Minutes of the 125th Quarterly Meeting/32nd Annual Meeting of the Upper Mississippi River Basin Association

February 27, 2013 Davenport, Iowa

UMRBA Chair Diane Ford called the meeting to order at 12:22 p.m. Participants were as follows:

UMRBA Representatives and Alternates:

Arlan Juhl Illinois Department of Natural Resources
Dan Stephenson Illinois Department of Natural Resources
Diane Ford Iowa Department of Natural Resources

Harold Hommes Iowa Department of Agriculture and Land Stewardship

Dave Frederickson Minnesota Department of Agriculture
Robert Stout Missouri Department of Natural Resources
Dan Baumann Wisconsin Department of Natural Resources
Jim Fischer Wisconsin Department of Natural Resources

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

Tom Christenson
COL Mark Deschenes
Gary Meden
U.S. Department of Agriculture, NRCS
U.S. Army Corps of Engineers, MVR
U.S. Army Corps of Engineers, MVR

Ken Westlake U.S. Environmental Protection Agency, Region 5

Tim Yager U.S. Fish and Wildlife Service, Region 3
Dave Bornholdt U.S. Geological Survey, MWA (by phone)

Others in Attendance:

Bernie Schonhoff
Andrea Fetherston
Kevin Stauffer
Janet Sternburg
Bryan Hopkins
John Hubbert

Iowa Department of Natural Resources
Minnesota Department of Natural Resources
Missouri Department of Conservation
Missouri Department of Natural Resources
U.S. Department of Agriculture, NRCS, Iowa

Roger Perk U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR Ken Barr U.S. Army Corps of Engineers, MVR Marvin Hubbell Karen Hagerty U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR **Dennis Hamilton** Nicole Manasco U.S. Army Corps of Engineers, MVR Brian Johnson U.S. Army Corps of Engineers, MVS Kat McCain U.S. Army Corps of Engineers, MVS U.S. Fish and Wildlife Service, Region 3 Jon Duyvejonck

Mike Jawson U.S. Geological Survey, UMESC

Tom Boland AMEC

Jordy Jordahl America's Watershed Initiative

Michael McGinn Cardno Entrix T. Miller HDR, Inc.

Gary Loss HNTB

Olivia Dorothy Izaak Walton League David Webb MidAmerican Energy

Brad Walker Missouri Coalition for the Environment

Jeff Jacobs National Research Council, WSTB (by phone)

Gretchen Benjamin The Nature Conservancy, Great Rivers Partnership

Dave Hokanson Upper Mississippi River Basin Association Kirsten Mickelsen Upper Mississippi River Basin Association

Minutes

No changes to the draft minutes of the November 28, 2012 meeting or the January 15, 2013 conference call were requested. Dan Baumann moved and Arlan Juhl seconded a motion to approve the draft minutes of both the November meeting and January conference call. The motion carried unanimously.

Recognitions

Diane Ford recognized Dru Buntin' service as member of UMRBA's Board during his tenure with the Missouri DNR, specifically noting his strong leadership as Board Chair. Ford also thanked Dave Bornholdt of USGS for his service as a federal liaison to UMRBA, noting the Bornholdt will soon be retiring. She said certificates of appreciation will be sent to both Buntin and Bornholdt.

Ford announced that Barb Naramore has taken the position of Assistant Commissioner for Forestry, Lands & Minerals, and Ecological & Water Resources with the Minnesota DNR. She expressed sincere appreciation to Naramore for her tremendous work on behalf of the UMRBA during her many years of service to the Association and offered best wishes to Naramore for success at Minnesota DNR. Hokanson added that Naramore had worked for UMRBA since 1990, serving in the positions of Associate Director, Ecosystem and Navigation Program Director, and Executive Director. He said Naramore had been instrumental in many of UMRBA's initiatives, leaving behind a legacy of great accomplishments, and that her expertise and wisdom will certainly be missed by the Association.

Executive Director's Report

Dave Hokanson gave the Executive Director's report, calling attention in particular to the recent execution of contracts for UMRR-EMP support services and spill contingency planning and mapping. He also said UMRBA had signed on to a letter authored by the Interstate Council on Water Policy (ICWP) supporting USGS' Cooperative Water Program and National Streamflow Information Program, as included on pages B-4 to B-7 of the agenda packet. Hokanson noted that UMRBA has been a signatory to similar letters over the past several years.

Hokanson directed the Board's attention to pages B-8 to B-11 of the agenda packet for the current Treasurer's Statement and UMRBA's FY 13 financial statements. Juhl moved and Frederickson seconded a motion to accept the Profit and Loss Statement and Balance Sheet dated February 12, 2013. The motion was carried unanimously.

