

**Minutes of the
108th Quarterly Meeting
of the
Upper Mississippi River Basin Association**

**November 18, 2008
Davenport, Iowa**

The meeting was called to order at 12:45 p.m. by UMRBA Chair Martin Konrad. The following were present:

UMRBA Representatives, Alternates, and Members of the Water Quality Executive Committee:

Gary Clark	Illinois (DNR)
Rick Mollahan	Illinois (DNR)
Marcia Willhite	Illinois (EPA)
Martin Konrad	Iowa (DNR)
Chuck Corell	Iowa (DNR)
John Fleig	Iowa (DOT)
Dick Vegors	Iowa (DED)
Rebecca Wooden	Minnesota (DNR)
Dick Lambert	Minnesota (DOT)
Mike Wells	Missouri (DNR)
Dru Buntin	Missouri (DNR)
Rob Morrison	Missouri (DNR)
Todd Ambs	Wisconsin (DNR)

Federal UMRBA Liaisons and Members of the Water Quality Executive Committee:

Charles Barton	U.S. Army Corps of Engineers (MVD)
Tim Henry	U.S. Environmental Protection Agency (Region 5)
Art Spratlin	U.S. Environmental Protection Agency (Region 7)
Bill Franz	U.S. Environmental Protection Agency (Region 5)
Charlie Wooley	U.S. Fish and Wildlife Service (Region 3)
Mike Jawson	U.S. Geological Survey (UMESC)
Mike Sullivan	USDA, Natural Resources Conservation Service

Others in attendance:

Tim Schlagenhaft	Minnesota (DNR)
Brian Hopkins	Missouri (DNR)
Janet Sternburg	Missouri (DoC)
Jim Fischer	Wisconsin (DNR)
Terry Smith	U.S. Army Corps of Engineers (MVD)
Jeff DeZellar	U.S. Army Corps of Engineers (MVP)
Roger Perk	U.S. Army Corps of Engineers (MVR)
Chuck Spitzack	U.S. Army Corps of Engineers (MVR)
Marvin Hubbell	U.S. Army Corps of Engineers (MVR)
Karen Hagerty	U.S. Army Corps of Engineers (MVR)
Hank DeHaan	U.S. Army Corps of Engineers (MVR)

Brian Johnson	U.S. Army Corps of Engineers (MVS)
Martin Adkins	USDA, Natural Resources Conservation Service
Pete DeKock	Office of Congressman Bruce Braley (IA-01)
Brad Walker	Izaak Walton League
Ron Kroese	McKnight Foundation
Michael Reuter	The Nature Conservancy
Gretchen Benjamin	The Nature Conservancy
Doug Blodgett	The Nature Conservancy
Diane Rudin	The Nature Conservancy
Kim Erndt	Prairie Rivers Network
Gary Loss	CDM
Andy Selle	Inter-Fluve
Tom Boland	MACTEC
Tom Saul	Quad Cities Times
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

Meeting Minutes

Gary Clark moved and Todd Ambs seconded a motion to approve the minutes of the August 5, 2008 meeting as drafted. The motion carried unanimously.

Recognition of Gretchen Benjamin

Martin Konrad announced that Gretchen Benjamin has left the Wisconsin Department of Natural Resources to take a job with The Nature Conservancy. On behalf of UMRBA, Konrad presented Benjamin with a certificate of appreciation, recognizing her many contributions to the UMR and its various interagency groups, including the River Resources Forum, EMP-CC, and UMRBA. Konrad observed that people have always listened to and valued Benjamin's thoughtful perspectives and insights regarding river issues. Todd Ambs said that Benjamin's departure is a significant loss for Wisconsin DNR, but said he is pleased she will be continuing to work on river issues through TNC's Upper Mississippi River Team. Ambs also announced that Jim Fischer will be leading Wisconsin DNR's river team on an acting basis.

Executive Director's Report

Barb Naramore highlighted the following items from her written report included in the agenda packet:

- As of November 18, 2008, UMRBA has an approved staff services agreement with USACE for support services in FY 10. The agreement covers services for both the EMP-CC and NECC/ECC (or Advisory Panel).
- UMRBA staff continues working with USEPA to clarify the funds available under the FY 10 OPA cooperative agreement. The FY 10 agreement includes an approved amount of \$175,000, but only \$100,000 of the agreement has been confirmed as funded at this point. The question of whether to hire additional project staff will be addressed when the level of available funding is clarified.
- ICWP is seeking UMRBA's participation on a joint letter supporting increased funding for USGS's Cooperative Water Program (CWP) and National Streamflow Information Program (NSIP). A copy of the letter was included in the read ahead packet. Naramore explained that the letter is similar to one UMRBA signed in February 2008. Rebecca Wooden moved and Mike Wells

seconded a motion approving UMRBA's participation on the new letter. The motion carried unanimously.

