

**Minutes of the 130th Quarterly Meeting
of the
Upper Mississippi River Basin Association**

**May 13, 2014
St. Louis, Missouri**

UMRBA Chair Arlan Juhl called the meeting to order at 10:38 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
Barb Naramore	Minnesota Department of Natural Resources
Patrick Phenow	Minnesota Department of Transportation
Robert Stout	Missouri Department of Natural Resources
Bryan Hopkins	Missouri Department of Natural Resources
Dan Baumann	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Harold Deckerd	U.S. Department of Agriculture, NRCS
Tom Holden	U.S. Army Corps of Engineers, MVD
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuge
William Guertal	U.S. Geological Survey, Midwest Region
Bill Paape	U.S. Department of Transportation, MARAD

Others in Attendance:

Harry Bozoian	Missouri Department of Agriculture
Chris Klenklen	Missouri Department of Agriculture
Kurt Boeckmann	Missouri Department of Natural Resources
Joe Engeln	Missouri Department of Natural Resources
Colleen Meredith	Missouri Department of Natural Resources
Sreedhar Upendram	Missouri Department of Natural Resources
Mark Moore	U.S. Army Corps of Engineers, MVD
Gary Meden	U.S. Army Corps of Engineers, MVR
Marv Hubbell	U.S. Army Corps of Engineers, MVR
Ken Barr	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Michael Tarpey	U.S. Army Corps of Engineers, MVR
Col. Chris Hall	U.S. Army Corps of Engineers, MVS
Mike Feldman	U.S. Army Corps of Engineers, MVS
Hal Graef	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, MVS
Deanne Strauser	U.S. Army Corps of Engineers, MVS
Brian Markert	U.S. Army Corps of Engineers, MVS
Julie Ziino	U.S. Army Corps of Engineers, MVS

Bob Clevestine	U.S. Fish and Wildlife Service
Angie Rodgers	U.S. Fish and Wildlife Service
Kevin Richards	U.S. Geological Survey
Mark Fuchs	National Weather Service
Jo Middleton	Office of U.S. Senator Claire McCaskill
Tom Boland	AMEC
DeAnna Clark	Fanning Communications
Mary Stroka	Fanning Communications
Dominika Dziegielewska-Parry	Independent Consultant
Aimee Andres	Inland Rivers, Ports, and Terminals Association
Jo Anne Smiley	Mayor, City of Clarksville, Missouri
Colin Wellenkamp	Mississippi River Cities and Towns Initiative
Brad Walker	Missouri Coalition for the Environment
Darrick Steen	Missouri Corn Growers Association
Nancy Guyton	Neighbors of the Mississippi
Terry Walton	Neighbors of the Mississippi
Olivia Dorothy	Nicollet Island Coalition
Elliot Brinkman	Prairie Rivers Network
Charles Williamson	St. Louis Carpenters' District Council
Dru Buntin	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

Minutes

Diane Ford moved and Robert Stout seconded a motion to approve the draft minutes of the February 25, 2014 quarterly meeting. The motion carried unanimously.

Executive Director's Report

Dru Buntin presented the Executive Director's report and noted that the report is organized according to the focus areas in the 2013-17 UMRBA Strategic Plan. Among the items in the report, Buntin highlighted UMRBA staff participation in Congressional briefings regarding the Navigation and Ecosystem Sustainability Program (NESP), commercial navigation infrastructure challenges, and Upper Mississippi River Restoration – Environmental Management Program (UMRR-EMP) funding levels in conjunction with the Waterways Council, Inc. (WCI) and The Nature Conservancy (TNC). He indicated that UMR Congressional Delegation members are organizing a letter to the Administration supporting the inclusion of funding for NESP in the FY2016 budget request. Buntin directed the Board's attention to the joint briefing document prepared by WCI, TNC, and UMRBA included in pages B-7 and 8 of the agenda packet.

Buntin said UMRBA staff and staff from the UMR state Departments of Transportation continue to plan for the July 9-10, 2014 UMR Navigation Summit to be held in St. Louis. The first day of the Summit will include representatives from the states, industry, federal agencies, ports and other related interests. Four panel discussions will focus on:

- The status of, and priorities for investment on, the Upper Mississippi's navigation infrastructure, including how the 2014 Water Resources Reform and Development Act will help advance those priorities.
- Creating an intermodal transportation network that enhances the nation's use of inland waterways to meet export and import demands.