Hokanson pointed out the brief description of the America's Watershed Initiative (AWI) provided in the Executive Director's report and invited AWI Executive Director Jordy Jordahl to offer further remarks regarding the initiative. Jordahl thanked the Board for the opportunity to speak. He said the AWI effort is currently focused on moving forward with the outcomes of its September 2012 summit in mind. In particular, Jordahl noted that AWI will be working on a watershed health report card and this effort will include holding workshops in each of the Mississippi River sub-basins, including the UMR. He said he will be reaching out to stakeholders in the UMR basin as this report card project proceeds. In addition

to the report card effort, Jordahl said that AWI will continue to examine ways to promote communication and collaborative action across the Mississippi River Basin. He commented that the AWI Steering Committee includes diverse membership from a number of sectors, and that he in particular has appreciated Barb Naramore's contributions as a member of the Steering Committee and UMRBA's support of AWI more broadly.

Interbasin Diversion Consultation

Hokanson explained that the five UMR states are party to the 1989 Upper Mississippi River Basin Charter, included as Attachment C in the agenda packet, which sets forth a notification and consultation process for any new or increased water diversion out of the basin that will exceed an average of 5 million gallons per day during any 30-day period. The Charter also requires the signatory states to report on their involvement in qualifying diversion requests at UMRBA's annual meeting. The states reported as follows:

Illinois, Arlan Juhl — no qualifying diversion requests Iowa, Diane Ford — no qualifying diversion requests Minnesota, Dave Frederickson — no qualifying diversion requests Missouri, Robert Stout — no qualifying diversion requests Wisconsin, Dan Baumann — no qualifying diversion requests

Hokanson said UMRBA will send its customary letters to the Governors conveying the results of the states' annual diversion reporting.

Presentation of 2013-2017 UMRBA Strategic Plan

Ford said the Board had recently completed a year-long process to develop a UMRBA Strategic Plan covering the period of 2013-2017. She thanked the Board members, UMRBA staff, and Andrea Balkenbush of Missouri DNR, who served as facilitator for the process. Ford also thanked the numerous individuals who provided comment on the plan during its development. She said the Strategic Plan will provide a framework for UMRBA's efforts over the next five years and that, annually, the Board will identify priorities for plan implementation.

Hokanson gave a brief overview of the strategic plan, highlighting the following:

- The purposes of the Strategic Plan are to confirm the Association's mission, principles, and function; articulate the states' joint priorities for UMRBA during 2013-17; and guide annual work plan development.
- The plan emphasizes the following "value proposition": *UMRBA* is the linchpin that enables its member states to achieve their collective vision for integrated, multi-purpose management of the Upper Mississippi River System and its watershed.
- The plan identifies seven focus areas for UMRBA as follows: 1) Aquatic Nuisance Species, 2) Commercial Navigation, 3) Ecosystem Restoration and Monitoring, 4) Flood Risk Management, 5) Hydropower, 6) Spill Response Planning and Mapping, and 7) Water Quality.
- The Board will identify priorities for plan implementation each year during its annual (February) meeting.

Ford said the Board had discussed its priorities for 2013 and identified aquatic nuisance species, commercial navigation, and ecosystem restoration and monitoring as areas of greatest emphasis, along with sustaining ongoing efforts in regard to water quality and spill response planning and mapping. Colonel Mark Deschenes applauded the plan and asked if there is a prior strategic plan in place or if this

is the first document of its kind for UMRBA. Hokanson responded that this is the first formal strategic plan for UMRBA, although there have been strategic planning efforts periodically throughout the Association's history which have helped define the organization's mission and priorities. Colonel Deschenes said it will be important to continue to revisit the plan in order to evaluate progress. He asked whether the emphasis on the three priority areas – aquatic nuisance species, commercial navigation, and ecosystem restoration and monitoring – reflected a consensus among the Board members. Ford responded that this prioritization was indeed a Board consensus.

Olivia Dorothy asked whether the Board had considered the possibilities for innovative, non-federal funding support of navigation projects as part of its deliberations regarding commercial navigation. Hokanson responded that the Board had not explicitly addressed such approaches to date, but that the Board's intent is to develop a position paper regarding navigation issues, and that this may be among the ideas considered as the position paper is developed.

Bernie Schonhoff stressed that it is important for the Board to report out progress in regard to the strategic plan on at least an annual basis. Ford said the Board's annual consultation will provide at least one opportunity to do this, and that other mechanism could be used, such as structuring the Executive Director's report around the strategic plan focus areas and priorities.

FY 13 Federal Budget Highlights

Corps of Engineers

Gary Meden said the President's FY 14 budget has not yet been released and, as such, he is largely limited to a description of FY 13 funding in his presentation. He added that the federal government is currently operating under a continuing resolution through March 27, 2013 and it is not known whether Congress will enact an omnibus measure for the remainder of FY 13 or pass another continuing resolution. With these parameters in mind, Meden described the following as highlights of the President's FY 13 budget for USACE:

- The President's budget for USACE in FY 13 is \$4.7 billion, which is \$100 million more than the FY 12 budget.
- The FY 2013 budget continues the process for development, prioritization, and execution of a performance-based civil works program.
- The FY 2013 budget places a strong emphasis on creating jobs at the national, regional, and local levels.

