

**Minutes of the  
114<sup>th</sup> Quarterly Meeting  
of the  
Upper Mississippi River Basin Association**

**May 18, 2010  
Bloomington, Minnesota**

UMRBA Chair Todd Ambs called the meeting to order at 9:45 a.m. Participants were as follows:

UMRBA Representatives and Alternates:

Gary Clark	Illinois Department of Natural Resources
Rick Mollahan	Illinois Department of Natural Resources
Bernie Hoyer	Iowa Department of Natural Resources
Laurie Martinson	Minnesota Department of Natural Resources
Rebecca Wooden	Minnesota Department of Natural Resources
Dick Lambert	Minnesota Department of Transportation
Mike Wells	Missouri Department of Natural Resources
Todd Ambs	River Network (for Wisconsin)
Jim Fischer	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Charles Barton	U.S. Army Corps of Engineers, MVD
Bill Franz	U.S. Environmental Protection Agency, Region 5
Kevin Foerster	U.S. Fish and Wildlife Service, UMR Refuge
Mike Jawson	U.S. Geological Survey, UMESC

Others in Attendance:

Bernie Schonhoff	Iowa Department of Natural Resources
Charlotte Cohn	Minnesota Department of Natural Resources
John Wells	Minnesota Environmental Quality Board
Norman Senjem	Minnesota Pollution Control Agency
Robert Stout	Missouri Department of Natural Resources
Jim Hannon	U.S. Army Corps of Engineers, MVD
Renee Turner	U.S. Army Corps of Engineers, MVD
Terry Birkenstock	U.S. Army Corps of Engineers, MVP
Tom Crump	U.S. Army Corps of Engineers, MVP
Jon Hendrickson	U.S. Army Corps of Engineers, MVP
Jeff DeZellar	U.S. Army Corps of Engineers, MVP
Don Powell	U.S. Army Corps of Engineers, MVP
Kevin Bluhm	U.S. Army Corps of Engineers, MVP
Mike Wyatt	U.S. Army Corps of Engineers, MVP
Nan Bischoff	U.S. Army Corps of Engineers, MVP
COL Shawn McGinley	U.S. Army Corps of Engineers, MVR
Marvin Hubbell	U.S. Army Corps of Engineers, MVR
Scott Whitney	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR

Brian Johnson	U.S. Army Corps of Engineers, MVS
Mark Harberg	U.S. Army Corps of Engineers, NOW
Tony Sullins	U.S. Fish and Wildlife Service, TCFO
Ryan Aylesworth	U.S. Fish and Wildlife Service, Region 3
Jim Stark	U.S. Geological Survey, Minnesota WSC
Dan McGuiness	Dan McGuiness & Associates
Brad Walker	Izaak Walton League
Mark Prancus	JFNew
Tom Boland	MACTEC
Ron Kroese	McKnight Foundation
Michael Reuter	The Nature Conservancy
Vince Shay	The Nature Conservancy
Gretchen Benjamin	The Nature Conservancy
Mark Gorman	Northeast-Midwest Institute
Paul Rohde	Waterways Council, Inc.
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association
Nat Kale	Upper Mississippi River Basin Association

**Announcements**

Todd Ambs announced that he has left his position as Wisconsin DNR’s Water Division Administrator to become President of River Network, a national organization that supports the work of 7,500 state and local river groups. While River Network is headquartered in Portland, Ambs will be based in Madison and will continue to serve as Wisconsin’s UMRBA Representative for the remainder of Governor Doyle’s term.

**Minutes**

Gary Clark moved and Laurie Martinson seconded a motion to approve the minutes of UMRBA’s February 23, 2010 meeting as drafted. The motion carried unanimously.

**Executive Director’s Report**

Barb Naramore highlighted the following items related to her written Director’s report included in the agenda packet:

- UMRBA continues its collaborative work with The Nature Conservancy, Waterways Council, and others to advocate for EMP and NESP funding. The Republican leadership’s directive that party members eschew all earmarks is complicating the appropriations process. There were no Republican signatories on what is customarily a bipartisan House members’ letter requesting EMP and NESP appropriations. In addition, the Inland Waterways Trust Fund situation continues to present a significant obstacle to obtaining a construction start for NESP.
- UMRBA has responded to a USACE request for a quote to provide writing, editing, and related services for the 2010 Report to Congress and Implementation Issues Assessment. The quote for requested services totaled \$56,700, including costs for graphics and printing subcontracts that UMRBA would let. Naramore noted that she will need Board approval before she can execute a contract.
- UMRBA submitted comments on the draft Principles and Standards released by the Council on Environmental Quality (CEQ). The comments applauded CEQ’s effort to ensure that economic,

environmental, and social factors are all considered in federal water resources planning. However, UMRBA also highlighted several areas of concern, including lack of clarity on important issues and the failure to require that federal agencies consider the national economic development (NED) option in their alternatives analysis.

- USACE has initiated scoping for the Great Lakes and Mississippi River Interbasin Study. The Congressionally authorized study will examine options for reducing the risk of aquatic nuisance species (ANS) transfer between the two basins. The first phase of the study will focus on Asian carp and other ANS in the Chicago area, while the second phase will examine the entire boundary between the two basins. Based on the Board's February discussion of the carp issue, Naramore has asked Corps study staff to include UMRBA on its Stakeholder Advisory Team. Illinois and Indiana are currently represented on an Executive Steering Committee (ESC). Other states may request representation on the ESC, or may wish to wait until scoping for the broader, second phase begins.

