to UMRS authorities might relate to how the Corps manages the Missouri, Ohio, and Lower Mississippi Rivers.

Conclusion/Recommendation #2

- The recommendation acknowledges that changes to authorities and policies of other federal agencies are beyond the scope of the navigation feasibility study. The states do not disagree with this conclusion. However, we do believe it would be helpful to clarify what will be done within the feasibility study to address integration across agencies. That is, will the feasibility process include a specific effort to identify, evaluate, and recommend options for interagency integration, or will this largely be incidental to other feasibility study work?

Conclusion/Recommendation #3

- This conclusion asserts that “there is a need to combine and streamline existing institutional arrangements to avoid duplication, promote efficiencies and better utilize resources.” However, the preceding chapters of the report do not provide a basis for this conclusion. In particular, the discussion in Section 3.4 equates coordination groups with institutional arrangements and seems to imply that there must be duplication and inefficiencies because there are several such groups. From the states’ perspective, the question of institutional arrangements is far more complex than simply the groups that various agencies and organizations use to coordinate. These complexities will have to await consideration in the feasibility study. However, readers of the Interim Report should not be left with the impression we have already reached conclusions regarding existing coordination mechanisms.
- As expressed in our February 2002 perspectives document, the states concur that consideration of the institutional arrangements question should await identification of the recommended plan. However, this has implications for the feasibility study schedule. For this approach to work, it is essential that the schedule include adequate time to thoughtfully evaluate institutional arrangements after the recommended plan is developed.

Conclusion/Recommendation #4

- The states agree with the need to take an adaptive approach to managing the UMRS in an integrated fashion. The importance of flexible authorities and an on-going funding commitment to the success of adaptive management cannot be overstated. Maintaining this flexibility and financial commitment over time will present significant challenges.

Conclusion/Recommendation #5

- As suggested above, the funding-related discussion in conclusion/recommendation #1 should be relocated to #5.
- The language in conclusion/recommendation #5 indicates the Corps has already determined it will seek system authority that “will assure that appropriations are allocated to both navigation improvements and ecosystem restoration objectives.” Moreover, the possibility of a federal trust fund of any type has been dismissed. Yet there is nothing in the preceding chapters of the report, including the Section 3.3 funding discussion, that appears to provide a basis for this conclusion and recommendation. From the states’ perspective, it is premature to be recommending a single approach, or to be dismissing potential options. As such, we do not concur with #5 as presently written.
- This recommendation also urges the states to “seek avenues of generating revenues to serve as cost-share funds for UMRS ecosystem management actions.” As articulated in the states’ February 2002 perspectives document, there are very real fiscal, policy, and legal impediments to state and local governments serving as major cost-share partners on the UMRS. Until the scope and nature of the proposed cost-share activities are better defined, the states will not be in a position to consider pursuing additional funding or addressing policy and legal constraints.

Conclusion/Recommendation #6

- The states believe that the rescoped navigation study's emphasis on collaboration has been helpful and concur that the collaborative process should continue for the remainder of the feasibility study. We remain committed to participating in that process.

Conclusion/Recommendation #7

- The schedule presented at the May 14, 2002 Governors Liaison Committee meeting calls for completion of the draft feasibility report in Winter 04 and issuance of the Chief's Report in Fall 04. However, conclusion #7 calls for the study to be "expedited," and the recommendation suggests that the study should be available for consideration in the anticipated 2004 Water Resources Development Act. Is the draft Interim Report recommending acceleration of the study schedule beyond that presented on May 14? The states have called for both a credible and timely feasibility study and would seek an opportunity to understand and comment upon any acceleration of the study schedule.
- The Interim Report should include a schedule of the remaining milestones in the navigation feasibility study. To provide readers with an overall understanding of the study, the schedule should be combined with summary descriptions of the remaining major tasks and plan formulation processes.