At the major account level, the President's FY 13 budget breaks down as follows:

	National	MVD	
	FY 13 President's Budget Request	FY 13 President's Budget Request	
	(in millions of dollars)		
General Investigations	102	17	
Construction General	1,471	70	
Operation &	2,398	417	
Maintenance			
Mississippi River &	234	234	
Tributaries			

Meden said the largest single budgeted construction item on the UMRS in FY 13 is the Upper Mississippi River Restoration-Environmental Management Program (UMRR-EMP) at about

\$18 million, along with about \$8.8 million in smaller navigation-related projects. He noted that neither the Navigation and Ecosystem Sustainability Program (NESP) nor the UMR Comprehensive Plan receive any funding under the President's FY 13 budget request.

Meden emphasized that there is great uncertainty both in regard to the President's FY 14 budget request, as it has not been released yet, and in the possible impact of sequestration on the Corps' budget.

Dan Baumann asked whether the budget allocation for MVD is similar to that of recent years. Meden replied that the proposed FY13 MVD budget is representative of the trend in recent years, which has included a steep decline in the Investigations account, particularly as funding for NESP has declined. In general, he said, the Corps' approach has been not to keep pursuing investigations when there is so little activity in construction. Meden added that the downside to this approach is that there may not be enough projects ready to go should funding for construction become available. Baumann asked whether MVD must compete with other divisions for funding, as it appears that the allocation to MVD is disproportionately low. Meden replied that MVD does not compete directly, but that ultimately all Divisions and missions are subject to the same budget constraints, adding that MVD's portion of the overall budget would be even smaller if not for spending on Coastal Louisiana.

In response to a question from Gretchen Benjamin, Meden confirmed that the national budget number for Operations and Maintenance in the President's FY 13 request is \$2.39 billion. Bryan Hopkins asked what the impact of rock pinnacle removal will be on the dredging budget. Meden replied that current year's dredging budget had been essentially exhausted before pinnacle removal began and therefore the Corps is seeking supplemental funding. It is also possible that funds could be moved between USACE Districts, but that is not the preferred approach, as General Peabody is seeking to move away from this type of movement of funds among Districts.

Arlan Juhl asked if Meden had any insight on the likely impacts of sequestration. Meden said little is known at this point and whether reductions would be assigned on a per project basis or via some other mechanism. Juhl said one of his concerns is the impact on basic data collection (e.g. from stream gages), if the Operations and Maintenance budget is significantly reduced. Ken Westlake asked what the likely impact of sequestration on the upgrade of the electrical barrier at Lockport would be. Meden said he cannot address this, as it falls under the jurisdiction of the Chicago District.

Natural Resources Conservation Service

Tom Christensen commented that, like the preceding presentation from USACE, he cannot directly address NRCS' FY 14 budget, since the President's budget has not yet been released. Instead, he said he will focus his remarks on agency initiatives and actual funding in recent years. Christensen said one continuing trend in recent years is that there less discretionary funding available and that some previously funded discretionary programs no longer receive any funding. He explained that mandatory programs are authorized at specific levels in the Farm Bill whereas discretionary programs are funded via the annual appropriations process. Christensen said NRCS' FY 13 budget is currently established under the continuing resolution and that certain Farm Bill programs were recently extended under the provisions of the American Taxpayer Relief Act of 2012.

Christensen characterized significant unknowns affecting NRCS' budget in FY 13 as including the impact of sequestration, the content of a new Farm Bill, and the lack of a President's FY 14 budget proposal, which has yet to be released. He said there is an anticipated reduction of approximately \$220 million in NRCS' budget as a result of sequestration. In implementing this, Christensen said NRCS is likely to seek cost reductions in administrative areas such as travel and supplies, but that the specific impacts are yet to be determined. He added that NRCS has instituted a hiring freeze in advance of sequestration's implementation.

In terms of areas of emphasis, Christensen named the following as NRCS' current programmatic priorities:

- Strengthening Business Operations
- Expanding Soil Health Campaign
- Enhancing Landscape Conservation Initiatives
- Increasing Conservation Access for Underserved Communities
- Broadening Regulatory Predictability
- Harnessing Private Markets
- Deepening Strategic Partnerships to Leverage Outcomes

Dave Frederickson expressed his thanks to Christensen for NRCS' assistance in establishing Minnesota's Agricultural Certainty program. Christensen responded that Minnesota's program appears to be progressing and noted that he had recently been part of a discussion regarding agricultural certainty in Iowa.