- Following the August 2008 quarterly meeting, UMRBA updated its 1993 Flood Statement, reaffirming its fundamental principles and offering additional lessons learned during and following this summer's regional flooding. Naramore briefed the Interagency Levee Task Force on the statement at the Task Force's October 23rd meeting.
- UMRBA has been asked to participate in a nationwide effort by the Corps of Engineers to compile information about state and regional water planning efforts. This data gathering effort will be followed by regional and national conferences to discuss the Corps' findings and opportunities to enhance water resource planning and management. Naramore said each state should have received a similar invitation. She asked the states to share any perspectives they want to convey through UMRBA.
- UMRBA's independent audit firm recently completed its biennial review of the Association's financial accounts, covering the fiscal years ending June 30, 2007 and June 30, 2008. UMRBA Board members discussed the findings with the auditors earlier this morning.

Report from the Water Quality Executive Committee

Annual Update

Chuck Corell announced that Marcia Willhite will succeed him as Chair of UMRBA's Water Quality Executive Committee, effective at the close of the WQEC's November 19, 2008 meeting.

Corell reported that the Water Quality Task Force's priorities include its ongoing consultation and data sharing efforts, as well as a designated uses project and exploring the potential for biological indicators. Corell described designated uses as the first leg of a three-legged stool, with water quality criteria and anti-degradation policies being the other two legs.

According to Corell, UMRBA's pending intergovernmental personnel agreement (IPA) with USEPA should provide the staff capacity needed to advance the designated uses project. He explained that the IPA was EPA's proposed alternative to providing UMRBA with direct funding to support interstate water quality coordination work on the river. While all of the details have not yet been finalized, Corell reported that the interview process is complete and a candidate for the IPA has been selected. This person will continue to work out of EPA Region 5, but will be under the direction of UMRBA's Water Quality Program Director. Corell expressed optimism that this approach will further facilitate coordination with EPA as the project unfolds.

Corell reported that USEPA has included the UMR Basin as a specific water quality priority in a pending draft update to its Strategic Plan. Specifically, the draft indicates that:

EPA will increase its efforts in the Upper Mississippi River Basin. The Agency will partner with multiple federal, state, and tribal agencies and nongovernmental organizations to establish and achieve shared ecosystem health objectives for the river. EPA will reduce nutrient and sediment loadings in the watershed to protect water quality while ensuring continued agricultural viability by promoting sustainable agricultural practices and innovative market-based approaches.

Corell said the WQEC members are very encouraged by inclusion of the UMRB in the draft, which had not been expected. While this is an important step, however, Corell cautioned that there are several steps remaining before EPA finalizes its Strategic Plan revisions. Of particular note, according to

Corell, it remains to be seen how the new Administration will approach the Strategic Plan. Dave Hokanson noted that UMRBA staff will be working with the WQEC to develop comments on the draft UMRB language for the Board's consideration.

Corell reported that the National Research Council currently has a panel examining sediment- and nutrient-related water quality issues on the Mississippi River and in the northern Gulf of Mexico. According to Corell, this may include evaluation of the potential for a basin-wide TMDL. The project is being funded by USEPA. Corell said he does not believe the panel has consulted any of the states directly in conducting its work. He said members of the WQEC are awaiting the panel's report with interest.

Priorities and Strategies for the Future

Corell explained that the WQEC's near term strategies include:

- Following up on the March 2008 Congressional visits, in which the states made a general case for increased federal resources to support UMR water quality efforts, with a new message that identifies more concrete, compelling goals and specific work items.
- Commenting on USEPA's draft revisions to its Strategic Plan.
- Commenting on the NRC's forthcoming panel report on sediment and nutrient issues on the Mississippi River and in the northern Gulf of Mexico.
- Maintaining connection and communication with senior water quality officials at USEPA at both the headquarters and regional level. In this regard, Corell expressed the states' appreciation to Tim Henry and Art Spratlin for their continued involvement in and support of the WQEC's efforts.
- Revisiting the possibility of seeking a specific Clean Water Act authorization for a UMR water quality program.
- Exploring relationships and common interests with potential partners and constituents.

Discussion

In answer to a question from Rebecca Wooden, Corell explained that designated uses are the purposes for which a state is trying to maintain or improve water quality. In the area of aquatic life uses, the goals can range quite a bit, depending on the type of waterbody, its reasonably attainable condition, etc. For example, on the Upper Mississippi River, Corell said pre-settlement or pre-lock and dam conditions are not likely attainable; so the question becomes what is the highest and best use given the river's physical structure. For aquatic life use on a large waterbody, Corell further explained that the metrics of use support tend to consider factors related to a healthy system, rather species-specific requirements.

Jim Fischer asked whether the five state water quality programs have an agreement on how they want to use biological indicators. Corell said that a common approach to indicators is a future goal. He explained that the states want to get away from each managing their part of the river and get to the point where there is a more collective approach to water quality protection on the UMR. Corell noted that the designated uses and biological indicators initiatives mesh nicely, explaining that a measure of biological integrity could function as a designated use.

Mike Jawson asked about how efforts to develop biological indicators for water quality purposes relate to interest in developing indicators for ecosystem restoration-related purposes. Barb Naramore said the biological indicators workshop planned for 2009 is designed, in part, to explore and, to the extent practical, establish these connections. She further explained that one of the primary questions to be

examined is what each program area (i.e., water quality and ecosystem restoration) needs from indicators and whether there is sufficient commonality in those needs to proceed jointly in developing indicators.

