

**Minutes of the 126th Quarterly Meeting
of the
Upper Mississippi River Basin Association**

**June 6, 2013
St. Louis, Missouri**

UMRBA Chair Dave Frederickson called the meeting to order at 9:32 a.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
Dave Frederickson	Minnesota Department of Agriculture
Harry Bozoian	Missouri Department of Natural Resources
Robert Stout	Missouri Department of Natural Resources
Bryan Hopkins	Missouri Department of Natural Resources
Dan Baumann	Wisconsin Department of Natural Resources
Jim Fischer	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Dick Purcell	U.S. Department of Agriculture, NRCS
COL Mark Deschenes	U.S. Army Corps of Engineers, MVR
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Bob Clevensine	U.S. Fish and Wildlife Service, Refuges
Leon Carl	U.S. Geological Survey, MWA

Others in Attendance:

Marcia Wilhite	Illinois Environmental Protection Agency
Kevin Irons	Illinois Department of Natural Resources
Ellen Anderson	Minnesota Department of Agriculture
Andrea Fetherston	Minnesota Department of Agriculture
Danny Brown	Missouri Department of Conservation
Janet Sternburg	Missouri Department of Conservation
Dale Schmutzler	Missouri State Emergency Management Agency
Scott Zeller	Missouri State Emergency Management Agency
Jack Drolet	U.S. Army Corps of Engineers, LRC (by phone)
Marv Hubbell	U.S. Army Corps of Engineers, MVR (by phone)
Charlie Hanneken	U.S. Army Corps of Engineers, MVS
Matt Hunn	U.S. Army Corps of Engineers, MVS
Hal Graef	U.S. Army Corps of Engineers, MVS
Deanne Strauser	U.S. Army Corps of Engineers, MVS
Shawn Sullivan	U.S. Army Corps of Engineers, MVS
Jason Wilson	U.S. Fish and Wildlife Service, Great River NWR
Olivia Dorothy	Izaak Walton League
Emily Marthaler	Midwestern Governors Association

Brad Walker	Missouri Coalition for the Environment
Gretchen Benjamin	The Nature Conservancy, Great Rivers Partnership
Mike Steenhoek	Soy Transportation Coalition
Paul Rohde	Waterways Council, Inc.
Dru Buntin	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

Chair’s Opening Comments

UMRBA Chair Dave Frederickson opened the meeting by expressing the Board’s appreciation for the dedicated service of former UMRBA Executive Director Barb Naramore, who was named an Assistant Commissioner of the Minnesota Department of Natural Resources earlier this year. He also recognized Diane Ford for her service as UMRBA Chair this past year.

Frederickson then acknowledged the Ohio River Valley Water Sanitation Commission (ORSANCO) for their participation in the previous day’s meetings and said he thought it was an excellent opportunity for ORSANCO and UMRBA to exchange information and that the Board had found the presentations to be productive.

Frederickson next introduced new UMRBA Executive Director Dru Buntin, who began serving as Executive Director earlier in the week. Buntin thanked Frederickson and the other members of the Board for the opportunity to serve as UMRBA Executive Director and also thanked Dave Hokanson, Kirsten Mickelsen, and all the UMRBA staff for their hard work during the transition. Ford expressed the Board’s thanks to Frederickson and Andrea Fetherston for their assistance during the executive director hiring process. Ford said Frederickson had taken the lead and made it an efficient and easy process.

Minutes

Arlan Juhl moved and Robert Stout seconded a motion to approve the draft minutes of the February 27, 2013 meeting. The motion carried unanimously.

Executive Director’s Report

Buntin asked Hokanson to present the Executive Director’s Report on his behalf. Hokanson noted that the report is now organized according to the focus areas in the 2013-17 UMRBA Strategic Plan, per the suggestion of the Board at its February meeting. Among the items in the report, he highlighted UMRBA’s collaboration with the Midwestern Governors Association in regard to aquatic nuisance species and staff’s engagement in a number of recent forums across issue areas. Hokanson also pointed out that the announcement of Buntin’s hiring is on page B-5 of the agenda packet.

Hokanson directed the Board’s attention to pages B-6 to B-9 of the agenda packet for the current Treasurer’s Statement and UMRBA’s FY 13 financial statements. Diane Ford moved and Dan Baumann seconded a motion to approve the Profit and Loss Statement and Balance Sheet dated May 21, 2013. The motion carried unanimously.

UMRBA Strategic Plan Implementation

Dave Frederickson highlighted the release of the UMRBA 2013-17 Strategic Plan at the previous (February 2013) quarterly meeting. He noted that the Strategic Plan includes the following focus areas: Aquatic Nuisance Species, Commercial Navigation, Ecosystem Restoration and Monitoring, Flood Risk

Management, Hydropower; Spill Response Planning and Mapping, and Water Quality. In response to a request from Frederickson, Hokanson provided an update of UMRBA's steps taken since the February meeting to implement the Strategic Plan.