U.S. Environmental Protection Agency

Ken Westlake reported that USEPA, like the other federal agencies, is currently operating under a continuing resolution and that both the President's FY 14 budget request for the agency and the specific impacts of sequestration are yet to be determined. He explained that the current continuing resolution caps USEPA's spending at 2012 levels and therefore the agency is expending funds very carefully and within the limits of the FY 12 budget. Lacking availability of an FY 14 President's budget, Westlake described trends in program funding from FY 09 through the FY 13 President's budget request for areas including Clean Water Act Section 106, Clean Water Act Section 319, Clean Water Revolving Loan Fund, Safe Drinking Water Revolving Loan Fund, Public Water Supply Supervision, Infrastructure Protection, and Geographic Programs. In regard to the revolving loan funds, he noted that while these comprise a significant portion of the Agency's overall budget, they still fall far short of addressing documented infrastructure needs. Westlake also explained that revolving fund allocations to individual states are calculated on a formulaic basis, which includes state population as one of the determinants. He also noted that the Great Lakes continues to be the geographic program with the largest allocation in US EPA's budget.

U.S. Fish and Wildlife Service

Tim Yager said the Service's operational plan for FY 13 anticipates that current continuing resolution levels will likely be extended through the remainder of the fiscal year. With this assumption in mind, he presented the following summary of recent Service budgets by major account as follows:

	<u>2011</u>	<u>2012</u>	2013 (Estimated)
Ecological Services Program	301M	300M	295M
National Wildlife Refuge System	492M	486M	487M
Migratory Bird Management &	128M	127M	125M
Law Enforcement			
Fisheries Program	139M	135M	138M
Science Applications	31M	32M	38M
General Administration	153M	147M	151M

Yager said the FY 13 estimate does not account for a potential five percent cut resulting from sequester implementation. He noted that the increase in the science applications account is in part due to work on climate change and strategic habitat planning.

Yager next focused on UMR-specific expenditures, estimating that approximately \$750,000 will be spent in FY 13 budget for UMR-related work by the three Ecological Services field offices on the river. For UMR/Illinois River refuges, Yager said the base budget for FY 13 is \$8.6 million. In terms of program priorities for UMR Refuges, Yager noted the following for FY 13:

- Implement portions of Comprehensive Conservation Plans (CCPs)
- Complete Port Louisa NWR office/visitor center facility
- Work on UMRR-EMP projects, including: Capoli Slough (construction), Harper's Slough (planning), Pool 12 overwintering (planning and design), Lake Odessa, Fox Island, Clarence Cannon NWR, and water level management in Pool 3
- Addressing multiple energy development/transportation related issues including hydropower development, sand mining, 1-90/Dresbach Bridge construction, and high speed rail
- Continue themed years programs: Year of Cycling 2013 and Year of Fishing 2014 (beginning coordination)

Yager also highlighted successes from the Summer of Paddling in 2012, which included more than 300 events in 10 states. He thanked USACE and the National Park Service for their contributions in co-hosting events.

Yager reviewed the work of the Service's Genoa hatchery, three Fish and Wildlife Conservation Offices, and Fish Health Center in La Crosse. Highlights here included Higgins Eye and Winged Mapleleaf mussel reproduction, lake sturgeon propagation, and eDNA transition and sample processing. He said that, in total, the work at these facilities is expected to result in approximately \$3.8 million in expenditures during FY 13.

Yager noted that federal assistance to states via grant programs continues to increase. He thanked all of those involved in the hunting and fishing programs supported via these grants. Yager also highlighted the Upper Mississippi River & Great Lakes Region Joint Venture program and Landscape Conservation Cooperatives' work in the Upper Mississippi River Basin.

Baumann asked whether sequestration is likely to affect USFWS trust funds. Yager said this is a possibility, as sequestration may likely be implemented as five percent reduction across all programs and accounts. Ford asked if this would likely affect assistance to states. Yager replied that assistance to states would be impacted in this case. He added that other likely impacts of sequestration include hiring freezes, particularly for youth career pathways programs, and travel restrictions.

U.S. Geological Survey

Dave Bornholdt began by emphasizing USGS' integrated mission, which incorporates both physical and biological science expertise within one agency. He also mentioned that Suzette Kimball is currently USGS Acting Director and the process of filling the Director position on permanent basis is ongoing. Bornholdt noted that USGS is currently considering how sequestration will affect the agency's operations, but that not many specifics are known at this time, adding that USGS will seek to maintain its research functions to the greatest extent possible while also complying with sequestration's reductions. Mike Jawson commented that the effects of sequestration are already being felt within USGS, as decisions regarding research and staffing are currently being impacted.

Bornholdt reviewed the priorities contained in the President's FY 13, the absence of an FY 14 President's budget being available. Among the focus areas in the President's FY 13 budget were increased funds to support research into issues associated with hydraulic fracturing methods, water quality studies, a National Groundwater Monitoring Network, and further research on Asian carp in the Upper Mississippi River and the Great Lakes. Bornholdt noted that, under USGS' operating plan to implement funding under the current continuing resolution, Asian carp work was considered a high enough priority that early release of funds was allowed. He commented that, overall, the President's FY 13 budget had looked quite promising and he is hopeful that its priorities are implemented and carried forward into the future.