Conclusion/Recommendation #8

- This conclusion/recommendation focuses exclusively on ecosystem goals and objectives. While the states certainly agree that there is much work to be done in this area, we would also note that tier 3 goals and objectives have not been articulated for the navigation system either — i.e., what are the quantitative, local and regional scale, specific goals and objectives for the navigation system that will contribute to meeting the tier one goal of UMRS sustainability? Identification of tier 3 goals and objectives for both the ecosystem and the navigation system should be part of the feasibility study process.
- The tier 3 goal identification process should begin with confirmation of the tier 2 goals outlined in the draft Interim Report. While the states do not necessarily take issue with any of the items presented as tier 2 goals, we do think that they should be the topic of explicit consideration and endorsement among the study participants before proceeding to tier 3.
- Recommendation #8 should be expanded to describe the "coordinated systemic planning effort" that will be employed to develop tier 3 goals and objectives. Among the states' unanswered questions, how would the tier 3 ecosystem effort relate to the pool planning work already underway? Does the Corps anticipate that the tier 3 work will be completed by the end of the feasibility study? The consensus among river management agencies and stakeholders is that agreement on goals and objectives for the navigation system and ecosystem is critical. The Interim Report should outline the process that will be employed in the feasibility study to address this critical need and reflect that process in the schedule that we have requested in our comments on conclusion/recommendation #7.

Conclusion/Recommendation #9

- The states concur that the Environmental Management Program is an important tool for integrated management of the UMRS. We further agree that potential modifications and enhancements to the EMP should be addressed in the EMP Report to Congress and reflected, as appropriate, in the navigation feasibility study. This approach, however, clearly requires careful integration between the Report to Congress and the feasibility study. The Interim Report should identify a process for this integration and reflect that process in the schedule that we have requested in our comments on conclusion/recommendation #7.

Conclusion/Recommendation #10

- This recommendation calls for continued development of navigation economic development models outside of the UMRS feasibility study, but does not indicate how these models might apply to management of the UMRS navigation system. Based on the May 14, 2002 Governors Liaison Committee meeting, the states understand that the Corps does not expect this proposed research and development effort to produce any results for use in the UMRS feasibility study. However, the applicability of those refined economic development models to subsequent management of the navigation system is less clear. The Interim Report should clearly describe the anticipated applicability of these improved economic development models to the UMRS, both before and after the feasibility study is completed.

Conclusion/Recommendation #11

- As articulated in our February 2002 perspectives document, the states agree that the navigation feasibility study should be completed in a timely manner and support navigation improvements that are economically justified and environmentally acceptable.

Upper Mississippi River Basin Association
415 Hamm Building, 408 St. Peter Street
St. Paul, MN 55102
Phone: 651-224-2880
www.umnba.org

**Upper Mississippi River Basin
States' Perspectives
on
Refocused UMRS Navigation Study
(February 27, 2002)**

Overview

The five Upper Mississippi River Basin states believe the refocused navigation study offers a promising approach for moving forward to address the current and future navigation and associated environmental needs of the Upper Mississippi River System (UMRS). As such, it is critical that the study proceed expeditiously to a timely conclusion. The states, both individually and collectively, through the Upper Mississippi River Basin Association (UMRBA), are committed to helping make this a productive process.

Introduction

As stewards of the region's water resources and partners in the management of the Upper Mississippi River System, the states have a keen interest in the Corps of Engineers' Upper Mississippi River and Illinois Waterway System Navigation Study and a stake in its outcome. Since the initiation of the feasibility study, the five basin states have participated in the full range of intergovernmental coordination venues for the study, including the Governors Liaison Committee, the Navigation Environmental Coordinating Committee, the Economics Coordinating Committee, and the Engineering Coordination Committee. Through the Upper Mississippi River Basin Association, the states have also monitored the study's progress and advocated funding for its timely completion.

Each of the basin states has its own unique perspectives on river management and the navigation study in particular. Nevertheless, through the UMRBA, the states seek to articulate and act upon their mutual concerns. As such, the states now offer their joint views on the navigation study, as refocused by the August 2, 2001 Guidance Memorandum from Brigadier General Robert H. Griffin.

General Griffin's August guidance directed that the navigation study be refocused to yield a plan for modifying the navigation system "to relieve lock congestion and achieve environmental sustainability." The states applaud this change in scope. In particular, expanding the study to include broad consideration of the ecological needs of the system, including environmental improvements, as well as mitigation requirements, is a welcome and necessary shift in the study framework. This fundamentally new approach is consistent with the framework that UMRBA advocated in its 1992 comments on the study's Initial Project Management Plan (IPMP). Those comments called for "a comprehensive integrated systems approach to evaluation of both the navigation and environmental needs of the river system." Having said that, the states would caution that, in an effort to broaden the study to a more comprehensive view of navigation and environmental needs, the study should not seek to address all river-related problems and needs. It is the states' view that the study must continue

to focus on what have been the fundamental long-standing questions surrounding the nexus of navigation and environmental management. Namely, it must address, in an integrated way: the need for navigation improvements, the associated environmental impacts of such improvements that require mitigation, and how to meet the ecosystem needs of a river system that has been altered over time for commercial navigation.