### **Minnesota's Proposed TSS/SAV Standards**

Norman Senjem explained that Minnesota is addressing the Lake Pepin water quality impairment under Section 303(d) of the Clean Water Act through two related efforts. The first involves developing a total suspended solids (TSS) standard for the Mississippi River above Lake Pepin. The issue of eutrophication in Lake Pepin is being addressed through a second, separate effort. Senjem said the proposed TSS standard would apply from St. Paul to Red Wing, an area that drains over half of Minnesota's land area.

The proposed TSS standard for the south metro is 32 parts per million (ppm), a level designed to provide sufficient water clarity to support submersed aquatic vegetation (SAV). Senjem said this standard is based on the scientific work of many individuals, including staff with the Army Corps, USGS, and Wisconsin DNR. In developing its proposed standard, MPCA examined physical, spatial, and historical evidence regarding turbidity. Senjem explained that Lake Pepin is currently functioning as a major sediment sink, with water clarity significantly higher below the lake than above it in the south metro. According to Senjem, Pool 13, which has several major tributaries but no upstream sediment sink, served as a useful reference pool for what might be reasonably achievable. In synthesizing these various lines of evidence, Senjem said it was clear that Minnesota's current 25 NTU turbidity standard was not protecting aquatic life uses between St. Paul and Red Wing. The 32 ppm proposed TSS standard is associated with about a 21 percent frequency for SAV.

Senjem noted that federal regulations allow states to develop site specific standards, if they are designed to help a waterbody meet its designated uses, are developed with public participation, and receive EPA's approval. The public comment period on the proposed TSS standard closed on March 26. In addition to 19 formal comments, most of which supported the proposed standard, Senjem said there has also been a lively debate among researchers and stakeholders regarding the science behind the standard. He expressed confidence in the scientific justification for the proposal, which MPCA's Board is scheduled to consider on June 22, 2010. If the Board approves the standard, then MPCA will submit it to USEPA for consideration. Assuming EPA approves the standard, MPCA's next step will be to develop a draft total maximum daily load (TMDL) designed to achieve the 32 ppm standard. Senjem acknowledged that meeting this standard will be challenging under high flow conditions, but should be achievable.

Jim Fischer commended MPCA on its efforts. He said Wisconsin DNR supports the proposed standard and is confident that it is based on sound science. Fischer observed that MPCA's approach of developing physical criteria designed to achieve a biological endpoint offers promise for protecting aquatic life uses on the UMR.

## UMRBA Water Quality Update

### *Biological Assessment Work Session*

Dave Hokanson reported on the May 5-6, 2010 biological assessment workshop held in Rock Island. The workshop is part of an effort by UMRBA's Water Quality Task Force (WQTF) to develop a biological assessment guidance document for the states. The guidance will address scientific and regulatory issues and include a review of available biological indicators. The work is being funded jointly by the five states under their 604(b) water quality management planning grants, with money from the American Recovery and Reinvestment Act.

Hokanson said he was quite pleased with the range of participants and caliber of discussion at the May workshop, which is the first of three sessions that will assist in developing the guidance document. Midwest Biodiversity, Inc. (MBI), UMRBA's contractor for this element of the 604(b) project, led the session and is responsible for drafting the guidance document. The session focused on establishing a baseline understanding, exploring the implications of biological assessment in a Clean Water Act context, and confirming the biological assessment methods and indices to be examined. According to Hokanson, several participants said the project should detail what an adequate monitoring framework for the UMR would look like. The next session will likely be held in September and will include discussion of MBI's draft background and scoping report for the project.

### *Other Updates*

Hokanson reported that USEPA Region 7 has issued a draft TMDL to address arsenic on two segments of the UMR in Iowa. The draft asserts that this TMDL is required pursuant to a 2001 consent decree that EPA entered into with several environmental groups. However, the two segments in question were not listed for arsenic impairment in Iowa's 1998 303(d) list, on which the decree requirements are based, though Iowa has included these two segments for arsenic in subsequent lists. According to Hokanson, none of the other four states list any portion of the UMR for arsenic.

The draft TMDL is open for comment through June 2, 2010, and has raised concerns among the five states. In addition to the lack of a link to the consent decree, these concerns include achievability in light of natural background levels, the use of data on total arsenic to determine impairment of a standard for inorganic arsenic (III), the identification of facilities outside of Iowa on the list of sources, and a range of other interstate considerations.

Hokanson reported that UMRBA's Water Quality Executive Committee (WQEC) recently discussed the draft TMDL via conference call, with the state members concluding that joint, five-state comments should be developed. Following this conversation, UMRBA staff drafted a comment letter, which is currently out for review by the WQEC and Board. As drafted, the letter outlines the states' specific areas of concern and encourages EPA to set aside the TMDL for the time being in favor of a collaborative state/federal effort to examine the issues and develop more consistent approaches to arsenic and other human health protection issues on the UMR.

Todd Ambs noted that several of the states were very surprised when EPA Region 7 issued the draft TMDL without prior consultation. He emphasized that this process was not consistent with the collaborative approach the states are trying to foster on the UMR through the WQEC and WQTF.