Hokanson said the Board had explored Strategic Plan priorities for 2013 at length in a dedicated session during its February breakfast meeting, as part of its first annual discussion of the Strategic Plan implementation. As a result, the Board identified priority actions for 2013 within each of the focus areas, as listed on pages C-1 and C-2 of the agenda packet. Hokanson also highlighted that, among the focus areas, the Board placed its greatest emphasis for 2013 action on Aquatic Nuisance Species, Commercial Navigation, Ecosystem Restoration and Monitoring, and Water Quality. In addition, he pointed out that the Board also saw value in engaging in collaborative, cross-cutting efforts with entities including America's Watershed Initiative, the Midwestern Governors Association, and the Mississippi River Cities and Towns Initiative.

Federal Budget Observations

Dave Hokanson noted that, at UMRBA's February 2013 quarterly meeting, the President's FY 14 budget had not yet been released. As such, the federal agencies focused on likely impacts to UMR-related programs and projects should a potential sequestration take effect. Given developments since that time, Hokanson asked the federal agencies to offer their current perspectives on their agencies' FY 13 and 14 budget forecasts and planning efforts.

Rock Island District Commander COL Mark Deschenes stated that sequestration has had minimal impact on civil works efforts. However, sequestration has affected 22 District military employees. COL Deschenes said the Administration about doubled its budget request for the Upper Mississippi River Restoration – Environmental Management Program (UMRR-EMP) in FY 14 above its request in FY 13 and the program's historical funding levels. This substantial increase reflects confidence in the tremendous interagency efforts involved in successful program implementation. He said funds were not requested for the Navigation and Ecosystem Sustainability Program (NESP) or the Upper Mississippi River Comprehensive Plan. He indicated that he was, however, encouraged by the recent flurry of advocacy on behalf of NESP and navigation in general. COL Deschenes said that, because so much of the planned navigation infrastructure improvement work on the Upper Mississippi River involves industry cost-share, the District is very sensitive to Inland Waterways Trust Fund (IWTF) issues.

COL Deschenes reported that the floodgates at Marseilles Lock and Dam on the Illinois River received major damages resulting from barges breaking free during April flooding, with temporary repairs costing \$10 million and a total repair cost of \$50 million. Repair expenses at Marseilles will consume a major portion of the District's FY 13 and 14 operations and maintenance (O&M). The District is taking an asset management approach to optimize its O&M spending. COL Deschenes said the Corps anticipates having an accurate estimate of the total repair costs by the end of July or August.

COL Deschenes also noted that Rock Island District has been working with Cedar Rapids on a flood control project for many years. However, the Administration did not include funding for this effort in FY14. He said Cedar Rapids has indicated that it will continue providing cost share in out-years. COL Deschenes said the District believes this is an important project, especially considering that Iowa has experienced record floods this year.

In response to a question from Bryan Hopkins, COL Deschenes explained that operations at Marseilles is very challenging and the Corps' overall ability to control the pool is compromised. The current challenge is the Corps' limited ability to pass water with only four gates operating. He said a Corps-constructed dike should stabilize the situation in low water; however, there may be unknown issues at the L&D under low conditions. Ken Westlake asked if the \$50 million repair figure at

Marseilles included the \$10 million estimate for temporary repairs. COL Deschenes said that, in reality, the total cost could be \$10 to \$20 million over or under the \$50 million estimate and that a better determination cannot be made until the Corps can fully assess the site. He hesitated to give a specific number, but wanted everyone to understand the order of magnitude involved. Olivia Dorothy asked if the company responsible for the accident will be held liable for damages. COL Deschenes said this will be settled in court, adding that the company had been a cooperative participant in the Incident Command. COL Deschenes said updates can be provided as information becomes available.

Arlan Juhl said that there is a substantial increase in the Administration's FY 14 budget request for Middle Mississippi O&M funding compared to the FY 12 actual budget and FY 13 request. Juhl asked what projects the Corps plans to fund with the potential additional funding. COL Deschenes explained that FY13 has been difficult in determining expenditures and contracting, given that final budget numbers are still undetermined. While he is encouraged by modest increases in O&M funding allowing the Corps to continue advancing critical O&M projects, the District's backlog is now approaching \$1 billion and cannot be sufficiently addressed under the current funding stream. For example, the dam gates built in the 1930s are cracking and have holes. He said the modest proposed increase in the President's FY 14 budget would be beneficial for the system's near term sustainability, but that funding level would not address long term reliability needs. Ken Westlake asked what the estimated O&M backlog is for the UMRS in all three Districts. COL Deschenes said he does not have specifics for the St. Paul and St. Louis Districts. Deanne Strauser said the St. Louis District's O&M backlog is also about \$1 billion.

Dick Purcell said NRCS has been able to avoid impacts to staff from sequestration cuts by leaving vacancies open and reducing other administrative costs (i.e., travel, supplies, etc.) where possible. Purcell said NRCS is undergoing a restructuring over the next six to eight months. He anticipates additional budget reductions to NRCS's conservation programs in out-years. In addition, the Administration will likely consolidate various conservation programs resulting in a more regional approach. In response to a question from Dave Frederickson, Purcell said NRCS will go through a rulemaking process after passage of the next Farm Bill for implementing its programs and determine distribution of funds.