Martin Konrad expressed the Board's appreciation to the WQEC members for their efforts and commended the progress made to-date.

Clean Water Act/Ecosystem Restoration — Opportunities for Collaboration

Barb Naramore briefly described two workshops UMRBA hosted earlier in the year, with support from the Corps and USEPA. The workshops were designed to explore the policy and practice interfaces between ecosystem restoration and Clean Water Act (CWA) programs on the UMR, with the goals of exchanging information, articulating key assumptions and understandings, and identifying and recommending opportunities for enhanced interaction and cooperation. Participants were asked to focus on identifying specific, actionable ideas, which Naramore said generally fell into the following five broad categories:

1. Ecosystem restoration objectives and water quality standards
2. Biological indicators
3. Water quality monitoring
4. Watersheds, tributaries, and TMDLs
5. Water quality considerations in ecosystem restoration projects

Kirsten Mickelsen explained that participants were also asked to identify the potential actions within each category that they viewed as most promising. She then highlighted the specific actions selected as having the most potential, referencing an excerpt from the project report included in the read ahead packet. She noted that, for each action, the report also identifies a potential lead and other key participants, examines whether new structures or processes would be required, and estimates whether the action could be initiated within the next 18 months.

Naramore emphasized that it clearly will not be possible to pursue all of the actionable ideas identified as most promising in the immediate future. She also noted that some of the ideas are more ripe for action than others, while some would require coalition-building or other efforts on the front-end. Naramore then posed the following questions for consideration by the Board, federal liaison members, and others:

- What are the partners' priorities and capacities?
- Are any ideas off the table?
- What are the preferred next steps?

Martin Konrad said he sees work on biological indicators as a clear top priority for many partners, noting that it would be a precursor to progress on several of the other potential actions identified at the workshops. Jim Fischer said biological indicators are certainly a priority for Wisconsin, noting that John Sullivan and other Wisconsin DNR staff have been doing considerable work in this area. Rob Morrison said he also views indicators development as key, in part because of indicators' relationship to refining designated uses.

Tim Schlagenhaft noted that the Lake Pepin TMDL is progressing rapidly, with an implementation plan under development. As part of these efforts, Minnesota is working with local government and stakeholders to develop indicators by which progress and attainment will be measured. Fischer

applauded Minnesota's progress on indicators, adding that it is also time for all partners to address assessment criteria and methods.

Bill Franz reported that USEPA and its collaborators have established three water quality and biological monitoring stations on the UMR for drinking water protection purposes. Two more stations are planned, and Franz said he is eager to find ways in which the data from these stations can be used to support other water quality purposes.

Mike Wells asked the UMRBA Water Quality Executive Committee to review the actionable ideas emerging from the workshops, identify priorities, and elaborate on the next steps required to advance priority items. Corell said the WQEC would discuss these issues at its meeting the following day. Dave Hokanson noted that some of the workshop recommendations have a natural home with the WQEC or WQTF, but said others require integration across programs.

Wells stressed the importance of water quality monitoring, noting that data can be pivotal on controversial issues like Gulf hypoxia. Corell observed that all states and many other entities are monitoring the UMR in some fashion, but not necessarily in a coordinated manner. Corell said he would recommend developing a joint strategy, assessing current monitoring relative to that strategy, and then determining what changes need to be made. Fischer expressed confidence that LTRMP data will prove effective in assessing both biological response to habitat restoration projects and support of aquatic life designated uses.

Marv Hubbell said he sees several ways in which water quality could be better integrated into ecosystem restoration efforts, including using water quality data to inform project sequencing, involving water quality staff on project design teams, and doing the pre- and post-project monitoring necessary to assess water quality-related project outcomes. In response to a question from Marcia Willhite, Hubbell said that, in the past, the Corps has not consistently informed water quality staff about project planning efforts. He called for a more formalized approach to communicating with the water quality programs about project planning and other restoration-related work.

Todd Ambs observed that the report from the two workshops reflects input from a variety of participants. He said UMRBA now needs to know whether the list of tasks and potential lead agencies is right and how that list matches against available state, federal, and NGO resources. Corell said that, on the question of indicators, the WQEC members recognize that it will be incumbent upon them to seek implementation of the indicators within their own states, once a common set of indicators has been agreed upon. Ambs agreed that this is a key role for the WQEC, noting that it was formed to ensure that there is management-level support for implementing the WQTF's interstate coordination and enhancement efforts.

Ambs also recalled that UMRBA issued a 2006 organizational options report, examining different institutional arrangements that could be used to support enhanced water quality coordination on the UMR. At that point, the states opted for an incremental approach, seeking to build capacity through the existing UMRBA structure in the near term. However, they also acknowledged that the possibility of an interstate compact should be reevaluated in the future, after the states gained experience with enhanced interstate water quality coordination through UMRBA. Ambs noted that such compacts are common on rivers in the eastern U.S.