Hokanson also reported that UMRBA has hired Nat Kale as a temporary water quality specialist to assist in implementing the 604(b) biological assessment and nutrients projects. Kale comes to UMRBA from the Minnehaha Creek Watershed District. Hokanson also reported that work continues on UMRBA's designated uses project. Finally, USEPA staff recently published a paper addressing perfluorinated compound (PFC) sampling in water, with much of the data coming from the Upper Mississippi and Missouri Rivers. Barb Naramore said the PFC paper illustrates the value of the states'

ongoing collaboration on the river. EPA staff were able to work through Hokanson and the WQTF to reach state and federal staff who could assist in the sampling. In exchange, the states received valuable data concerning PFC distribution.

### **Financing Inland Navigation Infrastructure**

Paul Rohde described the efforts of the Inland Marine Transportation System (IMTS) Capital Investment Strategy Team. Composed of Corps and industry members, the Team was charged with examining the current status of the Inland Waterways Trust Fund (IWTF), developing a capital investment strategy, and recommending an approach to funding those capital needs.

Rohde emphasized the need for a capital development plan, citing deteriorating navigation infrastructure, an inefficient project delivery process, and insufficient IWTF revenue to support needed investments. After peaking in 2002, IWTF levels have fallen dramatically, with only \$40.3 million available to support new projects in FY 10. Rohde said significant delays and cost overruns with the Olmsted and Lower Monongahela projects illustrate the problems with the current system, which emphasizes initiating, rather than completing, projects. Delays and cost overruns have increased dramatically for projects authorized after WRDA 86, according to Rohde. With five major navigation projects currently under construction, Rohde said there is no chance of new starts until after FY 40 under the *status quo*. Major rehabilitation is also severely impaired under the current system.

Having evaluated the current situation and a range of options, the IMTS Team formally presented its recommendations at the April 13, 2010 meeting of the Inland Waterways Users Board (IWUB). The Team's recommendations include the following:

1. Undertake a capital investment program averaging \$380 million annually, with an average of \$320 million going to new construction and \$60 million going to major rehabilitation. The Team estimates this will be sufficient to complete or nearly complete 25 inland navigation projects (new construction and rehabilitation) through FY 40.
2. Retain the fuel tax as the means of generating the non-federal cost share for inland navigation projects.
3. Retain the current 50/50 cost share for new lock construction and major lock rehabilitation projects costing over \$100 million.
4. Provide 100 percent federal funding for major lock rehabilitation projects costing less than \$100 million, all major dam rehabilitation projects, and all new dam construction.
5. Institute a cost sharing cap to protect the non-federal sponsor (i.e., the IWTF) from large cost overruns.
6. Increase the fuel tax by 30-45 percent to generate sufficient revenue to support the recommended capital plan. With the cost share changes described above, the IWTF would provide approximately \$110 million of the \$380 million average annual program, with the federal government supplying the remaining \$270 million in funding.
7. Adopt changes in the project delivery process designed to improve efficiency and accountability, including risk-based cost estimates, independent external peer reviews, enhanced engagement of the IWUB and contractors, and standardized designs for some navigation components.

Rohde said projects funded under the IMTS Team's capital plan would include:

1. New lock at L&D 25 — starts in FY 11 and completed in FY 19
2. Major rehab at L&D 25 — completed in FY 14
3. Major rehab at O'Brien — starts in FY 13 and completed in FY 15
4. New lock at LaGrange — starts in FY 17 and completed in FY 24
5. New lock at L&D 22 — starts in FY 22 and completed in 2030s
6. Major rehab at L&D 26 — starts in FY 23 and completed in FY 23
7. New lock at L&D 24 — starts in FY 24 and completed in 2030s
8. Major rehab at L&D 22 — starts in FY 30 and completed in FY 30

Rohde explained that the Team proposed a \$100 million minimum for cost shared lock rehabilitation to address the concern that routine operation and maintenance (O&M) work may be migrating to the major rehab category, thus presenting an additional, and unauthorized, drain on the IWTF. In calling for 100 percent federal funding for navigation dam construction and rehabilitation, the Team cites the dams' myriad of other beneficiaries, including water suppliers, wastewater treatment plants, power generators, and industrial water users.

Rohde emphasized that shippers and operators vigorously support the IMTS Team's capital plan and other recommendations. Waterways Council, Inc. (WCI) and others are actively reaching out to stakeholders, the Administration, and Congress to generate support for the recommendations. Rohde said more than 250 organizations have signed a declaration of support sponsored by WCI. He identified important factors in determining the fate of the Team's recommendations, including the debate over earmarks, the November election's impact on the political landscape, and uncertainty regarding the timing of a potential Water Resources Development Act (WRDA). Rohde noted that Representative Oberstar remains eager to move a WRDA 10, but the path in the Senate is considerably more difficult. WCI is running a selectively placed 30-second commercial spot in the DC media market, and is also using social media to circulate a longer format video designed to educate decision makers and others about the navigation system's benefits and investment needs.

Rohde thanked UMRBA for its November 2009 letter urging resolution of the IWTF situation and emphasizing the need to initiate construction under NESP. Without some kind of reform, Rohde said it will be decades before the IWTF can support the new locks authorized under NESP. Rohde said he believes the IMTS Team's plan is sound and offers an excellent framework for working with Congress and the Administration to craft a solution.