Bob Clevestine said the U.S. Fish and Wildlife Service is dealing with an 8 percent cut in operations funding and that they are cutting back on maintenance work, reducing visitor hours, limiting travel, and delaying any hiring of permanent or temporary staff. He indicated that the Service is expecting an additional 8 percent cut in FY 14.

Leon Carl indicated that USGS's sequestration reductions have impacted its federal gages, not cooperative gages. USGS is anticipating multiple years of reductions with associated impacts to travel and hiring for the agency. Carl said the President's FY 14 budget includes a \$3 million increase for Asian carp control efforts and \$1 million of the funding is planned for the Upper Mississippi River basin. However, he said this was proposed last year as well, but that it was not realized because Congress enacted a continuing resolution. Carl said USGS is undertaking a strategic planning process to reduce impacts to partners from decreased funding. Dave Frederickson asked Carl how much success had been seen on Asian carp control efforts. Carl said Asian carp are not in the Great Lakes and that control technology is still evolving. He said USGS is looking for registration partners on "bio bullet" technology. In response to a question as to whether any physical barrier was stopping Asian carp migration on the Ohio River, Carl indicated that he did not believe this to be the case and that he thought that carp were slowly migrating up the Ohio.

Arlan Juhl said he had understood that the National Streamflow Information Program (NSIP), which is funded entirely with federal funds, is the backstop on gaging. He said that now, however, it appeared the NSIP is being cut while cooperative gages are maintained. Carl said he does not know why cuts are

proposed for the federal gages. Juhl asked if there had been any pushback on the legal front from losing this source of data. Carl said there had not yet, but that USGS hopes to target cuts to gages with the least potential impact. Bryan Hopkins asked how reductions would impact USGS's inundation mapping work with the states and if the effort will continue. Carl noted that the inundation mapping efforts started in Indiana, and then became a national initiative. He said that, since inundation mapping is largely funded by partners, future involvement is hard to predict. Bob Clevensine asked what USGS needs for registration of nanoparticles. Carl said a lead management agency is needed; likely be a federal agency and possibly the USFWS.

Ken Westlake said that, including sequestration, the Environmental Protection Agency (EPA) is experiencing a 20 percent reduction in their budget as compared to FY 12. Westlake said sequestration had resulted in seven furlough days for EPA staff. He noted that cuts are starting to impact state partners, particularly in the State Revolving Loan Fund (SRF) program. He said there are modest increases proposed in some programs in FY 14, but that EPA's overall budget has been steady to declining.

Bill Paape said the Maritime Administration (MARAD) has been able to absorb sequestration cuts since the agency is withholding a large number of vacancies. He described three MARAD initiatives, starting with their port planning grants. The Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant program provides funds to invest in road, rail, transit, and port projects that promise to achieve critical national objectives. The third initiative was the Marine Highway Program to expand the use of navigable waterways to relieve landside congestion, reduce air emissions, and generate other public benefits by increasing the efficiency of the surface transportation system. Dan Baumann asked Paape what the level of state engagement is on these issues. Paape replied that he interacts primarily with the state departments of transportation. COL Deschenes asked for additional information on the significance of the Maritime Highway designation. Paape said the designation creates opportunities for partnerships and leveraging funding and other resources. He said it is intended to communicate to national leaders how the system of ports interrelate and helps the areas receiving the designation to better compete for public funds.

Navigation

Industry Perspectives

Paul Rohde said WCI, in collaboration with TNC and UMRBA, worked effectively with Congressional staff to draft a members' letter that underscores the importance of UMRS inland navigation and the planned infrastructure improvements in NESP. He said the process of gaining signatories was important for educating newer members of Congress regarding NESP. Rohde said the low water conditions in 2012 and earlier this year highlighted the importance of Upper Mississippi inland navigation and built substantial Congressional support for the river's multi-purpose needs.

Rohde stated that the Waterways Council, Inc. (WCI) is supportive of the public-private partnership provisions contained in the Water Resources Development Act (WRDA). He said the Senate version of WRDA passed on May 15, 2013 contains elements of 2013 RIVER Act, which are of particular interest to WCI. Rohde said the Senate bill removes the Inland Waterways Trust Fund cost share of Olmsted, which should free up about \$750 million for other projects. He said that WCI supports the Inland Waterway Users Board's construction and major rehabilitation schedule as a plan for improving infrastructure, so they are pleased that it is referenced in the bill. WCI is also supportive of the bill provisions incentivizing project completion. Rohde said the definition of major rehabilitation seems to be a moving target as the Senate bill would set it at \$20 million while previous iterations had it at \$14 million.

Rohde said the Minnesota Congressional delegation is supportive of the RIVER Act provisions contained in the Senate bill. He said the Senate version of WRDA does not address a fuel tax change and that such a change would have to come from the House. Rohde pointed out that Representative Bill Shuster (R-PA) is the new Chair of the House Transportation and Infrastructure Committee. He said Speaker of the House John Boehner has asked Representative Shuster to find a way to identify funds to support navigation infrastructure. Rohde said that there appears to be movement to pass a WRDA this year. He said Representative Shuster has indicated he wants WRDA out of committee by the end of June.