Biological Indicators

Dave Hokanson provided a general overview of biological indicators. He explained that direct measures of various forms of aquatic life, including fish, macroinvertebrates, and vegetation, can be used to indicate the condition of a waterbody or aquatic ecosystem. Hokanson cited several benefits to

using indicators, including that they integrate and reflect the impact of multiple stressors over time, they can be more cost-effective than chemical monitoring, and they facilitate communications with the public. He observed that biological indicators, multi-indicator indices, and other related assessment approaches have been applied widely on smaller streams. There is also increasing use of indicators on larger rivers, including the Ohio River. Hokanson said there is considerable ongoing work on the UMR that is related to indicators, including EMAP's efforts to develop fish and benthic invertebrate indices of biological integrity (IBIs), Wisconsin DNR's development of a large river fish IBI, consideration of vegetation indicators as part of the Lake Pepin TMDL work, and various LTRMP efforts to compare and develop biological indices.

Hokanson explained that increased interest in indicators has been expressed in several UMR-related venues recently, including the LTRMP A-Team, NESP Science Panel, UMRCC Fish Tech Section, UMRBA WQTF, and the recent CWA/ecosystem restoration workshops. Following the workshops, an *ad hoc* interagency work group was formed to consider how best to follow up on the biological indicators recommendation stemming from the workshops. The work group includes representatives of both water quality and restoration programs at both the state and federal levels who have agreed to:

- explore system-wide and cross-program questions related to biological indicators;
- assist in designing a UMR biological indicators workshop; and
- act as a venue for information sharing among various indicators-related efforts on the UMR, while not seeking to direct or supersede these efforts.

Hokanson identified the following anticipated outcomes from the proposed biological indicators workshop:

1. Identify specific area(s) within each program (i.e., CWA and restoration) where the greatest opportunity exists for the use of indicators.
2. Identify the existing approaches to indicators that hold the greatest promise for application on the UMR, and modifications that may be needed to enhance UMR applicability.
3. Assess opportunities for developing indicators applicable to both CWA and restoration on the UMR.
4. Recommend potential next steps in development of indicators for the UMR.

He emphasized that it is not a foregone conclusion that program goals and needs are sufficiently congruent to develop shared indicators for water quality and ecosystem restoration.

According to Hokanson, workshop invitees will include scientists, practitioners, and managers from both CWA and restoration programs on the UMR. In addition, leading national and regional researchers will be asked to present case studies. Both USACE and USEPA will be providing financial support for the workshop, though the grant from EPA has not been finalized. Dates for the workshop will be determined after the grant is in place, with the location likely being in the Quad Cities or Dubuque. Hokanson said the workshop agenda will include identification of program goals and needs, a primer on key concepts related to indicators, case study and research presentations, various opportunities for discussion, and a group assessment of opportunities and next steps.

Todd Ambs encouraged examination of the potential for indicators development on the UMR. He noted that one critical question for any data collection effort relates to who should gather the data. Ambs said volunteer monitoring has been very successful in other parts of the country, and urged that it be considered in any effort to develop the data needed to support UMR indicators. With the current budget environment, Ambs said increased resources for agency data collection are quite unlikely. Bill Franz agreed with the potential for volunteer monitoring, and said LTRMP and EMAP will also likely

be important sources. Franz observed that monitoring needs must first be defined, however, before judgments can be made about how best to meet those needs. Ambs said there is a tendency within agencies for staff to want to do all of their own monitoring to ensure data integrity and compatibility. However, with severely constrained resources, Ambs stressed the need to think about how we can all make use of other data sources, including monitoring by citizens and other agencies.

Marv Hubbell said USACE strongly supports looking at how the partnership can use indicators to inform ecosystem restoration efforts. He said the Corps is pleased to be collaborating with USEPA and UMRBA on the indicators workshop. Franz said he is trying to expedite processing of UMRBA's grant proposal for workshop funding.

Gary Clark made the following motion:

Move to authorize the UMRBA Executive Director to execute a grant agreement with USEPA to support a biological indicators workshop and to make such adjustments as necessary to UMRBA's budget upon execution of such a grant agreement.

Dru Buntin seconded the motion, and it carried unanimously.

Flood Recovery and Floodplain Management Issues

Report from October Forecasting Summit

Kevin Landwehr provided a brief report on the Rainfall-River Forecasting Summit held October 7-9, 2008 in St. Louis. He explained that the Corps, National Weather Service (NWS), and USGS convened the summit to examine forecasting during this summer's flooding in the UMRB. Specifically, participants looked at what went well, what did not go well, and opportunities to improve future performance. Among the positive factors, Landwehr cited coordination, data exchange, several new products, instrumentation, personnel, and resource allocation. He highlighted the NWS's new probabilistic Ensemble precipitation forecasts as an example of a useful new product. Problem areas included rainfall that exceeded forecasts, multiple forecasts for the same reach of river, failure to fully engage the public, difficulty retrieving and exchanging information at times, loss of some key gauges near crest, and methodological differences in measuring discharge. Landwehr said the Cedar River experienced flash flooding on top of flood conditions, resulting in record stages with very little warning. He also observed that different audiences have different information needs, noting that some are not equipped to handle any uncertainty in forecasts, while others prefer to receive a probabilistic range.