Bernie Hoyer asked Rohde to comment on the report released in February by a coalition of environmental groups criticizing the economic analyses underlying NESP. Rohde said Congress clearly concluded that the investments are justified, as evidenced by members' broad bipartisan support for NESP in WRDA 07. He stressed the importance of taking a long view when projecting future needs and making capital investment decisions, explaining that a robust multi-modal transportation system is critical to meeting future needs. Rhode also cautioned against overemphasizing data from a relatively brief period of time when evaluating the economics of a navigation project.

In response to a question from Mike Wells, Rohde said the Administration has not yet responded to the IMTS Team's recommendations. After endorsing the Team's report at its April meeting, the IWUB formally forwarded the recommendations to Assistant Secretary Darcy. Rohde said he does not know what the likely timeframe is for a response from the Administration. He added that Congressional

feedback has generally been supportive, and noted that industry and Congress are united in their opposition to a lockage tax. In response to a question from Jim Fischer, Rohde said Transportation Secretary Ray La Hood is calling for a national strategy on intermodal transport.

Gretchen Benjamin reported that The Nature Conservancy's Great Rivers Partnership has written a letter expressing appreciation for the IMTS Team's efforts and emphasizing the need to resolve the IWTF issue and initiate work under NESP.

Gary Clark expressed appreciation for the breadth and depth of the IMTS Team's strategy. He stressed that successfully addressing these issues is critical to the future vitality of the UMRS and encouraged UMRBA to support the Team's recommendations. Mike Wells said that, at minimum, UMRBA should applaud the Team's rigorous process and exceptional effort. He observed that it represents exactly the kind of careful examination of the issues that UMRBA called for in its November 2009 letter. Wells said that he needs to consult internally within Missouri before he would be prepared to speak to the specifics of the Team's recommendations. Hoyer said he is favorably impressed with the Team's effort and recommendations, but said he is not yet prepared to endorse the strategy. Hoyer added that he needs time to confer with the other agencies in Iowa and consider how best the five states can identify and express their joint perspectives on the issue.

Barb Naramore suggested that she circulate an email to the Board outlining the IMTS Team's recommendations, the current situation, and options for the states to consider. The Board members agreed with this course of action.

### **EMP/NESP Transition Plan**

Marv Hubbell reviewed the Senate Appropriations Committee's FY 10 energy and water report, which reiterated previous directives to the Corps to develop a transition plan for EMP and NESP. He also summarized an October 6, 2009 meeting between Corps HQ and regional program staff, during which the transition plan was discussed. Based on those discussions, Corps staff has drafted a revised transition plan that more explicitly addresses two major obstacles to program transition — i.e., the Inland Waterways Trust Fund situation and obtaining construction general funding for NESP. In addition, the revised plan addresses the Senate's FY 10 report language and elaborates on the measures the Corps is taking to ensure project transferability. Finally, the revised plan emphasizes the importance of having restored EMP to full functionality and includes a "point-in-time" transition statement indicating that there will not be any need for overlapping construction funding to the two programs.

At Hubbell's request, UMRBA staff sent the revised transition plan to the UMRBA, EMP-CC, and NECC distribution lists on May 12, 2010. Hubbell said he hopes to finalize the plan by May 28, at which point the plan would be submitted to MVD.

Gretchen Benjamin expressed concern with the new point-in-time language, which appears as Section V of the revised plan. She said it does not clarify anything, is unnecessary, and may be limiting in the future. Bernie Hoyer agreed, noting that overlapping construction funding may not be needed, but that this will be the case only if NESP is receiving satisfactory funding. Hubbell asked whether any partners wanted to offer alternative language. Benjamin said she would prefer to eliminate the section rather than revise it. Todd Ambs concurred, observing that if the concept the Corps is trying to outline cannot be articulated clearly, perhaps it should simply be omitted. Barb Naramore reflected on the numerous developments and shifting landscape since passage of WRDA 07 and the states' first attempt to outline a transition strategy. These include prohibitions on EMP new starts, the IWTF situation, and the struggle to gain Administration support for NESP. Given the evolving situation, Naramore emphasized that flexibility can be very useful and cautioned against making a blanket statement that overlapping

appropriations will not be necessary. She also noted that the subcommittee staff who have pushed for the transition plan have not indicated that such a definitive statement is needed.

Hubbell said he would confer with others within the Corps regarding Section V and communicate back to the partnership before submitting the revised plan.

### **Missouri River Authorized Purposes Study**

Mark Harberg said the 2009 Omnibus Appropriations Act authorized the \$25 million Missouri River Authorized Purposes Study (MRAPS) to “determine if changes to the authorized project purposes and existing Federal water resource infrastructure may be warranted.” He briefly reviewed the history of the Missouri River project, noting both similarities and differences among the issues and priorities that drove the original 1944 Pick-Sloan authorization and those of today. The project’s primary authorized purposes are flood control and navigation.