- The advantages of enhancing Upper Mississippi River System ports through collective advocacy.
- The potential for public-private partnerships in advancing Upper Mississippi River System navigation projects and infrastructure maintenance.

Buntin indicated that UMRBA has submitted a letter supporting the Iowa Department of Transportation's application for a Transportation Investment Generating Economic Recovery (TIGER) grant from the U.S. Department of Transportation's Maritime Administration (MARAD). He said the letter was included in the agenda packet. The grant would fund a five-state planning study to explore opportunities to enhance the UMR commercial navigation system and be implemented in partnership with all five UMR state Departments of Transportation.

In the Ecosystem Restoration and Monitoring focus area, Buntin highlighted UMRBA staff's ongoing support of the Upper Mississippi Restoration – Environmental Management Program (UMRR-EMP) strategic planning process and indicated team members are in the process of conducting a targeted review of the draft strategic plan with program partners. Feedback from this process will be considered during planning team meetings held this summer. The team anticipates presenting the draft plan for UMRR-EMP CC consideration at its August 6 meeting in East Peoria. Buntin directed the Board's attention to a letter contained in the agenda packet from Representatives Ron Kind (D-WI), Tim Walz (D-MN), and Cheri Bustos (D-IL) to the House Appropriations Committee leadership requesting that \$12.6 million of UMRR-EMP funding be directed to the program's long-term resource monitoring component. Buntin said he and Gretchen Benjamin with TNC had expressed concern to Congressman Kind's staff regarding Congressionally-mandated spending within the program. While UMRR-EMP partners are extremely appreciative of support for increased funding, mandating a specific amount of funding for long term monitoring in this way has the potential to undermine the efforts of the UMRR-EMP partners to better integrate the long term monitoring and habitat rehabilitation components of the program. Some program partners have longstanding concerns regarding the extent to which these two components of the program sometimes appear to operate independently of one another. Improving communication between those implementing long term monitoring and habitat projects, as well as better integrating those efforts, has been a primary focus area of the UMRR-EMP strategic planning team.

In the Water Quality focus area, Buntin noted that, following the Board's approval of the *Upper Mississippi River Clean Water Act Recommended Monitoring Plan* in February, UMRBA staff completed work on the monitoring strategy under the contract with the Illinois EPA and are now supporting plan implementation by the states via the Water Quality Executive Committee (WQEC) and Water Quality Task Force (WQTF). Minnesota and Wisconsin have initiated discussions regarding potential pilot implementation of the plan in 2016 in their shared river reaches. UMRBA staff have developed GIS-based maps of proposed monitoring locations to aid implementation and refinements to monitoring design.

In the Cross-Cutting Initiatives and Collaboration focus area, Buntin said America's Watershed Initiative (AWI) staff held a Lower Mississippi River report card workshop in Memphis on March 25-26, 2014 that included over 40 attendees from six states. Upcoming AWI workshops include the Arkansas-Red River Basins in Tulsa, Oklahoma on May 14-15, 2014, and the Missouri River Basin in Rapid City, South Dakota on May 22-23, 2014. AWI staff plan to have draft report cards for the component basins as well as for the entire Mississippi River watershed available for discussion at the AWI Summit scheduled for September 30 through October 2, 2014 in Louisville, Kentucky.

Buntin directed the Board's attention to page B-11 of the agenda packet for a copy of UMRBA Treasurer Jason Tidemann's statement regarding his review of UMRBA's financial statement for the period of February 1, 2014 through March 31, 2014. Diane Ford offered and Robert Stout seconded a motion to approve the Treasurer's statement. The Board unanimously adopted the motion by voice vote.

Mississippi River Cities and Towns Initiative

Mississippi River Cities and Towns Initiative (MRCTI) Executive Director Colin Wellenkamp said MRCTI had recently completed the relocation of their office to St. Louis and invited attendees to visit them in their new location. Wellenkamp introduced Jo Anne Smiley, the Mayor of Clarksville, Missouri and a member of the MRCTI Executive Committee, to brief the Board on recent MRCTI activities.