According to Landwehr, the summit's convening agencies identified the following ways to improve performance in future events:

1. Discharge measurements — need to get critical ranges established; need to look at procedures to get these measurements and establish consistency
2. Rating curve extension issues need to be addressed — curves should be extended before extreme events occur
3. Need to educate people on how to get stage information
4. Wave of the future is probabilistic forecasting — examples include Ensemble and contingency forecasts
5. Instant messaging — utilize cross-agency instant messaging to relay critical information, such as levee overtopping/breaching, as soon as it is identified
6. Technical experience — need to develop a means to capture experience from retiring personnel

Landwehr said a “fusion cell,” comprised of representatives from USACE, USGS, and NWS, will consider how forecast accuracy can be improved with current science, staffing, and funding. The cell will also develop a process for cross-training forecasters and other key personnel across agencies. Within three months, the agencies will supply the navigation industry with a report on capabilities to improve forecast accuracy.

Landwehr also noted a standing policy, under which the Corps explicitly recognizes that the NWS is the nation’s official weather forecasting and flood warning agency. As such, the Corps does not release its own forecasts to the public.

Mike Wells noted that this was a federal agency summit. While lauding the effort to improve forecasts, Wells said the states are important players and need to be engaged. Barb Naramore observed that the states have long recognized the importance of a sound river gauging network. She asked Landwehr whether the summit participants had any recommendations regarding how to ensure an adequate network. Landwehr acknowledged that maintaining gauges has been a continuous challenge, and said the states and other partners have been key in helping to make up for some of the federal funding reductions. Landwehr described the UMR mainstem gauge system as being in relatively good shape, but said there are some critical gaps on tributaries. For example, he said there is very little information between Waterloo and Cedar Rapids, which presented significant problems this year. In response to a question from Brian Hopkins, Landwehr explained that the Corps’ mainstem forecasting models are able to reflect storage capacity changes associated with levee overtopping or breaching.

Update on Flood Recovery and Interagency Levee Task Force Activities

Bruce Munholand explained that an Interagency Levee Task Force (ILTF) has been established to address key regional flood risk management issues following this summer’s flooding. He noted that the authority for the ILTF comes from OMB and CEQ directives. The Task Force includes five of the eight states affected by the June flooding (i.e., IA, IL, IN, MO, and WI), as well as USACE, FEMA, USDA, SBA, FWS, EPA, and other federal agencies. Munholand conveyed General Walsh’s appreciation to the states and other federal agencies for their participation, and highlighted the following Task Force goals:

- Acknowledge shared responsibility for flood risk management in the watershed — reflected in the ILTF’s diverse membership.
- Bring consistency to addressing short- and long-term flood protection, environmental quality, ecosystem enhancement, and watershed management.
- Promote a uniform approach across regional and state boundaries.
- Consider non-structural alternatives and other agency initiatives.

Munholand described various tools for flood risk management, including insurance, building codes, zoning, levees, contingency and response plans, and outreach. However, he emphasized that there will always be residual risk for those living behind levees and in other flood-prone areas. He noted that the ILTF has already heard a series of briefings during its initial meetings, including presentations on recovery efforts in Illinois, Iowa, and Missouri, and highlights from UMRBA’s updated flood statement.

Munholand explained that Interagency Levee Work Groups (ILWGs) have been established for each of the state-level joint field offices (JFOs). The ILWGs are intended to augment existing programs at all levels of government; identify new mitigation initiatives; apply lessons learned and best practices; and

identify potential changes in policies, regulations, and funding mechanisms to enhance long-term flood risk management. Munholand reported that various ILWGs are currently developing several white papers detailing specific nonstructural alternatives as well as longer term strategies. The Work Groups will report to the ILTF with their recommendations for nonstructural alternatives, policy changes, etc.

Munholand displayed a slide summarizing levee-related flood recovery projects in the five ILTF-member states, ranging from 0 in Wisconsin to 83 in Missouri. He noted that the ILTF's initial mission runs through August 2009. The Task Force will be considering options for continuing progress and coordination at the regional level beyond that time, perhaps through an ongoing flood risk management group. Munholand also reported that "silver jacket" teams may be established for each state. These would be core groups of personnel from key agencies who would work together on an ongoing basis to address various flood risk reduction issues. Munholand encouraged people to visit the ILTF's web site at <http://www.iwr.usace.army.mil/iltf/>.

Marty Adkins explained that NRCS has two primary programs that are often tapped during flood recovery efforts — i.e., the Emergency Watershed Protection (EWP) program and the Wetlands Reserve Program (WRP). Under EWP, NRCS can fund both repair efforts, such as streambank stabilization and levee repairs, as well as floodplain easements. According to Adkins, most EWP projects are executed through agreements with local sponsors, rather than directly by NRCS. There is no standing appropriation for EWP. Instead, it is typically funded through emergency supplemental appropriations, with eligibility limited to federally declared disaster counties. Following this summer's flooding, Adkins said the EWP was activated in Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, and Wisconsin.

Adkins further explained that the WRP can provide important flood risk reduction benefits by opening up sections of floodplains and letting them function more naturally. He noted that WRP is an ongoing program, though it may receive additional resources through emergency supplemental bills.