Harberg explained that USACE contracted with the U.S. Institute for Environmental Conflict Resolution (USIECR) to conduct an independent situation assessment to inform the Corps’ MRAPS scoping effort. Using focus groups, stakeholder interviews, and an electronic survey, USIECR explored issues, opinions, and the level of collaboration and communication within the basin. Sharing several sample comments from the assessment, Harberg said there are clearly some important divisions that will present challenges. In its assessment report, USIECR offered the following conclusions and recommendations:

- Collaboration among the states is challenging but necessary.
- Institutions and processes that are working well should be leveraged.
- The Tribes must be included.
- Communication and coordination need to happen at multiple levels, including informing interested parties, involving stakeholders, and collaborating with other federal agencies and the states through an Executive Council.

Harberg explained that USIECR is recommending an Executive Council that would include USACE senior leadership, state employees named by each of the Missouri Basin Governors, representatives from other relevant federal agencies, and two government representatives from Mississippi River states. As recommended by USIECR, the Executive Council would not make decisions or take votes, but would instead allow members to receive information and perspectives from the Corps and provide the Corps with their guidance and counsel. USIECR also recommended that the Corps consider forming a similar Tribal Steering Council. Both groups would consist exclusively of government employees and thus would not be subject to the Federal Advisory Committee Act.

Harberg emphasized that USACE has not yet made decisions regarding any of USIECR’s recommendations, but will instead be considering them as part of the study scoping process. The MRAPS study team will hold approximately 30 scoping meetings throughout the Missouri River Basin and along the Mississippi River between May 25 and August 20. Additional tribal scoping meetings will be held as well. The scoping schedule includes meetings at New Orleans (July 7), Memphis (July 8), St. Louis (July 9), and Rock Island (July 27). The bulk of each session will be devoted to an open house format, with 8-10 informational stations staffed by Corps employees ranging from technical staff to decision makers. The sessions will conclude with an open mic opportunity, and individuals will also have the opportunity to provide comments directly to a stenographer. The Corps is accepting written comments on the scoping process through September 20, 2010. Harberg noted that the tribal meetings will employ a roundtable approach, rather than the open house format. He summarized the various tools the study team will be using to facilitate communication and coordination



throughout the study, include the study web site ([www.mraps.org](http://www.mraps.org)), public meetings, interim product review opportunities, public notices, and a list serve. Harberg noted that people may sign up for the list serve by visiting the study web site.

Laurie Martinson observed that UMRBA has formally asked USACE to fully engage the UMR states in the study. She expressed concern that there is no scoping meeting scheduled for Minnesota, despite the fact that Minnesota is both in the Missouri and Upper Mississippi River Basins. Harberg said the Corps had to limit the overall number of scoping meetings and suggested that the Fargo scoping meeting might provide an opportunity for Minnesota interests. He also stressed that the Corps will fully consider comments from all geographic areas, regardless of whether they are submitted at a scoping meeting.

Mike Wells reported that the Corps held an agency briefing via teleconference on February 19. He asked how the Corps selected the agency invitees for that briefing, noting that most of the UMRBA Board members did not receive notice from the Corps. Harberg said USACE invited federal agencies, tribes, and the Missouri and Lower Mississippi River states (both natural resource and transportation departments). There were approximately 100 invitees, with 35 participants. Wells asked Harberg to be sure to distribute the survey discussed on the call to the UMR states. He stressed that the UMR states, acting through UMRBA, have specifically requested that the Corps engage them fully in the study process. Harberg said he would work with Barb Naramore to get the necessary contact information and distribute the survey.

Paul Rohde asked how the MRAPS would be coordinated with the Missouri River Recovery Implementation Committee (MRRIC). Harberg said the MRAPS team will provide periodic briefings to MRRIC and seek information about committee members' issues and concerns.

Bernie Hoyer stressed the importance of recognizing the many linkages between the Missouri and Mississippi River. He said those linkages, both economic and environmental, are very important to all the UMR states. Hoyer thanked the Corps for its efforts thus far to recognize the interconnectedness of the two river systems. Harberg said USACE certainly understands and appreciates the perspectives of the Mississippi River states and committed to correcting any oversights in the Corps' efforts to communicate with the UMR states.

### **Hoyer Retirement**

Todd Ambs announced that Bernie Hoyer will be retiring from Iowa DNR at the end of June. On behalf of UMRBA, Ambs recognized Hoyer's many contributions to Iowa and the five states' collaborative efforts. Ambs presented Hoyer with a certificate of appreciation from UMRBA. Hoyer said he has been privileged to work for Iowa and has particularly enjoyed working with the other states on Mississippi and Missouri River management issues. Hoyer applauded the UMR states' work through UMRBA.

### **Midwest Natural Resources Group**

Ryan Aylesworth explained that the Midwest Natural Resources Group (MNRG) is composed of the regional directors of the federal agencies with major natural resource missions in the region, including USACE, USGS, USFWS, NPS, USFS, USEPA, and NRCS. MNRG addresses issues in 12 states and 13 major watersheds. After working together since 1998, Aylesworth said the MNRG members are now seeking to increase their interaction and coordination with existing interagency groups on the Mississippi, Missouri, and Ohio Rivers, including UMRBA. He also explained that MNRG is shifting from information exchange to more formal collaboration, including pooling resources among the federal agency members to work on joint projects. Chairmanship of MNRG rotates annually, and the group meets twice per year.