Bornholdt also reviewed highlights from the Water Science Centers in the five UMR states. These include work related to nutrients, sediment, continuous monitoring, large river geomorphology, flood inundation forecast mapping, and a range of other water quality questions. He also the current Midwest Area Science Initiative focused on the environmental effects of agricultural practices, that includes work on the Minnesota River. He explained that this is an example of the type of interdisciplinary studies which are funded with discretionary funds available to the Regional Executive, in this case utilizing funds from FY 12.

Bornholdt noted that there is a potential for an increase of up to \$3 million in FY 13 above base funding to support USGS's Asian carp, including \$2 million for work on the Great Lakes and \$1 million for Upper Mississippi River effort. With current base funding, he added, ongoing projects addressing Asian carp will continue and USGS will keep the states informed regarding these efforts.

Navigation

Mississippi River Navigation Infrastructure and Investment

Gary Meden presented an overview of Mississippi River infrastructure and investment issues. He began with a historical perspective on the 9-foot navigation channel on the Mississippi and Illinois waterway, noting that most of the navigation structures in the system were built in the 1930s with a planned 50-year life span and much of the original electrical and mechanical systems are still in place. Meden credited Corps lock and dam crews for keeping this aging infrastructure running as well as possible, but noted that there is only so much that can be done with current limited resources. He presented a map showing the locations of the 37 locks and dams on the 1,200 navigable miles of the UMRS, emphasizing the importance of this system in the shipment of grain, chemicals, and other commodities. Meden also provided visuals of decaying infrastructure, including dam gates and lock walls.

Meden described inland waterways navigation infrastructure as a "three-legged stool", relying on: 1) operations and maintenance, 2) major rehabilitation, and 3) system improvements (both large scale and small scale). For the UMRS, he explained that funding has been declining across all three categories, with only operations and maintenance receiving any substantial funding in recent years, adding that 65 percent of this operations and maintenance funding is used to support personnel. He noted that, in FY 13, the UMRR-EMP ecosystem restoration program received the majority of Construction General funding on the UMRS, with the only navigation construction project being for Lockport on the Illinois River.

In sum, Meden said, only one "leg" (i.e., operations and maintenance) of the navigation infrastructure stool is being supported. He described the situation as analogous to keeping an old car running only by fixing things that break and require immediate attention, but not providing for ongoing stability or addressing future needs. Meden said one result of the current situation is that planned rehabilitation and construction projects have simply not happened as the system continues to age, pointing out that the Rock Island District alone has almost \$1 billion in prioritized maintenance that it does not have funding to accomplish.

Meden said NESP was authorized at over \$4 billion in 2007 and was intended to address navigation infrastructure needs, as well as ecosystem restoration. He described the navigation improvements incorporated in NESP as including both small-scale structural and non-structural measures, as well as new 1200-foot lock changes at seven locations, all intended to allow river traffic to be more efficient. However, Meden explained, NESP has never received construction funding and has not received funding of any type since FY 11.

Meden also described the Capital Development Plan (CDP) approved by the Inland Waterway Users Board (IWUB) in 2010 that addresses funding issues regarding navigation infrastructure. In particular, he noted that the CDP recommends: 1) an increase in the existing fuel tax from \$0.20 to \$0.29 per gallon, 2) removing Inland Waterways Trust Fund (IWTF) cost sharing requirements on dam projects and establishing a threshold of \$100 million for cost sharing on major rehabilitation projects, and 3) setting cost ceilings at agreed-upon project estimate levels to limit industry's expenses resulting from cost overruns and project delays.

Meden said it is important to keep in mind the importance of inland waterways when confronted with the challenges he has described. He highlighted the benefits of commercial navigation on inland waterways as including the following:

- Least expensive, most environmentally friendly, safest mode of transportation for many commodities, including grain and other bulk goods.
- Helps keep U.S. commodity prices down, making them more competitive in world markets.
- Reduces road congestion and road maintenance costs.
- By providing a transport alternative to rail, helps keep rail rates competitive.
- Provides ancillary benefits to the river system, including water supply, recreation, and environmental habitats.

Meden also noted that the new Panama Canal locks provide an additional opportunity to expand the shipment of commodities via the inland waterway system.

In addressing the challenges facing inland navigation, Meden suggested there may be several paths to pursue, including:

- Upper Mississippi River states working together for common goals.
- Congress finding a way to fund projects in a "no earmarks" environment.
- Resolving the Inland Waterways Trust Fund impasse.
- Broad recognition of the value of inland waterway transportation and national prioritization of investment.

Meden cautioned that, without addressing the challenges facing commercial navigation, the nation will be facing a future that may include higher prices for grain, increased roadway traffic, reduced operations of locks, and potential major navigation system failure.

Harold Hommes said his understanding is that current legislative proposals differ in their requests for an increase in the fuel tax to support the IWTF, with proposals including both a \$0.26 per gallon tax and a \$0.29 per gallon tax. Meden said his understanding that the commercial navigation industry is largely supporting a \$0.29 per gallon tax.