Adkins said NRCS welcomes the Corps' efforts to widen the range of entities involved in flood risk reduction and to ensure consideration of nonstructural alternatives. He observed that there are many different perspectives on the issue of how best to manage and reduce flood risk, including those held by very diverse local stakeholders. He emphasized the need to engage these differing perspectives, not just during the immediate aftermath of a flood, but also between flood events. In addition to agencies with more traditional flood-related missions, Adkins stressed the importance of engaging economic development and transportation agencies.

Rebecca Wooden said Minnesota is very pleased to hear of the ILTF's emphasis on evaluating nonstructural alternatives. However, she expressed concern with the Mississippi River Commission's recent endorsement of Plan H in the Comp Plan, noting that it calls for a 500-year level of flood protection. Munholand observed that, if there is a longer term regional effort to coordinate on flood risk reduction issues, this is precisely the kind of question such a group would have to address.

Comprehensive Plan Update

Roger Perk provided an update on the Upper Mississippi River Comprehensive Plan, explaining that it was authorized in the 1999 Water Resources Development Act as a reconnaissance-level assessment of systemic flood damage reduction options for the UMR. The Comp Plan built upon other studies and existing data, including flood profiles from the post-1993 Flow Frequency Study, and used a collaboration team to work with other agencies and stakeholders. The study area was limited to the mainstems of the Mississippi and Illinois Rivers, which range from 3% leveed in Pools 1-13 to 80% leveed on the Open River.

Perk explained that alternative plans were developed, then evaluated based on National Economic Development (NED), Environmental Quality (EQ), Regional Economic Development (RED), and Other Social Effects (OSE) criteria. The benefit cost ratios (BCRs) for all plans evaluated were below 0.1, with first costs ranging from \$3.7 to \$5.4 billion.

The Comp Plan report was completed in August 2008. Perk explained that, in light of the low BCRs, the plan does not recommend proceeding with feasibility-level analysis of any of the system flood damage reduction alternatives evaluated. However, the report does include the following recommendations:

- Plan H is the best performing systemic flood damage reduction option evaluated (though it is not recommended for further evaluation based on its low BCR).
- Reconstruction of existing levee systems to their original design level of protection should be evaluated through cost-shared feasibility studies.
- Improvements to protect critical transportation infrastructure should be evaluated through feasibility studies (cost-share requirements TBD).

Perk briefly summarized Plan H, explaining that it would provide 500-year level of protection through either raising the level of protection or acquiring property and/or flowage easements, depending on which was the most cost effective in a particular area. He said Plan H was one of the two highest scoring alternatives from the Risk Informed Decision Framework process, with Plan H having less impact on downstream Mississippi River and Tributaries (MR&T) flood protection projects. Acquisitions would only be done on a willing seller basis. In acquisition areas, options would include active management for environmental restoration and reestablishing floodplain connectivity.

Perk reviewed recent activity following completion of the Comp Plan report, including a hearing before the Mississippi River Commission (MRC) on August 14, with transmittal from the MRC to Corps Headquarters and the Secretary of the Army on that same date. The MRC endorsed Plan H, with the additional caveat that there be no induced rises below Thebes. According to Perk, Corps Headquarters endorsed the Comp Plan report as written (i.e., without a recommendation for Plan H) and transmitted it to the Assistant Secretary of the Army for Civil Works on September 11. On October 31, the ASA(CW) forwarded the report, without change, to OMB. Thus, as presented to OMB, the report includes no recommendation for a system flood damage reduction plan. Perk said OMB and Congressional staff briefings are tentatively scheduled prior to the end of 2008.

Perk noted that there is no funding for further Comp Plan-related work under the current Continuing Resolution Authority (CRA) funding, though the Senate version of the FY 09 energy and water bill did include \$220,000. In response to a question from Martin Konrad, Perk said that, if Congress were to provide any further funding at this point, it would be used to initiate feasibility studies related to the report's recommendations on reconstruction, tributaries, and or critical transportation infrastructure.

Navigation and Ecosystem Sustainability Program

Economic Reevaluation Report

Chuck Spitzack reviewed the framework used to reevaluate the Navigation Feasibility Study's economic analysis, explaining that benefit cost ratios were calculated over a range of possible traffic scenarios. The reevaluation confirmed the fundamental findings of the original Feasibility Report, concluding that the risk of a sub-optimal economic outcome is greater if the recommended navigation improvements are not implemented than if they are. The District Commander's Reevaluation Report therefore includes the following four recommendations:

1. Endorse the dual purpose Recommended Plan from the Feasibility Report
2. Support coordination and collaboration
3. Support innovations
4. Support development of multimodal tools

Spitzack explained that the Corps' reevaluation was subject to assessment by an External Peer Review Panel, comprised of experts in various aspects of transportation economics. While determining that the Corps had made significant progress in improving its modeling and analysis, the Peer Review Panel also concluded that the reevaluation is incomplete in several respects and recommended the following:

- Perform extensive sensitivity analysis
- Improve models for future
- Improve risk assessment

As reported previously, the Corps submitted the Reevaluation Report and the Peer Review Panel's recommendations to the Assistant Secretary of the Army for Civil Works on April 11. According to Spitzack, the ASA(CW) responded on July 24 that the report was not actionable because the remaining uncertainty is too great. On September 22, USACE replied that it could not reduce that uncertainty with current models, but planned to use the Peer Review Panel's comments in defining future research. Spitzack said the ASA(CW) reiterated his position that additional sensitivity analysis would be helpful, particularly concerning critical factors such as ethanol, crop area, grain prices, and fuel prices. Spitzack reported that the Corps is now considering its further options.