According to Aylesworth, MNRG has increased its focus on Mississippi River issues, including habitat loss and fragmentation, climate change, invasive species, loss of biodiversity, Gulf Hypoxia, flooding, toxics, and sedimentation. In May 2009, under General Walsh's leadership, MNRG issued a Call to Action for the Mississippi River, citing the need for a unified vision and intergenerational commitment to the Mississippi River. Aylesworth reported that several MNRG members will be participating in the June 22-24, 2010 America's Inner Coast Summit, and MNRG is also a partner in Root River project under the NRCS's Mississippi River Basin Initiative (MRBI).

### **Mississippi River Vision**

Jim Hannon observed that the United States has an abundance of diverse water resources. The biggest challenge, he said, is finding the right balance between competing and conflicting concerns, agencies, and uses to ensure future sustainability. He briefly reviewed MVD's history in the Mississippi River Valley, starting with clearing and snagging in the 1840s, progressing through a series of navigation and flood control projects, and moving to the present day when those missions are combined with an ecosystem restoration mission. He pointed to the Mississippi River and Tributaries (MR&T) project as an example of people having a vision and largely achieving their goals. Following the devastating 1927 floods on the Lower Mississippi, Congress authorized the MR&T as a comprehensive project for flood control and navigation on the LMR. Since that time, Hannon said the MR&T has prevented an estimated \$354 billion in flood damages and provided a 27-to-1 return on investment.

Hannon stressed the importance of taking a basin approach to managing water resources and reflected on the question General Walsh first posed upon assuming command of MVD back in 2008 — i.e., what is the vision for the world's third largest watershed and who owns that vision? Hannon said there is currently no collective vision, and no single entity with the clear authority to articulate such a vision. He emphasized that collaboration is a key component to developing a successful, jointly held vision for the Mississippi River Basin. In addition, he said, such an effort must employ a holistic, comprehensive, systems-based approach. He said there is growing interest in developing a jointly held vision, including among the MNRG, the Gulf Hypoxia Task Force, and those working on diversion and coastal restoration issues in Louisiana.

Michael Reuter explained that, five years ago, Caterpillar made a transformational gift to The Nature Conservancy (TNC), enabling TNC to move beyond its traditional state chapter structure to address the Mississippi River and other globally significant rivers in a holistic, systemic way. One of the hallmarks of TNC's Great Rivers Partnership is its emphasis on information exchange and learning from others. Reuter noted that USGS and USACE have been active partners in the program, including supporting the effort to help Chinese scientists learn from the LTRMP as they develop a monitoring program for the Yangtze River.

Reuter said integrated river basin management (IRBM) is key to success in managing the world's great river systems. He defined IRBM as

the process of coordinating conservation, management and development of water, land and related resources across sectors within a given river basin, in order to optimize the economic and social benefits derived from water resources in an equitable manner while preserving and, where necessary, restoring freshwater ecosystems.

He observed that the states' coordination efforts through UMRBA are very much in keeping with IRBM principles. The question, according to Reuter, is how we continue such efforts and build a systemic approach to managing the entire Mississippi River and its watershed. He said this will be a future focus of TNC's Great Rivers Partnership.

Reuter reported that TNC commissioned a survey to assess stakeholder perspectives regarding IRBM and a possible visioning process. The Meridian Institute conducted 43 in-depth interviews with a range of key Mississippi River stakeholders. Reuter said the survey clearly showed there is a desire for a shared vision for the Mississippi River Basin, as well as a need for more effective institutional structure(s) to coordinate river management and turn the vision into reality.

Hannon shared the Mississippi River Commission's vision statement from August 2009, which emphasizes an intergenerational commitment to national security and flood damage reduction, environmental sustainability and recreation, infrastructure and energy, water supply and water quality, agriculture and manufacturing, and the movement of goods. He emphasized that USACE is offering the MRC's vision simply as a catalyst for discussion. According to Hannon, an effective vision for the Mississippi River Basin can only emerge from a much more broadly based process and dialogue. That process should:

- result in a shared vision for the Mississippi River Basin that encompasses the whole system in an integrated manner;
- be intergenerational and fit the realities of situation, including geography, interest group diversity, scientific and informational input; and
- produce a vision that serves as a touchstone to inform project development across the watershed.

Hannon observed that there are various tools and models available to help guide and support a Mississippi River visioning process. Ultimately, the participants will need to determine what is most suitable for their use. Hannon estimated that it would take between three and six years to develop a vision for the Mississippi River, and stressed the importance of investing the time needed for a sound collaborative process. Building on the insights from the Meridian Institute's report, Hannon said the next step is the America's Inner Coast Summit, scheduled for June 22-24, 2010 in St. Louis. Summit participants will be asked to formulate, evaluate, and recommend different visioning process alternatives; exchange information and perspectives; and establish a working group to help guide the process beyond the summit.

Hannon observed that it is clearly not just a USACE, or even federal, responsibility to build the vision for the world's third largest watershed. He emphasized that, to be successful, this must be a collaborative process. Hannon commended the UMR states' commitment to collaboration, and asked them to consider how UMRBA might be able to engage in the visioning process. He suggested that there are important lessons to learn from the UMR states, including how they established and have maintained UMRBA and how they have engaged other interests.

Reuter stressed that neither TNC nor USACE wants to own or drive the visioning process. He observed that it will be critical for a broad range of agencies and stakeholders to engage in the conversation. Reuter said there is a clear need to invest in developing a collaborative vision for the integrated management of the Mississippi River. He cautioned against allowing the system's complexity and size to distract or divert partners from this goal.