Mike Steenhoek described the role that transportation costs play in the international economic competitiveness of farm products. He said Brazil is the main competitor to the United States in regards to soybean markets and noted that one quarter of U.S. soy production is consumed in China. He compared the costs of transporting soybeans to China from the U.S. and Brazil, showing that the UMR currently allows for a competitive advantage for the U.S.

Steenhoek described the results of a study funded by the National Soybean Checkoff Program that looked at the implications of the Panama Canal expansion. The study projected that the total grain and oilseeds transiting the canal will increase by 30 percent by 2020-21. He said each vessel will accommodate up to 13,300 additional metric tons (or 488,642 bushels) resulting in \$6-7 million in additional value or a 35 cents per bushel savings. Steenhoek said the study also concluded that canal expansion will increase the average inland draw area for river commerce shipping by 91 miles and that this is projected to also have an impact on rail rates.

Steenhoek said how funding for infrastructure needs is allocated is just as important as the amount itself. He described how the U.S. does not compare favorably when it comes to completing projects on time and on budget. He suggested that the primary reason is the lack of predictable funding. He said consideration should be given to alternative funding mechanisms that provide money up front, thereby creating certainty needed for letting contracts and making construction more efficient. Steenhoek asserted that Congress could help solve this problem by providing predictable funding and that this would help avoid cost overruns. He also suggested exploring the potential for foreign investment in infrastructure. Steenhoek said a predictably good inland waterway system is better than a hypothetically great one. He added that consideration should be given to potential transition from a “build & expand” approach to a “preserve & maintain” approach. He pointed out that the cost of one lock construction project (\$376.8 million) is approximately equal to the cost of 9 major rehabilitation projects (\$40.7 million).

NGO Perspectives

Olivia Dorothy presented information on the specific areas of focus for the Izaak Walton League (IWL) in the Senate WRDA. She said the IWL supports an amendment to WRDA calling for a multiagency effort to slow the spread of Asian carp in the Upper Mississippi River and Ohio River basins. Dorothy said IWL also supports the provision requiring the closure of the Upper St. Anthony Falls Lock and Dam if certain conditions are met. She said both of these amendments deserve support because they would slow the spread of Asian carp.

Dorothy said IWL opposes a provision of the Senate WRDA related to a pilot program in the Middle Mississippi River. IWL is interpreting the provision to allow the Corps to make navigation improvements as part of ecosystem restoration projects. The pilot program would sunset in 2023. The IWL believes the program would siphon funding away from existing ecosystem restoration efforts.

Dorothy overviewed the project authorization provisions in the Senate WRDA. She said previous WRDAs authorized projects individually, while the new Senate WRDA provides a set of criteria

required for a project authorization – e.g., an approved Chief of Engineers Report. She pointed out that projects would still have to receive individual appropriations in the annual budget process. She said that, under the Senate WRDA provisions, new feasibility studies would need to meet the Corps’ “3x3x3” criteria. Dorothy stated that, under this bill, a lump sum would be authorized for studies and that no additional authorization would be necessary. She added that under this new approach the IWL recommends Congress ensure that the Corps’ planning and project prioritization processes are open to public comment.

Dorothy expressed concern with the project acceleration provisions in the Senate WRDA. She said that these provisions would set deadlines for environmental review completion under which noncompliant agencies could be fined \$20,000 per week. She suggested that the project acceleration provisions be stricken. She said delays in the environmental review process could be avoided by planning up front with natural resource agencies and changing the cost-benefit analysis to incorporate ecosystem services.

Dorothy said the Senate WRDA has provisions to reform the construction planning process for projects funded by the Inland Waterways Trust Fund. She said that these provisions a) require projects to be overseen by certified project managers, b) standardize construction protocol, c) initiate pilot private-public funding partnerships, and d) allow for greater involvement and oversight by the Inland Waterways Users Board. Dorothy said that the Senate WRDA increases the rehabilitation cost-share minimum from \$8 million to \$20 million. She said that the bill authorizes a study on other tax collection methods and shifts 100 percent of the costs for the Olmsted project to taxpayers.

Dorothy said the IWL’s opposes H.R. 1149, otherwise known as Waterways are Vital to the Economy, Energy, Efficiency and Environment Act (WAVE4). She said IWL is also opposed to the Reinvesting in Vital Economic Rivers and Waterways Act (S. 407, RIVER Act). She said that these bills would eliminate cost share for dam rehabilitation and construction, maintain cost share for all lock construction and rehabilitation over \$50 or \$100 million, increase the fuel tax by \$0.06-0.09 (generating \$2.2 billion over 20 years), and adopt the Inland Marine Transportation System (IMTS) Team’s 20-year project list. She said that, under these measures, taxpayer costs would increase from \$800 million to \$1.7 billion in addition to overruns, while industry costs would go from \$80 million to \$110 million.

Dorothy said there are other funding proposals to consider. She said the IMTS Team proposed to increase fuel tax to \$0.50 per gallon while several past administrations had proposed lockage fees. Dorothy said taxing the value of commodities had also been considered in the Senate as a funding source.