Jim Fischer asked whether all UMRS lock and dams have, at some point, undergone major rehabilitation. Meden replied that all have had some major rehabilitation, but only of critical components. Gretchen Benjamin asked for clarification regarding the distinction among appropriations for operations and maintenance and major rehabilitation. Meden explained that there is not a clear, explicit definition of what constitutes major rehabilitation vs. operations and maintenance. He noted that industry is seeking to create that definition by using \$100 million as a threshold for classifying major rehabilitation projects, at which point industry would be responsible for cost share.

National Research Council Report - Corps of Engineers Water Resources Infrastructure

Jeff Jacobs gave an overview of the recently completed National Research Council (NRC) report *U.S. Army Corps of Engineers Water Resources Infrastructure: Deterioration, Investment, or Divestment?* He began by describing the role of the NRC within the National Academies and the activities of the NRC's Water Science and Technology Board (WSTB) in particular. Jacobs noted that this most recent report regarding USACE infrastructure is the product of roughly a year's work by a twelve-member panel whose statement of task was to "...identify alternatives and opportunities for improved decision making and prioritization in regard to maintenance, upgrades, and modernization of the navigation, flood management, hydropower, and related ecosystem infrastructure managed by the Corps." He said this study had been conducted at USACE's request.

Jacobs said main areas of investigation in the report included Federal Water Resources Development Act (WRDA) processes; Corps mission areas and operations, maintenance, and rehabilitation (OMR); and options for improving OMR. He noted that the report also focuses on existing Corps infrastructure including inland navigation locks and dams, flood protection structures, hydropower generation facilities, and port and harbor facilities. Jacobs observed that the estimated value of the Corps' current water resources infrastructure is approximately \$164 billion, which is down from a peak of approximately \$237 billion in the mid-1980s and results at least in part from a lack of infrastructure investment. He noted the report's observations that USACE water resources infrastructure is showing widespread signs of deterioration and is heavily dependent on general revenue from U.S. Treasury, though users do pay an Inland Waterways Fuel Tax of \$.20/gallon to contribute to construction projects. Jacobs also said ports and harbors tend to have less federally-owned infrastructure and therefore provide more opportunities for private-public partnerships.

In regard to federal water project planning, authorization, and appropriations; Jacobs shared the following observations from the report:

- Federal water projects are authorized via occasional Water Resources Development Acts (WRDA), but maintenance and rehabilitation projects are not typically authorized via WRDA, although there are exceptions to this general rule.
- Congress and the Office of Management and Budget (OMB) are the nation's de facto water planners under the current system. There is, however, no clearly defined responsibility among them (and the Corps) for setting national-level operations, maintenance, and rehabilitation priorities.
- WRDA was not designed to help set OMR priorities. Creating a higher priority on OMR issues for Corps infrastructure will likely require some reorientation away from the present strong focus on WRDA.

Jacobs described the report's examination of flood risk management infrastructure, noting that the Corps' role in levee OMR across the nation is primarily technical support, as the large majority of levees are owned by non-federal entities. He shared some of the report's major observations regarding flood risk management infrastructure as follows: 1) in many parts of the nation, there is much infrastructure and property behind existing levees and other protective structures that have significant

maintenance and rehabilitation needs, 2) flood risks in these settings will not be reduced easily or quickly by nonstructural measures, and 3) at the same time, given limited availability of federal funding, there is a pressing need for less costly and more efficient measures to reduce risks to public safety and reduce flood damages.

Jacobs briefly discussed the hydropower component of the report, noting that this is not a primary mission area for the Corps, but they have numerous facilities and are a national leader in hydropower generation. He added that these facilities generate considerable revenue for the federal treasury, and ongoing contractual relationships may present opportunities to increase funds available for OMR needs.

Jacobs shared the alternatives laid out in the report regarding federal water resources infrastructure investment as follows:

- 1) Business as Usual This entails increased frequency of infrastructure failure and negative social, economic, and public safety consequences. The potential extent of these negative consequences is not well understood.
- 2) *Increase Federal Funding for OMR* There has been a long-term declining trend in funding for Corps infrastructure OMR. The future viability of this option is unclear.
- 3) *Divest or Decommission* This would reduce OMR obligations, but would require action by Congress or the administration.
- 4) Increase revenues from Corps project operations Opportunities exist to expand revenue capture from some projects, especially inland navigation and hydropower. Legal barriers currently inhibit greater revenue capture from these sources.
- 5) Expand partnerships with states, communities, and private sector Many partnership arrangements offer opportunities for more efficient OMR activities. Greater private sector participation in Corps OMR activities will not be desirable in all circumstances. The Congress and/or administration should commission a study of the opportunities for more extensive partnerships for the OMR of Corps water infrastructure.