General Griffin's August guidance also placed heavy emphasis on a collaborative process for conduct of the study and development of the plan. The states welcome this more inclusive approach. In addition to state and federal agencies and organized stakeholder groups, this collaborative process must include opportunities for individual citizens to be involved.

This document provides the five basin states' common perspectives on the Corps of Engineers' refocused navigation study. Included are general comments, as well as the states' perspectives on more specific potential actions and recommendations.

Overview Comments

Guiding Principles — The states, both individually and collectively, through the UMRBA, have a long-standing and strong commitment to the balanced management of the Upper Mississippi River as a multi-purpose system. As articulated in the 1997 Joint Governors' Proclamation, the states are committed to the "pursuit of unified economic and environmental policies," and management of the river "to ensure the needs of present generations are met without compromising the ability of future generations to meet their needs." These principles should guide the navigation study and serve as the basis for a unified package of policy, program, and project recommendations.

Navigation Improvements — The UMRS commercial navigation system is an integral part of the national transportation system and an important part of the regional and national economy. The navigation study is designed, in part, to address the future viability and integrity of this system. It must therefore provide a rigorous systems economic analysis that identifies the costs and benefits of navigation improvement alternatives and offers a sound basis for pursuing improvements that are economically justified. New locks, lock extensions, small scale structural measures, and nonstructural alternatives must all be among the options evaluated and considered.

Environmental Needs — The UMR is a nationally significant ecosystem that has been altered over time to also serve as a commercial navigation system. The navigation study, as refocused, is designed, in part, to produce a plan to "achieve environmental sustainability." To successfully do so, the study must seek ways to actively restore presently degraded conditions and enhance natural river processes, recognizing that these fundamental processes are what shape and sustain a healthy ecosystem. The study must also seek an adaptive approach for ecosystem management, recognizing that our understanding of many biological and physical processes is imperfect and that both the environmental needs and available management tools will change over time.

Operation and Maintenance — The Corps’ authority to operate and maintain the navigation system is arguably the strongest direct human influence on the character and dynamics of the river. It is certainly one of the largest investments that the federal government makes in the UMRS, with annual expenditures of over \$130 million. While the cost of O&M has been increasing over time as the navigation infrastructure ages and the challenges of finding environmentally acceptable approaches increase, O&M funding has essentially remained flat. The navigation study must address the fundamental question of how future O&M needs, related to both the navigation system and ecosystem, will be met. Future lock and dam rehabilitation needs, channel maintenance needs, and “environmental O&M needs” must all be considered.

Mitigation — Consistent with current law, the navigation study must evaluate the environmental impacts of increased traffic associated with navigation improvements and include mitigative actions for whatever improvements are ultimately recommended, just as the Corps intended to do from the beginning. However, the recent refocusing of the study to more broadly address environmental sustainability offers an opportunity to set aside longstanding legal and procedural debates regarding the Corps’ obligation to mitigate for past and future O&M activities. Clearly identifying the cumulative impacts of past actions, including O&M of the nine-foot channel, and designing a discrete mitigation package for those distinct actions is both scientifically challenging and potentially of limited practical value. If the navigation study identifies the full range of actions required for future environmental sustainability of the UMRS and a viable strategy for pursuing them, the fine distinctions associated with mitigation are much less important. With particular regard to the issue of whether an EIS should be done on the cumulative effects of O&M of the 9-foot navigation channel, the states support the approach set forth in the August guidance that says, “the historical and projected conditions of the system’s ecology, including the cumulative effects from all sources, will be evaluated to identify trends in the state and health of the ecosystem, and to identify opportunities to improve the ecosystem.”