Dorothy closed by summarizing the IWL’s position on the legislation previously described. She said IWL does not wish to see expanding taxpayer financing of grey infrastructure and therefore opposes the WAVE4 and RIVER Acts as well as WRDA provisions that shift infrastructure cost-share onto taxpayers. She stated that IWL supports reforms to hinder the spread of Asian carp, but opposes using restoration dollars on navigation infrastructure. IWL opposes project acceleration provisions that weaken environmental laws like the Clean Water Act or the National Environmental Policy Act. Dorothy said IWL also opposes Inland Waterways Trust Fund reforms that shift funding burdens onto taxpayers.

Bryan Hopkins expressed concern with the project acceleration provisions of the Senate WRDA as it relates to state and federal environmental review processes. Dorothy concurred that states involved in a federal permitting process could be impacted by the provisions. Ken Westlake stated that the surface transportation authorization contains a provision for such penalties, but that it had not been implemented. However, Westlake also noted that such provisions have a chilling effect on the federal review process. Arlan Juhl said it appears that the Senate WRDA would authorize the recommendations of the Great Lakes and Mississippi River Interbasin Study (GLMRIS), when the study has yet to be

complete and stakeholders understand the actions being proposed. Dorothy agreed that this was odd and stated that she was not sure how this would work given Corps policy requiring Secretary approval of a feasibility study.

Gretchen Benjamin of the Nature Conservancy (TNC) began her presentation by stating that she agrees with the notion of irregular funding streams being a problem, as had been identified in Steenhoek's remarks. She then gave an overview of TNC's Great Rivers Partnership (GRP) and explained it is a vehicle to exchange information on best management practices related to the river's many uses such as agriculture and water supply. She said GRP's goal is to move towards a sustainable system in the long term as we are now on an unsustainable path. She said GRP is currently expanding the rivers included in its focus.

Benjamin said that, for the Mississippi River, aging infrastructure is a key issue. She said partners need to consider how we think about these issues most effectively and that crisis often can drive opportunity. She said TNC believes that governance is a critical issue. She pointed out some examples of GRP projects including sustainable agriculture and floodplain connectivity. She said GRP recognizes navigation as a key component in the river's uses, but that it does have an impact on the ecosystem. Benjamin pointed to examples of mutually beneficial endeavors such as drawdowns, environmental flows, and dike notching. She noted that system restoration through UMRR-EMP is supported by the navigation industry. She said GRP would like to see this type of activity in the lower Mississippi River as well and that GRP is starting to work with all sectors on system sustainability.

Harry Bozoian asked what the benefits result from notching structures. Benjamin said that notching changes the bathymetry, creates scour holes and deposits and results in a more diverse habitat structure. She said side channel opening would, for example, benefit plovers and terns. She pointed out that navigation is not experiencing an adverse impact from notching dikes. Bozoian asked if GRP is working with the Mississippi River Commission (MRC). Benjamin said they are in conversation with MRC members to help cultivate greater understanding regarding restoration.

Ecosystem Restoration

Marv Hubbell presented background information on the Upper Mississippi River Restoration – Environmental Management Program (UMRR-EMP). He said UMRR-EMP was the first large river ecosystem restoration and scientific monitoring program in the nation. Through the program, the region has strong technical, scientific, and management capabilities for restoring the Upper Mississippi River System ecosystem. Hubbell said the Corps has developed a very strong regional partnership of federal and state agencies, NGOs, and the public, which has helped reduce costs, increase the effectiveness of programs, and facilitate integrated river management. The program is restoring and protecting the world's third largest river through a unique combination of monitoring and research, cooperation, and communication as well as active construction. UMRR-EMP serves as a model program regionally, nationally, and internationally. Hubbell acknowledged that UMRR-EMP has completed 54 habitat projects addressing over 100,000 acres.

Hubbell said UMRR-EMP's monitoring goals include: gaining a better understanding of river ecology and resource problems; tracking resource changes; developing alternatives to better manage the river; and providing for the proper management of monitoring information. He said collaborative efforts are needed between scientists, managers, and the public to define the desired future condition of the river ecosystem. He encouraged everyone with interest in the UMRS to participate. He shared information regarding the organizational structure of UMRR-EMP and said that, even though the program has been functioning well, program partners are just now moving to adopt a charter.

Hubbell said the final FY13 budget for UMRR-EMP should be known at the end of June when the Corps releases its civil works budget for the year. He recognized that this does not give the program much time to determine allocations and execute any additional funding. He then shared information regarding the process for the FY14 budget formulation, saying that the Corps took a new approach to the budget request. Specifically, he explained that the Corps: reduced funding requested specifically for regional activities; requested funding for all rehabilitation projects and not just those in construction; and requested science funding in the first increment that was sufficient to accomplish base monitoring. He said the historical HREP/LTRMP funding allocation approach will no longer be used, but rather a programmatic, priority-based allocation approach. In addition, any additional science work beyond base monitoring will require a specific SOW and budget. He said science work will need to explicitly articulate how it will enhance understanding of the Upper Mississippi River system in order to increase the program's ability to identify, evaluate, select, formulate, implement, and/or evaluate ecosystem restoration efforts. Hubbell said this new approach resulted in a substantial increase in the President's FY14 budget request – i.e., \$31,967,800, which is a 79 percent increase over the FY13 budget request.