### **Hydropower on the UMR**

Janet Sternburg briefly summarized the status of existing and proposed hydropower projects on the UMR, from Coon Rapids, Minnesota to Cairo, Illinois. As indicated in the meeting packet, there are:

- 6 Federal Energy Regulatory Commission (FERC)-licensed projects,
- 3 existing projects that are not subject to FERC licensing,

- 25 proposed projects that have received preliminary permits from FERC,
- 1 project with a draft license application submitted, and
- 9 projects with preliminary permit applications pending before FERC.

Sternburg said there are multiple preliminary permits pending at several of the locks and dams. She explained that there are many factors behind the increased interest in hydropower on the UMR and other big rivers, including increased consumer demand for alternative energy, federal tax credits and grants, state laws requiring power suppliers to meet renewable targets, and new technologies. Among the benefits of hydropower, Sternburg cited reduced greenhouse gas emissions, decreased reliance on fossil fuels, and good reliability. Hydrokinetic generation has the additional benefit of not requiring dams or diversions and offers the potential to operate in a variety of aquatic environments, both freshwater and marine.

Sternburg briefly reviewed the FERC pre-licensing process, which she said is complex and imposes many deadlines on applicants and participating agencies. The process begins with an application for a preliminary permit, which is relatively easy to obtain and provides the recipient with three years to assess the feasibility of their proposed project. According to Sternburg, there is intensive interagency coordination and consultation during the preliminary permit, pre-licensing, and post-licensing phases. FERC is responsible for completing an environmental assessment or environmental impact statement for each project prior to licensing. Sternburg observed that applicants are often reluctant or unable to fund studies during the preliminary permit and pre-licensing phases. But these studies are the applicants' responsibility and provide important information on which FERC ultimately bases its licensing decisions. Sternburg noted that hydropower licenses are typically 30 to 50 years in duration.

Sternburg briefly reviewed the agencies engaged in the hydropower licensing process for each of the UMR states. The states are, of course, responsible for issuing water quality certifications and any other required Clean Water Act permits. In addition, they review and comment upon applications in terms of fish and wildlife issues, any other natural resource concerns, and historic preservation/cultural resource issues.

Nan Bischoff explained that there are four basic types of hydropower projects—i.e., conventional, hydrokinetic, very low head, and a new “Lock+” technology. She showed illustrations of each. Charlotte Cohn said there are several common concerns that hold across agencies and project types on the Upper Mississippi. These include effects on fish and wildlife, including invasive species issues, as well as impacts to the river, river users, and infrastructure, including, but not limited to, the locks and dams.

Jim Fischer explained that Wisconsin strongly supports renewable energy and greenhouse gas reduction efforts, and thus recognizes the important role of hydropower. But he emphasized that Wisconsin also has a very strong Public Trust Doctrine, under which DNR is responsible for protecting Wisconsin waters in the public interest. He noted that, in addition to 401 certifications, applicants in Wisconsin also need a Chapter 30 permit if their proposed project involves alterations to the river bed. Fischer said the current volume of preliminary permit applications is extremely challenging to state staff. He distributed a standard letter that Wisconsin DNR is sending to all preliminary permit applicants outlining the basic questions the state will expect them to address. Fischer said the state also intends to file a motion to intervene in all projects proposed for Wisconsin waters.

If all of the proposed projects were to come to fruition, Fischer observed that the UMR could go from having very few hydropower installations to have thousands of turbines on the river. He stressed that Wisconsin does not want to stand in the way of responsible hydro development, but will insist on proper evaluation. Part of the necessary study, according to Fischer, will involve evaluating the cumulative

effects of the existing and proposed projects. Fischer encouraged the UMRBA Board to consider sending a letter to FERC requesting a system-level cumulative effects study. He also said it would be very helpful to have UMRBA staff help monitor the status of proposed projects and facilitate communication among the states and federal agencies involved in reviewing hydro proposals on the UMR.

Cohn said Minnesota DNR has consistently advocated for fully evaluating the impacts of proposed projects. The agency is now examining hydro development potential on its own lands, and will need to undertake the same type of evaluations. She noted that Minnesota DNR has typically opposed desktop evaluations, in favor of full entrainment and mortality studies. She acknowledged that this increases applicants' costs, but stressed the importance of these studies in fully evaluating potential project impacts, particularly for proposals involving new technologies. Cohn echoed Fischer's call for a system-level cumulative effects study. Robert Stout observed that Wisconsin DNR's standard letter to applicants is an excellent outline of the issues that any state would likely want to see addressed.

Tony Sullins described the March 2010 memorandum of understanding (MOU) signed by the Departments of Energy, the Interior, and the Army supporting the development of environmentally sustainable hydropower. Sullins said the Fish and Wildlife Service is fully aware of the importance of developing clean energy, but also recognizes that even clean energy production can pose important environmental issues. He emphasized that the recent MOU explicitly addresses the need to identify the right opportunities for expanding hydropower while taking care to avoid or reduce environmental impacts.