Cost-Sharing — The August guidance indicates that the navigation study “will also address any procedural, sponsorship, and cost-sharing issues that might arise related to the study and implementation of measures that cannot be appropriately allocated to inland navigation.” The states view this issue as particularly critical to the ultimate success of the study. The study must identify a viable approach for funding whatever navigation and environmental improvements are ultimately recommended. This will likely require serious consideration of changes to existing law and policy. Currently, nonfederal cost-sharing is required for environmental improvements undertaken by the Corps of Engineers, with the exception of EMP projects on refuges and those activities pursued as “the least cost, environmentally acceptable alternative” under the O&M authority. While mitigation features are funded in part by the Inland Waterways Trust Fund, the responsibility for funding the nonfederal share of other environmental improvements typically falls on states or local units of government. If existing Corps environmental authorities, such as the EMP, Section 1135, Section 206, or Section 204, are to offer viable options for addressing future environmental needs of the UMRS, cost-sharing requirements must be re-examined. The reality is that cost-sharing for environmental restoration and enhancement on the UMRS is simply too expensive under existing programs for state and local governments. In addition, it is unrealistic to assume that all states and/or local units of government will be willing and able to take responsibility for financing projects within a federally managed river system, the character of which has largely

been shaped by federal actions to create and sustain a nationally significant commercial navigation system.

Moving Forward — It is likely that the optimal suite of economic and environmental improvement investment will be elusive. The navigation study should certainly seek to provide sound economic and environmental analysis upon which to base future decisions and a robust array of alternatives from which to choose. In this regard, the scenario approach to be employed in the refocused study will be potentially very useful. As the August guidance describes, these scenarios should “allow the decisionmakers to consider the relative impacts and risks of selecting a particular plan for implementation.” In the end, the states expect to have, at a minimum, a reasonable basis for proceeding, even in the face of uncertainty.

Preliminary Recommendations

As Congress considers a Water Resources Development Act in 2002, the states anticipate that some stakeholders will seek to move ahead quickly with recommendations for the future of the UMRS. The navigation feasibility study, which began in 1993, has been a lengthy and challenging process. With the recent restructuring, the study’s final completion date is unclear. The states are eager to have the study completed in a timely fashion and are hopeful that major investment decisions will await its conclusion. However, in an effort to help focus the consideration of alternatives, the states offer the following preliminary suggestions and observations regarding potential specific actions and recommendations:

Navigation Improvements

Assessing the potential need for UMRS navigation improvements was the original purpose of the Corps of Engineers’ feasibility study, and continues to be a primary focus. As part of the ongoing study, the Corps has identified a range of potential large scale, small scale, and nonstructural measures that might be taken to enhance the system’s capacity. Under the refocused study, the Corps is now completing its evaluation of these potential measures. While the states’ specific recommendations at this time regarding navigation system improvements are relatively brief, this should by no means be interpreted as indicating a lack of commitment to maintaining the UMRS as a vital and efficient transportation system. Rather, the brevity of the states’ comments below reflects their confidence that the range of options has been well identified. What remains is for the Corps to complete its assessment of how these various options might perform under a range of possible futures. That assessment will provide critical insight regarding which option(s) will best serve the region and the nation. In contrast, the range of alternatives for addressing the system’s environmental needs has not been as well documented. Thus, in an effort to further the discussion, the states’ observations regarding environmental needs are somewhat more extensive. The states’ continuing commitment to balanced, multi-purpose management of the UMRS cannot be overemphasized.

- Small scale measures, such as mooring buoys and cells, tow haulage units, and guidewall extensions appear to be feasible near-term actions that could be taken at various locations. While evaluating all options is important, the study should focus on those that hold most promise and they should be considered for recommendation in the Interim Report. A

variety of these nonstructural and minor structural improvements was recommended 20 years ago in the UMRS Master Plan, but never implemented.

- The states support authorization of navigation improvements that are economically justified and environmentally acceptable. Economic analysis to date suggests that those improvements may include additional lock capacity. Further analysis is needed to determine whether new locks or lock extensions would be appropriate.