Jacobs noted that the report also calls for greater leadership and action on the federal level. This includes a request for specific direction from the Congress regarding OMR priorities, as this will be essential to sustaining the Corps' highest priority and most valuable infrastructure. The report also states that the Executive Branch could play a more aggressive role in promoting dialogue between the Corps and Congress on infrastructure OMR needs and priorities. Jacobs thanked the Board for the opportunity to present and noted that the report is available online at www.nap.edu.

Benjamin asked whether the report examined channel training structures as part of navigation infrastructure. Jacobs said the report did not examine these structures as it was done at a very broad, nationwide level and so did not get down to that level of specificity. Benjamin explained that these structures are significant features on the lower reaches of the UMR as well as the Lower Mississippi River and, as such, are a very important part of water resources infrastructure.

Low Water Conditions Update

Nicole Manasco presented an update regarding low water conditions on the UMRS. She began by discussing the Illinois River and the locked portion of the Upper Mississippi River. On both the Illinois River (including the Chicago Area Waterway System) and locked Upper Mississippi she said the system performed well, with dams and channel structures functioning as expected. Manasco said long term impacts are expected for the locked portion of the Upper Mississippi, though tributary deltas might be a concern and additional dredging may be needed to keep these clear.

Regarding the Middle Mississippi, Manasco explained that more extensive measures were taken. These low water mitigation methods included:

- Additional dredging operations, as facilitated by the supplemental appropriations approved in the wake of flooding in 2011.
- Removal of rock pinnacles in the Thebes area.
- Water management operations, including at Barkley Dam (Great Lakes and Ohio River Division), Gavins Point Dam (Northwestern Division), and discretionary reservoir management in the Mississippi Valley Division.

Manasco noted that work on the rock removal at Thebes is now complete, pending final quality assurance checks. She stated that, overall, Phase 1 of the Middle Mississippi low water campaign in largely complete, with plans for additional phases in place, if they are needed. Bryan Hopkins asked whether steps in Phases 2 and 3 would proceed if water levels increased, as it appeared that lower water levels are needed to complete some of this work in these later phases. Manasco replied that this is yet to be determined. Arlan Juhl asked if, at any point during the drought, the navigation channel on the UMR had actually fallen below its authorized 9 foot depth. Manasco replied that the 9 foot depth had been maintained on the UMR, though there may have been instances where it was not met on the lower river. Juhl then asked how decisions are made in regard to water levels for the Chicago Area Waterway System (CAWS). Manasco replied that this is a collaborative effort between USACE and the Metropolitan Water Reclamation District of Greater Chicago (MWRD).

Recent Congressional and Other Developments

Hokanson briefly described activity regarding Mississippi River-related Congressional caucuses that may prove relevant to navigation and other issue areas as follows:

- Mississippi River Caucus A bipartisan, bicameral caucus recently announced by Senators Tom Harkin (D-Iowa) and Roy Blunt (R-Missouri) aimed at addressing a variety of river issues. The formation of this caucus has been advocated for by the mayors participating in the Mississippi River Cities and Towns Initiative. The pre-existing Upper Mississippi River Task Force will likely function as a subset of the broader Mississippi River Caucus.
- Mississippi River Valley and Tributaries Caucus Also a bipartisan caucus, which appears to be a House-only effort to date. This caucus is co-chaired by representatives Blaine Luetkemeyer (R-MO), Collin Peterson (D-MN), Rodney Davis (R-IL), and Cedric Richmond (D-LA). Hokanson noted that this caucus' geographic scope includes representation from throughout the basin, which distinguishes it from the Mississippi River Caucus. In other all other respects, the relationship between the two caucuses in not yet apparent.

Kirsten Mickelsen noted that several navigation-related legislative initiatives appear likely to see activity in this Congressional session, including the Water Resources Development Act (WRDA), the Reinvesting in Vital Economic Rivers and Waterways (RIVER) Act, the Waterways are Vital for the Economy, Energy, Efficiency, and Environment (WAVE 4) Act, and the American Waterworks Act.

Report from Iowa Stakeholder Meeting

Harold Hommes reported on the stakeholder meeting hosted by Iowa Governor Terry Branstad on February 5, 2013 in Davenport, Iowa. He said Gov. Branstad is very interested in working on navigation and related economic development issues, as well as collaborating through the Midwestern Governors Association on this topic. Hommes said the Governor is also interested in promoting

communication across all sectors, citing Iowa Agriculture Secretary Bill Northey's current chairmanship of the Gulf Hypoxia Task Force.

Hommes said one of themes of the stakeholder meeting is the need to "think outside the box" in regard to the funding of navigation infrastructure, including considering opportunities for public-private partnerships. He noted that while Iowa remains committed to the goals and actions established in NESP, the Governor is also aware of new perspectives being voiced, such as that of the Soy Transportation Coalition, which has emphasized operations and maintenance over capacity expansion in light of the current fiscal and policy constraints. Hommes said this perspective could be summarized as "good and reliable is better than great and theoretical," and places a high value on avoiding catastrophic failures. Hommes added that Secretary Northey has offered to serve as conduit for discussions regarding legislative proposals related to navigation and economic development.