Institutional Arrangements

Spitzack reported that MVD has reviewed the Advisory Panel (AP) proposal, and the three Districts have responded to the Division's comments. As forwarded to MVD, Spitzack said the proposal looked similar to the partnership's plan, with revisions to describe responsibilities more fully and repackage the document as a joint proposal from the three Districts. MVD's comments focused on the interpretation of "independent guidance" and the appropriate level of representation on the AP. Specifically, Spitzack said MVD staff prefers a higher level of representation on the AP, with a working group underneath it to address the details of program implementation. Spitzack said he is scheduled to brief General Walsh on the Districts' proposal on December 1. Following that briefing, Spitzack said endorsement at the Division and Headquarters levels and the ASA(CW)'s issuance of invitations to the states and federal agencies could come before the close of the calendar year. Solicitation of NGOs would parallel this process, with selection of NGO members by April, and the Advisory Panel's first meeting in May 2009. However, Spitzack emphasized that the remainder of the schedule is contingent upon when MVD forwards its proposal to Washington.

Spitzack provided an update on Illinois' proposal for an Illinois River Team and Work Group that would parallel the existing district-based groups. After an opportunity for partner comment on the original July proposal, USACE and Illinois staff met on October 23 to discuss the comments and review the proposal in the context of the operational framework of the existing river teams and work groups. Following that meeting, Spitzack said Illinois modified its proposal slightly to enhance consistency with the operational framework, and then presented it to the Illinois River Coordinating Council (IRCC). The Council accepted the revised proposal, and its recommendations for an Illinois River Team and Illinois River Work Group, on November 6. Spitzack said the Corps had recommended deferring formation of the Illinois River Team, but the IRCC decided to move forward in establishing both groups.

June 2009 Implementation Report

Spitzack said the Corps has developed a draft project management plan (PMP) for the NESP Report to Congress that is due in June 2009. In addition, a basic outline and synopsis of the report have been prepared. Spitzack said he anticipates having draft products for partner review in December 2008. He noted that the reach planning notebook will be a significant portion of the report, in response to the authorizing legislation's call for information about project baselines, goals, priorities, and progress measures, as well as the related requirement for a project ranking system. While funding constraints have delayed progress on these items, the Report to Congress will use the reach planning notebook to document how the Corps plans to address these requirements.

Inland Waterways Trust Fund

Spitzack reported that the Inland Waterways Users Board is meeting today, with the challenges facing the Inland Waterways Trust Fund prominent on the agenda. Under federal law, 50 percent of inland navigation projects (both improvements and major rehabilitation) are paid for through the Trust Fund. The Trust Fund's revenue source is a tax on fuel used by the inland navigation industry. Spitzack showed historic and projected Trust Fund balances, demonstrating that the Fund is essentially exhausted each year. Annual revenues into the Fund are projected to support only about \$90 million in annual distributions, far below what is needed to support a reasonably anticipated program of navigation construction. As an example, Spitzack observed that a NESP construction program funded at \$150 million annually would by itself draw \$75 million from the Trust Fund.

Spitzack summarized an Administration proposal to address the Trust Fund shortfalls by shifting from the current fuel tax to a lockage fee. The Administration estimated that the new lockage fees would generate approximately \$250 million annually. However, this plan was widely resisted by industry, and within Congress. As a temporary fix, Congress granted a one-year cost sharing exemption for major rehabilitation projects in FY 09. At this point, Spitzack said the options would appear to be:

1. Make no changes — in which case the Trust Fund is insufficient to support navigation improvements and major rehabilitation.
2. Extend the cost share exemption for major rehabilitation — would help rehabilitation projects, but would make little difference in the funding available for navigation improvement projects.
3. Enhance revenue — an annual revenue stream of \$250 million to the Trust Fund is estimated to be sufficient to meet navigation improvement and major rehabilitation needs over the next 20 years.

Spitzack showed anticipated completion schedules for several Ohio River system projects under the first and third options. For out-year projects, the enhanced revenue option advances some project completions by six years and more.

Dick Lambert expressed concern that the lockage fee would disadvantage portions of the inland system relative to others. He asked why the Administration did not simply propose raising the fuel tax. Spitzack said this option was evaluated, but said he was not familiar with the details of the analysis or the basis for the Administration's proposal.

State Reports: Post Election Perspectives

Barb Naramore reported that UMRBA staff included its customary summary of even-year election results in the meeting packet. She offered a minor correction, noting that Peter Roskam (IL-06), Bill Foster (IL-14), and Emanuel Cleaver (MO-05) should have been designated as incumbents in the results summary.

Todd Ambs reported that Wisconsin's Assembly shifted to Democratic control. For the first time since 1994 in Wisconsin, the Governorship, Assembly, and Senate are all under Democratic leadership. Ambs also reported that the state is facing a very serious budget shortfall, estimated at \$5-6 billion. He said across-the-board budget cuts of 10-25% are possible.