Environmental Needs

Achieving environmental sustainability will require a variety of actions to both restore degraded conditions, as well as enhance and protect ecological functions and resources. While many of the specific actions and measures have yet to be determined, the overall framework should include the following:

- mitigation of navigation traffic impacts (Trust Fund)
- integrated authority for navigation and ecosystem O&M
- habitat restoration and enhancement (EMP)
- mitigation of site-specific impacts of navigation improvements
- floodplain acquisition to restore floodplain connectivity
- enhanced refuge O&M
- pool planning to identify needs and specific actions by river reach
- long term monitoring to support adaptive management

Each of these is described below:

- The environmental impacts associated with increased navigation traffic will require mitigation. Actions to avoid, minimize, and compensate for those impacts will need to be undertaken over time within the context of adaptive management, with emphasis on preventing impacts before they occur. A mitigation Trust Fund approach may be an effective way for financing and implementing these measures, given that many of the required actions will need to be implemented over a longer time frame than the funding and construction of the navigation improvements. Such a Trust Fund would be established at the same time as the navigation improvement construction authorization. Appropriations to the Trust Fund would be coincident with construction appropriations, but expenditures would be made over time as specific traffic mitigation actions are identified and implemented.
- The Corps of Engineers currently has authority for operation and maintenance of the UMRS navigation system. That O&M authority should be amended to allow the Corps to address the needs of both the navigation system and the river ecosystem. Such an expanded O&M authority must be accompanied by a significantly enhanced funding level. While this will undoubtedly be challenging, given historical O&M budget constraints, it may be the most viable long-term funding strategy for ensuring environmental sustainability.

Establishing such an integrated authority would enhance the Corps' partnership opportunities with natural resource agencies that also have responsibility for fish and wildlife management. This authority could provide a broad integrated basis for making channel improvements, dredging, pool regulation, modifying regulatory structures and embankments, and fish passage structures. For example, changes to the Corps' authority need to include the ability to operate pool levels outside the normal operating band, while still accommodating navigation needs, so that pool-wide drawdowns can be conducted in the future. By establishing a more unified authority for O&M, environmental concerns would no longer necessarily be viewed as a planning constraint (i.e., the "least cost, environmentally acceptable" criteria). In addition, the on-going debate regarding responsibility for mitigating the impacts of navigation O&M could evolve into a more integrated framework of pro-active maintenance of the UMRS for dual purposes. General Griffin's August guidance appears to open the possibility of such a new approach by indicating that "modifications to operations and maintenance procedures to improve the environment will be identified and considered."

- The Environmental Management Program (EMP) should continue to be a primary programmatic vehicle for undertaking environmental restoration and enhancement projects on the UMRS. Since its reauthorization in 1999, annual EMP appropriations have fallen short of the authorized levels and must be increased in the future. The August guidance memo for the navigation study indicates that "the report should address the advisability of modifying the ... Environmental Management Program ... to plan and implement ecosystem restoration measures that might be identified in this study." While a general recommendation regarding the future of the EMP would certainly be appropriate as part of the Navigation Study report, more in-depth consideration of EMP programmatic changes should be handled in the context of the EMP Report to Congress, required by law to be submitted in 2004.
- Site-specific environmental impact assessments for navigation improvements recommended in the navigation study should be undertaken for each site prior to construction. Site-specific impacts should be mitigated as part of the project.
- A reduction in the acreage of the natural floodplain is one of the primary causes of the decline in habitat diversity, particularly on the lower reaches of the UMRS. Restoring floodplain connectivity by acquiring floodplain lands from willing sellers was recommended in the 1993 "Galloway Report" and the 2000 UMRCC "Working River Report." A new consolidated UMRS floodplain acquisition program should be established for the dual purposes of environmental restoration and flood damage reduction. While land acquisition can be accomplished under a wide variety of existing programs, many are not sufficiently nimble to take advantage of market opportunities and lack a multi-purpose authority. There is a critical need to be able to respond to acquisition opportunities when they arise, such as immediately following flood events.
- The Fish and Wildlife Service's extensive network of refuge lands on the UMRS is essential to effective efforts to maintain and improve ecosystem health. Current funding to operate and maintain the refuges is inadequate, jeopardizing the Service's ability to participate as an effective partner in the Environmental Management Program and other habitat protection efforts. In addition to increased O&M resources, the refuges need reliable and flexible acquisition funding if the Service is to contribute to goals such as restoring floodplain connectivity by acquiring lands from willing sellers.