Sullins reviewed the scope of Fish and Wildlife Service authorities relevant to hydropower, including endangered species, migratory birds, migratory fish, and the Bald Eagle Protection Act. Overall, Sullins said the Service has more opportunities to engage in the licensing process than it has staff to participate. The Service's general approach is to respond to preliminary permit applications and to intervene in the licensing process where it has sufficient capacity and the issues warrant. According to Sullins, the Service's concerns on the UMR include the many unknowns, especially related to hydrokinetic technology and cumulative impacts.

Bischoff described the Corps' areas of concern, including issues related to commercial and recreational navigation, flood control, safety during construction and operations, security, integrity of the lock and dam structures, and cultural and environmental resources.

Bernie Hoyer observed that the panel members had articulated many unknowns and a broad range of agency concerns. He suggested that project review staff identify their top priority questions and then determine how best to ensure that they are addressed. Sternburg said some questions are very general and applicable to many projects, such as how to optimize the design of hydrokinetic and very low head turbines. Other questions are quite site-specific, such as a proposed project's impacts on sediment transport. However, Sternburg said FERC and industry could develop models that would aid in exploring such site-specific questions more efficiently.

Todd Ambs asked whether most of the UMR proposals involve new structures or modifications to existing structures. Fischer said the preliminary permit applications generally provide very limited design details. Some of the projects are being proposed for auxiliary lock locations, others in dam gates and embankments, and some below the dams. Most appear to involve modifying existing structures. Ambs said projects involving new structures would likely generate more concerns for the resource and environmental agencies. Fischer observed that even projects within existing structures have the potential to require modifications to operations that could prove problematic or limiting to river managers. For this reason, he said it will be vital for USACE to articulate its broad operating range prior to licensing.

Barb Naramore noted Fischer's earlier suggestions regarding UMRBA engagement in potential follow-up activities. She suggested providing UMRBA staff support to an *ad hoc* hydropower group, composed of staff from the relevant state and federal agencies. In addition to information exchange and coordination, the group could then explore the possibility of specific actions, such as a joint letter concerning cumulative effects. The Board members concurred with Naramore's recommendation and directed staff to work with interested state and federal agency staff to form such a group.

### **Administrative Issues**

Due to Board members' travel schedules, Todd Ambs adjusted the agenda order to advance consideration of two administrative items.

#### *RTC Contract Authorization*

Mike Wells moved and Laurie Martinson seconded a motion authorizing Barb Naramore to execute a contract with USACE for the provision of writing, editorial, and publication services related to the 2010 Report to Congress and Implementation Issues Assessment. With no further discussion, the motion carried unanimously.

#### *FY 11 Budget*

Naramore distributed copies of her proposed FY 11 budget, dated May 17, 2010. Martinson moved and Wells seconded a motion to approve the budget as drafted. Bernie Hoyer offered an amendment to increase the Iowa dues revenue line item from \$24,000 to \$39,000. He emphasized that there is no guarantee the agencies will be able to pay dues at this level in FY 11, but said Iowa's four representatives have set this as their goal. Martinson accepted Hoyer's change as a friendly amendment and moved adoption of the proposed budget with Hoyer's amendment. Wells seconded the motion and, with no further discussion, the Board unanimously approved the proposed FY 11 budget as amended (copy attached).

### **Minnesota River Basin Integrated Watershed Study**

John Wells provided an update on the Minnesota River Basin Integrated Watershed, Water Quality, and Ecosystem Restoration Study. He explained that the study is designed to bring together local, state, and federal agencies to address problems in the Minnesota River Basin. The study is broad in scope, including flood damage reduction, ecosystem restoration, watershed management, water quality management, and ground water management. It will examine hydrology and the basin's water budget, aquatic habitat conditions, sediment transport, nutrient loading, watershed conditions, and social and economic conditions in the basin.

Study products will include an integrated plan, as well as LiDAR coverage, a decision support system (DSS), and advanced models for the basin. Wells emphasized the state's hope that the plan and DSS will facilitate coordination and prioritization of resource expenditures by all levels of government within the basin, with strong local stakeholder involvement. He also noted that Minnesota is developing the LiDAR coverage, which is a large portion of the non-federal contribution to the study. USACE is participating in the study through its Section 22 Planning Assistance program, which requires a 50 percent non-federal cost share. Minnesota EQB is the lead non-federal sponsor, and is coordinating the efforts of other participants.

Wells explained that an Interagency Study Team is guiding the overall study. Technical groups will address more targeted questions, while a Planning Group is currently in the process of identifying the

fundamental planning questions the study should address. A modeling group will then explore how to apply technical analyses in exploring these priority questions.

Michael Wyatt, the Corps' study manager for the effort, emphasized the complexity of the Minnesota Basin and thus of this integrated study effort. Wyatt and Wells both stressed the collaborative, partnership approach to implementing the study. Wells explained that the current scoping phase was delayed somewhat due to a funding gap. Following completion of the scoping, next steps will include communication and outreach, developing sub-watershed technical analyses, determining key users' decision support system (DSS) needs, and starting to build the DSS.

#### **Administrative Issues (continued)**

Barb Naramore reported that the next two quarterly meetings are scheduled for August 3-4, 2010 in La Crosse and November 16-18, 2010 in the Quad Cities, with UMRBA's meeting falling on the first day of each series. She noted that NECC will be holding its summer meeting via web conference on August 10, 2010. The Board set the winter quarterly meetings for February 15-17, 2011 in St. Louis.

With no further business, the meeting adjourned at 3:28 p.m.