Hubbell then shared information regarding the UMRR-EMP strategic planning process currently underway and thanked Minnesota for providing facilitation services. He said program partners are focusing on actions to adapt to changing regional and national conditions so that the program remains relevant and robust. Through this strategic planning effort, partners are seeking to enhance UMRR-EMP's effectiveness by applying lessons learned. Hubbell anticipates that the effort will include seven to nine meetings over the course of the next federal fiscal year. He said that, thus far, those involved in the effort had identified key issue areas as: defining success; ecosystem restoration; ecosystem monitoring; collaboration; communication; funding; and integration.

Hubbell then discussed the Implementation Issues Assessment (IIA) which is a follow-on report to the 2010 Report to Congress. The IIA explores 12 issues and makes recommendations for future action to address the issues. On its May 29, 2013 webinar, the UMRR EMP Coordinating Committee (UMRR-EMP CC) endorsed the IIA. He said the IIA covers topics including: NGOs as cost share partners; land acquisition; state participation and leadership support; Long Term Resource Monitoring component implementation; delegated authority; and adaptive management. The IIA also covers various aspects of Habitat Restoration and Enhancement Projects (HREPs) including: states' service capacity for operations and maintenance; planning and prioritization; and HREP evaluations. Hubbell said the UMRR-EMP CC is interested in having discussions with its member agencies' upper level leaders about UMRR-EMP importance to the region as well as its implementation issues. Hubbell encourage those in attendance to speak with UMRR EMP-CC representatives on any of these issues.

Hubbell overviewed the current status of habitat projects and the likely schedule for project implementation through FY 23 at funding levels proposed in the President's FY 14 budget. In response to a question from Dan Baumann, Hubbell said about \$5.2 million would be allocated to base monitoring in FY 14, but additional work could be funded that meet the program's priorities and demonstrate an ability to enhance restoration work. He said that this would be a slight increase over FY13 for LTRMP.

Spring 2013 UMRS Flooding

Matt Hunn presented an update on recent flooding. Hunn said there has been flooding this spring in the majority of the Upper Mississippi River basin including the Illinois River, where record stage was seen at Beardstown, Illinois. He said minor to major flooding has occurred over portions of the Des Moines-Raccoon, Skunk, Iowa-Cedar and Wapsipinicon basins in Iowa; as well as on the mainstem of the Mississippi River, the northeast Missouri tributary streams, the Rock River in Illinois, and the Illinois River and many of its tributaries. Hunn said that while February saw much of the basin still in drought conditions, higher than normal precipitation in April led to flooding. He reported

that the Corps has been involved in providing technical assistance and flood fight materials to requesting communities in an attempt to mitigate damage to public infrastructure and private property. Hunn said most levees impacted were non-federal with an approximate 20 to 50 year level of protection.

Hunn said there was no flooding currently within the Corps' St. Paul District, but that precipitation had caused prolonged high flows. All 13 lock and dams in St. Paul District were open and there were no channel closures at the current time. He stated that in Rock Island District, 11 levees had been overtopped and the Marseilles lock and dam had been damaged, but that repair and mitigation work was underway. In St. Louis District, Hunn reported that 7 levees had been overtopped, 3 levees had been overtopped and then breached, and that the Corps is seeing underseepage and mechanical issues at pump stations. Hunn said that St. Louis District had maintained flood storage pools at their reservoirs to reduce flooding downstream, but that they were seeing no significant issues from that perspective. Hunn stated that Memphis District had just initiated Phase I flood fight activities on June 3 and that Phase II activities had begun on June 4 in the Charleston Sector of the Cairo Area. Memphis District reported no navigation channel issues resulting from high water this year.

Hunn stated that next steps for the Corps would be largely dependent upon precipitation. He said the Corps would proceed with reservoir management to minimize flood risk, conduct damage assessments when possible, and pursue recovery of Public Law 84-99 levees as well as navigation structures as soon as circumstances allow. Hunn shared the latest long term precipitation projections from the National Weather Service for the basin in which normal to above normal precipitation is forecast for most of the Mississippi River basin through mid-June.

Hunn said that, while a disaster declaration has been issued, finding the available funding is going to be a challenge. Harry Bozoian asked Dunn if the Portage des Sioux in St. Louis District had held. Dunn said that, so far, it had and that the Corps had been able to work in cooperation with state and local agencies to protect West Alton and Portage des Sioux in Missouri. Gretchen Benjamin asked if there was potential for green infrastructure options when considering post event response under Public Law 84-99. Dunn stated that the Corps authorization includes an accelerated time frame that gives the agency 80 to 90 days to get to construction. As such, one of the challenges is that individuals want to quickly return to their property to pre-event conditions, regardless of whether system improvements are possible. Dunn suggested a concerted focus on green infrastructure in mitigation efforts as the Corps has seen benefits to such approaches.