- Environmental pool plans such as those being developed in the St. Paul District should be completed for all pools and defined reaches of the open river. Such plans currently focus primarily on desired future habitat conditions, illustrated on maps that identify backwater, side channel, and floodplain habitat. Expanding these plans to address channel maintenance, recreation, fleeting, floodplain management, and other pool-specific needs could provide a tremendously useful tool for management decisions. They could serve as the basis for implementation of environmental improvements, as well as navigation improvements and flood damage reduction projects.
- Long term monitoring of ecosystem health is critical to the success of adaptive management. Our understanding of ecosystem functions, trends, and responses to management actions has increased significantly in recent years, but must be enhanced. The EMP long term resource monitoring program (LTRMP) offers a well-established, scientifically sound framework for river monitoring and research. However, to fully meet future needs, the LTRMP must be expanded, including an enhanced capacity to monitor and evaluate the impacts of navigation traffic and O&M.

Floodplain Management

- The states have long supported development of a comprehensive flood damage reduction strategy for the Upper Mississippi River System. Section 459 of the 1999 Water Resources Development Act provides a basis for undertaking such an effort and the states urge that it be undertaken. While the legislation authorized an \$8 million effort, the first appropriations, totaling \$1 million, did not become available until FY 02. What is most needed now are continued funding and participation by the full range of relevant public agencies and private stakeholders.
- The states certainly concur that the navigation study must consider any floodplain management impacts directly stemming from recommended navigation system improvements. However, the August guidance also indicates that the navigation study may engage in a broader effort to “identify opportunities to improve floodplain conditions.” This appears potentially duplicative of the WRDA 99 study. Completion of the navigation study should not be delayed to incorporate a comprehensive flood damage reduction strategy. To do so would unnecessarily complicate both processes. As the August guidance indicates, the study may recommend that floodplain-related planning “be pursued independently from the navigation study under the normal budget and study processes.” The states concur and view the WRDA 99 authority as the most appropriate avenue for such planning.

Comprehensive Plan

General Griffin’s August guidance calls for the Interim Report to “address additional authorization that may be needed to investigate navigation, ecosystem, and related needs in a comprehensive, holistic manner.” This directive has been interpreted in the study’s November 9, 2001 draft Plan of Action to mean that the Interim Report will include “an assessment of the need for, general contents of, and development approach for a comprehensive plan to address the multiple water and land resources needs of the Upper Mississippi River System.” This interpretation has raised a variety of questions regarding such

a potential comprehensive plan, including need, spatial and substantive scope, and mechanisms for undertaking such an effort. The states offer the following perspectives concerning a comprehensive plan for the Upper Mississippi River System and its watershed:

- The UMRS is a large and complex river system. As such, it presents a wide ranging set of management challenges, including issues related to sedimentation, navigation, water quality, recreation, floodplain management, and fish and wildlife habitat. None of these issues can be addressed successfully in isolation. However, that does not necessarily lead the states to the *a priori* conclusion that development of a basin-wide comprehensive plan is warranted.
- Undertaking a single plan designed to address the full range of UMRS management challenges would be an enormous undertaking. Any such planning effort would presumably extend well beyond completion of the final navigation study report. The submittal of the navigation study and action on its recommendations should not be delayed to permit completion of a comprehensive plan.
- No single agency has the expertise and credibility to serve as the sole lead for a truly comprehensive plan. While there are also challenges to multi-agency leadership, we must recognize that the utility and credibility of such a plan would, in part, be a function of how it is developed.
- A series of more focused plans on particular management issues might be a more effective approach. One or two agencies with primary expertise and authorities related to the issue would take the lead, but would conduct the plan in a collaborative way. This approach would obviously require a commitment to integration and coordination across the different planning efforts, but would afford the opportunity to make better use of each agency's skills and resources.
- Issues concerning institutional arrangements for river management are largely ancillary and have the potential to distract from the substantive management questions at hand. We must first identify what actions are needed for effective river management. Only then will it be profitable to review whether existing institutional arrangements are capable of addressing those needs.

Conclusion

The five Upper Mississippi River Basin states believe the refocused navigation study offers a promising approach for moving forward to address the current and future navigation and associated environmental needs of the UMRS. As such, it is critical that it proceed expeditiously to a timely conclusion. The states, both individually and collectively, through the UMRBA, are committed to helping make this a productive process.

Upper Mississippi River Basin Association
415 Hamm Building, 408 St. Peter Street
St. Paul, MN 55102
Phone: 651-224-2880
www.umrba.org