Martin Konrad indicated that all incumbents were reelected in Iowa's Senate and House races. Gary Clark reported that the leadership is changing in both the Illinois House and Senate. Clark also said Illinois is facing a very difficult budget situation, with grim prospects for the outyears as well.

Mike Wells reported that Jay Nixon, Missouri's current Attorney General, defeated Representative Kenny Hulshof in the race to replace Governor Matt Blunt, who did not seek reelection. Blaine Luetkemeyer, a former state legislator with a background in insurance and banking, won the contest for Hulshof's vacated seat. Wells said Missouri's House and Senate remain under Republican control. With the new administration, Wells said agency directors and some other key management positions will likely turn over.

Rebecca Wooden noted that Minnesota's closely contested Senate race will likely remain undecided for some time. The tight margin between incumbent Norm Coleman and challenger Al Franken has triggered an automatic recount. Wooden also reported that Minnesota voters approved a Clean Water, Land, and Legacy Amendment, under which the existing 6.5% state sales tax will be increased by 0.375%. The revenue generated by the increase will be devoted to projects related to clean water, the outdoors, parks and trails, and arts and culture.

Administrative Issues

Credit Card Authorization

Martin Konrad explained that UMRBA needs to replace its current credit card, which was obtained by Holly Stoerker with her personal guarantee. He reported that Wells Fargo, with which UMRBA has its banking relationship, will consider a credit application without a personal guarantee, but requires a letter of authorization. Gary Clark offered the following motion:

Move to authorize the Executive Director to apply for, establish, and maintain a credit card account with Wells Fargo, with a total credit limit of \$10,000.00. The following individuals are authorized card holders and are thus authorized to indebted UMRBA up to the credit limits specified:

Marjorie Daniels — \$500.00

Barbara Naramore — \$9,500.00

Mike Wells seconded the motion, which then carried unanimously.

403(b) Retirement Plan

Konrad reported that, as an ERISA-exempt sponsor of a 403(b) retirement plan, UMRBA is newly required to have a written plan document, effective January 1, 2009. Wells moved the following resolution adopting the required written plan:

WHEREAS, the Association previously adopted and maintains a Section 403(b) retirement plan, which plan has been maintained in an unwritten format; and

WHEREAS, the Association desires to amend and restate the 403(b) plan in order to comply with final regulations issued under Section 403(b) of the Internal Revenue Code of 1986, as amended, which require, among other things, that the Association's plan be maintained pursuant to a written plan document.

NOW, THEREFORE, IT IS HEREBY RESOLVED, by the Board of Directors of the Association, this 18th day of November, 2008:

- 1. The Section 403(b) retirement plan previously adopted and maintained by the Association be and hereby is amended and restated as the Upper Mississippi River Basin Association 403(b) Savings Plan (the "Plan"), a copy of which is attached to these resolutions.*
- 2. The delegation of all allocation of all discretionary administrative responsibilities under the Plan to the Chairman of the Board of Directors, as that person may change from time to time, is hereby ratified, adopted and approved.*
- 3. The appropriate officers of the Association, or any one of them, be and hereby are, authorized, on behalf of the Association, to take any actions and execute any documents as may be necessary or desirable to carry into effect the foregoing resolutions.*

Clark seconded the motion, which then carried unanimously.

Wells moved the following resolution establishing an approved vendors list for UMRBA's 403(b) plan:

WHEREAS, the Association adopted its Upper Mississippi River Basin Association 403(b) Savings Plan (the "Plan") on November 18, 2008; and

WHEREAS, the Association must maintain a list of approved Vendors pursuant to Section 7.3 of the Plan.

NOW, THEREFORE, IT IS HEREBY RESOLVED, by the Board of Directors of the Association, this 18th day of November, 2008:

- 1. The list of approved Vendors for the Association's 403(b) retirement plan is as follows:*

*Vanguard Fiduciary Trust Company
P.O. Box 1106
Valley Forge, Pennsylvania 19482-1106*

Todd Ambs seconded the motion, which then carried unanimously.

UMRBA Personnel Manual

Konrad explained that the Board wishes to amend UMRBA's Personnel Manual relating to employee use of sick leave when caring for immediate relatives. Rebecca Wooden offered the following motion:

Move to amend Section VI.B. of the UMRBA Personnel Manual to eliminate the requirement that immediate relatives reside in the employee's household in order for the employee to use sick leave when providing necessary personal care. Item 2 of the second paragraph in Section VI.B. will now read "presence of sickness, including alcoholism, in an employee's immediate family (identified in "C.I. Bereavement Leave") which would require personal care and in the event no one else is available;"

Wells seconded the motion, which then carried unanimously. Wooden indicated that, at some point in the future, she would like the Board to revisit the provision related to availability of other care options.

Future Meetings

Naramore reported that the next two quarterly meeting series are scheduled for February 18-20, 2009 in St. Louis and May 19-21, 2009 in the Twin Cities, with UMRBA's meeting falling on the first day of each series. The Board set the summer meetings for August 4-6, 2009 in Peoria.

With no further business, the meeting adjourned at 4:36 p.m.