Asian Carp

Multi-Jurisdictional Efforts and Illinois DNR's Role

Kevin Irons outlined the multijurisdictional approach being pursued by all partners dealing with Asian Carp on the Upper Illinois River and Chicago Area Waterways System. He described the structure of the Asian Carp Regional Coordinating Committee (ACRCC) and noted that his presentation will focus on work under the auspices of ACRCC's Monitoring and Rapid Response Workgroup, while acknowledging that many more projects are outlined in the Asian carp management framework funded under the Great Lakes Restoration Initiative. Irons credited the many state, federal, regional, local, and academic partners that have focused their work in support of the efforts described in his presentation.

Irons next described the elements of ACRCC's Monitoring and Rapid Response Plan. He said this interagency effort is intended to monitor for the presence of Asian carp and document their upstream advance, utilizing four sites on the Illinois River which are monitored monthly using a variety of fish collection techniques. Irons said the Response Plan is triggered if Asian carp are found in samples from the Lockport Pool and that an initial step would be intensive sampling to confirm abundance. He

explained that small fish are actually a more significant concern as larger fish will likely be stopped by the electrical barrier. Irons noted that the electrical barrier had been shut down for maintenance in December 2009 and rotenone was applied a seven-mile long section of the Illinois River at that time, as the distribution of Asian carp was not known. He said one bighead carp was collected during this event, and none have been collected since that time.

Irons displayed a map showing the national distribution of bighead and silver carp. Bryan Hopkins asked about the presence of carp in Lake Erie, as this was the one Great Lake documented as showing the presence of Asian carp. Irons replied that three carp had been caught in Lake Erie several years ago, but none had been observed since that time. He noted that annual summary reports on the Asian Carp Monitoring and Rapid Response Plan, as well as the Annual Monitoring Plan, are available on the asiancarp.us website.

Irons next described the projects conducted in 2012 by the Monitoring and Rapid Response Workgroup. These projects included Asian carp presence and abundance monitoring, applied research and gear development, and electric barrier support and evaluation. He also described various monitoring efforts, including those triggered by eDNA detections, as well as fish suppression efforts.

Irons discussed the potential role of commercial harvest in reducing Asian carp on the Illinois River. He said over 3 million pounds of Asian carp have been removed from the lower reaches of the Illinois River by commercial harvesting and that this appears to be making an impact on the population, noting that efforts are ongoing to develop marketing and distribution systems for Asian carp. Irons also noted work that is ongoing regarding various control technologies, including water gun, carbon dioxide, and chlorination approaches. Additionally, he highlighted the importance of collaborating with law enforcement to help control the transportation of Asian carp, and that this piece must be in place in order for various control technologies to be effective.

Irons emphasized that a national strategy, including the Mississippi and Missouri Rivers, is needed to effectively address Asian carp. He also offered the following concluding comments:

- Collaborative work on the Illinois River and Chicago Area Waterways is a model for Asian carp management.
- Interagency and interdisciplinary communication is functioning at an unprecedented level, reducing duplication of effort.
- Collaborative work allows for the best use of limited financial resources.
- Other basins are taking lessons learned on the Illinois River/Chicago Area Waterways and applying them to their local contexts.

Hopkins asked how well various control technologies can function under conditions of extreme fluctuation in water levels. Irons replied that it is important to apply technologies at points where they will be effective, such as Saint Anthony Falls and Lockport, which won't be swamped during high water conditions.

Dan Stephenson said, in light of the information presented by Irons, it does not appear that Asian carp are actually challenging the electric barrier on the Illinois River. Irons confirmed this currently appears to be the case, in that the carp populations are petering out downstream of the barrier, though there is some recent evidence of reproduction taking place upstream of Starved Rock.

Jim Fischer asked Irons how electrofishing seems to perform as a sampling method for Asian carp. Irons replied that methods developed the UMRR-EMP Long Term Resource Monitoring Program (LTRMP) seem to be effective in collecting Asian carp.

Robert Stout asked Irons to clarify whether Asian carp will reproduce in ponds. Irons said they will not reproduce in ponds and Stephenson added that reproduction also does not appear to be happening in smaller tributaries. Rather, he said, it appears most of the reproduction is happening in large streams and rivers such as the Illinois and Mississippi.

Great Lakes and Mississippi River Interbasin Study

Jack Drolet described the role of the Great Lakes and Mississippi River Interbasin Study (GLMRIS) within USACE' Aquatic Invasive Species (AIS) Strategy, noting the strategy consists of four lines of operation: 1) operation of electric barriers, 2) Asian carp monitoring, 3) barrier efficacy study, and 4) GLMRIS. In regard to barriers, Drolet explained that there will ultimately be three electric barriers in place on the Illinois River and Chicago Area Waterways System (CAWS).

Drolet next described the authority and purpose of GLMRIS, noting that it had been authorized in the 2007 Water Resources Development Act (WRDA) and has the following purposes:

- To identify aquatic pathways between the Great Lakes and Mississippi River basins (including both Chicago area waterways and other pathways)
- To inventory current and future potential aquatic nuisance species (ANS).
- To analyze possible ANS controls and prevent ANS transfer between basins via aquatic pathways.

Drolet noted that, in regard to controls, GLMRIS is not limited to single option and can examine/recommend a range of options. Further, the study is to examine the impacts to uses and users from various potential controls, and what types of mitigation might be needed.