Administrative Issues

Investment Authorization

Hokanson explained that, with Barb Naramore's departure from the Association, it is necessary for the Board to approve a resolution that: 1) appoints Hokanson to make investment decisions on behalf of the Association, and 2) is consistent with Wells Fargo Advisors' current conditions for serving as UMRBA's investment manager. Baumann motioned that this resolution be approved and Stout seconded the motion. (Note: The full text of this resolution is appended to this meeting summary.)

Election of Officers

Stout moved and Baumann seconded a motion to elect Dave Frederickson as UMRBA Chair, Arlan Juhl as UMRBA Vice Chair, and Ken Vandermeer as UMRBA Treasurer. With no other nominations, the motion carried unanimously. Frederickson thanked Ford for her leadership as Board Chair in the past year.

Executive Director Transition

Frederickson outlined the Board's process to fill UMRBA's Executive Director position on a permanent basis, noting that the Board's goal is to have the position filled in time for June UMRBA meeting.

Personnel Manual Change

Stout moved to remove from UMRBA's personnel manual the following sentence regarding payment for accumulated leave upon separation: "The lump sum is limited to pay for 30 days." Juhl seconded the motion and it carried unanimously.

Future Meetings

Hokanson said the next meeting series will be held June 4-6, 2013 in St. Louis, including joint meetings with the Ohio River Valley Sanitation Commission. The August quarterly meeting series will be held August 27-28, 2013 in La Crosse and the November meetings will be held in the Twin Cities the week of November 18, 2013.

With no further business, the meeting adjourned at 4:40 p.m.

Resolution of the Upper Mississippi River Basin Association Authorizing Investments with Wells Fargo Advisors, LLC

February 27, 2013

RESOLVED, that the Organization is authorized and empowered to open banking, asset management, brokerage (including, without limitation, margin, options, and commodities) accounts with Wells Fargo Advisors, LLC (WFA).

RESOLVED, that each of the Authorized Individuals is hereby authorized in the name and on behalf of this Organization to open and maintain such Accounts with WFA as he or she may deem necessary or appropriate, in his or her sole discretion, including, without limitation, checking, savings, safe deposit, lock box, night depository, asset management, and brokerage (including, without limitation, margin, options, and commodities) accounts and relationships.

Those Authorized Individuals are as follows: David K. Hokanson, Acting Executive Director

RESOLVED, FURTHER that each of the Authorized Individuals is hereby authorized in the name and on behalf of this Organization to (i) issue any and all instructions, and WFA is authorized to accept such instructions, with respect to the Accounts including, but not limited to, deposit and withdrawal, the purchase, sale or other disposition of stocks, bonds, and other securities or commodities, deliver and receive monies, stocks, bonds, and other securities or commodities, and (ii) receive and acknowledge the correctness of all statements of the Accounts, enter into agreements (whether oral or written) with respect to the Accounts, execute any and all documents with respect to the Accounts, and otherwise act with respect to the Accounts as if the Accounts were his or her Accounts only.

RESOLVED, FURTHER, that all matters relating to the Accounts shall be governed by these Resolutions, by the terms of any agreements entered into with respect to the Accounts, and by such internal and external rules and regulations as may be applicable thereto.

RESOLVED, FURTHER, that WFA is hereby authorized to honor, receive, certify, or pay all checks, drafts, and other evidences of indebtedness bearing or purporting to bear the signature or the facsimile signature of any Authorized Individual, regardless of whether the purported signature is genuine or resembles the signature or facsimile signature of such Authorized Individual and regardless of who affixed the actual or purported facsimile signature thereon, or by what means the signature or the facsimile thereon may have been affixed thereto.

RESOLVED, FURTHER, that WFA is authorized to honor, receive, certify, or pay all checks, drafts, and other evidences of indebtedness even though drawn or endorsed to bearer or to the order of any individual, or any officer, representative or employee of this Organization, including without limitation, any Authorized Individual, or for the payment of the individual obligations of such officer, representative, or employee, or for deposit to his or her personal account; and that WFA shall not be expected or be required or under any obligation to inquire as to the circumstances of the issuance or use of any document or item signed or endorsed in accordance with the foregoing Resolutions, or the application or disposition of such documents or items or the proceeds thereof.

RESOLVED, FURTHER, that the Secretary (or other duly designated officer) of this Organization is hereby authorized to furnish a certified copy of these Resolutions to WFA, and WFA is authorized to deal with the Authorized Individuals under the authority of these Resolutions, unless and until it shall be expressly notified in writing to the contrary by this Organization.

RESOLVED, FURTHER, that all transactions by officers, representatives, employees, or agents of this Organization, on its behalf and in its name prior to the delivery of a certified copy of these Resolutions, are, in all respect, hereby ratified, confirmed, and adopted, nunc pro tunc.

(Unanimously approved by the Upper Mississippi River Basin Association Board of Directors on February 27, 2013)