Drolet described CAWS as the study's Focus Area I, noting that it is the only continuously available pathway for interbasin species transfer. He said other pathways are addressed as the study's Focus Area II, though these are only intermittently available to allow transfer. Among these other pathways, Drolet noted that Eagle Marsh in Indiana appears to be the highest risk for potential transfer.

Drolet next discussed the identification of species of concern, explaining that a total of 39 species of potential concern for CAWS have been evaluated via a risk assessment approach. This evaluation has identified a "most wanted" list of 12 species identified as presenting either a high or medium risk. Drolet said these species fall into four categories: fish, plants, algae, and crustaceans. He said the goal of the evaluation has been to focus on a manageable number of species presenting the greatest risk.

Drolet said the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012 required that GLMRIS report be completed by the end of 2013. As such, the report will not be a feasibility study, but rather will offer a range of alternatives and not a single recommendation. Specifically, he said the report will include:

- Conceptual design of alternatives.
- General mitigation requirements of alternatives.
- Range of cost estimates commensurate with design detail.
- Evaluation criteria.

He explained that the general categories of alternatives to be evaluated include hydrologic separation, technology-based, hybrids of physical and technology-based, non-structural measures, and no new federal action.

Drolet closed by describing the path forward leading to completion of the GLMRIS report by December 2013, which includes a draft report which will be reviewed and revised within USACE , and a final report submitted to Congress by the end of the year. Ken Westlake asked if there will be an opportunity for input by the public or other agencies in regard to environmental assessment. Drolet replied that there would not be an external review opportunity as the report is finalized, but that public and state agency reviews, as well as environmental compliance analysis, are among the remaining analyses to be completed after the report is submitted but before an project would move to preliminary engineering and design (PED).

Sand Mining

Ellen Anderson explained that sand mining for use in hydraulic fracturing began to dramatically increase in 2012, especially in southeastern Minnesota. This is due to the prime quality silica sand resource along the Mississippi River. Anderson said several counties and cities in the area had implemented moratoria on this mining as they analyzed impacts. Some citizens in these communities have expressed concerns about the impact of mining on truck traffic, health, water quality, habitat and tourism. As a result, the Minnesota Environmental Quality Board has studied the silica sand issue, held hearing and published a comprehensive interagency staff report on the subject in March of this year. Much of this mining activity is occurring in the Driftless area of Minnesota. Because a significant portion of this area is made up of karst topography and also includes many of Minnesota's trout streams, there are concerns regarding mining's impact on water quality.

Anderson said Minnesota's legislature recently passed measures to address concerns about the impacts of silica sand mining. The legislation imposes a one mile buffer between mining activities and trout streams in southeastern Minnesota, unless a hydrogeological study is conducted and a permit issued by Minnesota DNR. The legislation also authorized \$1 million to fund Silica Sand Technical Assistance Teams to develop model ordinances and standards as well as to provide technical guidance to local communities. The legislation also authorized \$600,000 to fund rulemakings related to reclamation and air quality at silica sand mining sites. Until the rulemakings are complete, there is a temporary environmental review requirement for mines over 20 acres in size.

Water Quality

Hokanson reported that UMRBA's Water Quality Executive Committee and Water Quality Task Force had discussed the UMR Clean Water Act Monitoring Strategy extensively during their meetings earlier in the week and that, as a result, work on a *Recommended Monitoring Plan* is proceeding. He said a draft *Recommended Monitoring Plan* will be available for review and comment by UMR stakeholders in July and that he would seek the Board's input regarding individuals and groups to include in this round of review. Hokanson noted that the monitoring strategy project, including the final *Recommended Monitoring Plan*, is scheduled for completion by September 30, 2013.

Administrative Issues

Approval of FY2014 Budget

Arlan Juhl acknowledged that the FY2014 budget being considered by the board resulted in a deficit. However, Juhl said that the board was comfortable with this in the short term given sufficient cash reserves available and the board's direction to UMRBA staff to bring the budget into balance over time. Juhl offered and Robert Stout seconded a motion to approve the UMRBA FY2014 budget. The motion was approved by voice vote.

Investment Authorization

Hokanson explained that, with Dru Buntin's selection as Executive Director, it is necessary for the Board to approve a resolution that: 1) appoints Buntin to make investment decisions on behalf of the Association, and 2) is consistent with Wells Fargo Advisors' current conditions for serving UMRBA's investment manager. Dan Bauman offered and Harry Bozoian seconded a motion to approve such. The motion passed on voice vote.

Future Meetings

Hokanson said the next meeting series will be held August 27-28, 2013 in La Crosse, with the UMRBA Board meeting on the 27th and UMRR-EMP CC on the 28th. The November meetings will be held November 18-20, 2013 in the Twin Cities, including a Water Quality Executive Committee meeting on the 18th, a joint meeting with the Water Quality Executive Committee and the quarterly meeting on the 19th and UMRR-EMP CC on the 20th. The February quarterly meeting will be held February 25-26, 2014 in the Quad Cities.

With no further business, Dan Bauman made and Diane Ford seconded a motion to adjourn. The motion passed unanimously and the meeting ended at 3:10 pm.