Mayor Smiley thanked the Board for accommodating the schedule change, noted her past presentations at past UMRBA meetings on behalf of MRCTI, and expressed appreciation for the collaboration between the two organizations. Smiley highlighted a number of developments since her last presentation to the Board in June of 2013. She said an economic profile of the Lower Mississippi River recently released by the Lower Mississippi River Conservation Committee found that the annual revenue generated by activities on the Lower River is more than \$200 billion. Additionally, she said the combined gross municipal income of cities along the Mississippi River is nearly half a trillion dollars annually. The Mississippi River also supports the nation's only trade surplus – the export of agricultural goods. Smiley asserted that if we wish to protect these investments and keep the economic engine that is the waterway in good repair, we must solidify our collaboration with each other as well as other coalitions on the Mississippi River.

Smiley said MRCTI has strengthened the partnership between the mayors and the Corps through the execution of a memorandum of common purpose – a document through which MRCTI and the Corps outlined shared objectives and established a platform for their shared work. The memorandum covers topics such as drought response, improvement of water quality, and addressing aquatic invasive species.

Smiley said MRCTI, along with the Delta Regional Authority (DRA), and the City of Memphis, hosted an October 2013 Mississippi River Economy Summit in Memphis, Tennessee. At this meeting, MRCTI and DRA entered into agreements with Walmart, Chism Hardy Investments, Ingram Barge Company, the Inland Rivers, Ports and Terminals Association, and the Illinois Soybean Association to work together to facilitate container shipping on the Mississippi River. The agreements call for MARAD to take a coordinating role in this effort to create economic opportunities for the region's ports, while relieving freight congestion on other modes. Smiley said the Economy Summit also resulted in a new working relationship between MRCTI and the World Trade Center Mississippi River Alliance (Alliance), a group comprised of seven world trade centers along the Mississippi River and headed by the World Trade Center of New Orleans. The Funder's Network for Smart Growth and Livable Communities has formed a River Partnership of 17 community foundations along the Mississippi River. MRCTI and the Alliance entered into an agreement at the Economy Summit through which the Alliance intends to work with MRCTI to facilitate investment in these community foundations to support sustainability projects.

Smiley shared with the Board several developments that occurred at MRCTI's Washington, DC meetings held in March 2014. She said MRCTI mayors met with Assistant Secretary of the Army for Civil Works Jo-Ellen Darcy and MVD Commander Brig. Gen. DeLuca and discussed strategies to improve the economic performance of the Mississippi River, while also improving the ecological condition of the system. MRCTI mayors also met with a number of environmental organizations, including the Mississippi River Network, American Rivers, the Conservation Fund, the National Wildlife Federation, and the National Sustainable Agriculture Coalition, and discussed improving funding for the Clean Water and Drinking Water State Revolving Funds, as well as the Pre-Disaster Mitigation Grant Program. During the meeting, the MRCTI mayors also met at the White House with representatives from the President's Rural Council, Export Council, and Climate Action Task Force and discussed ways to make communities more resilient to flooding, drought, and other extreme weather

events. Smiley said MRCTI mayors highlighted a number of possible areas of coordination with the Administration on these issues, including:

- Reclaiming the natural landscapes of waterfront areas to decrease erodible zones and increase the capacity to absorb stormwater.
- Increasing investment in water system infrastructure.
- Engaging in climate resiliency planning.
- Securing resources for climate resiliency technical assistance.
- Creating reliable inventories of ecological services and critical river-related infrastructure.

MRCTI mayors also met with nearly 20 Senators and Representatives and discussed issues including the drought policy provisions of the Farm Bill, the Water Resources Reform and Development Act, as well as efforts to address invasive species. Smiley said Mayor Dave Kleis of St. Cloud, Minnesota, led MRCTI's interagency meeting with federal agencies, including the U.S. Environmental Protection Agency, U.S. Department of Transportation, Federal Emergency Management Agency, and U.S. Department of Agriculture. Smiley said one topic of discussion at the interagency meeting related to the chemical spill that had recently taken place on the Elk River in West Virginia and how to improve the accident prevention and response framework on the Mississippi River.

Smiley highlighted a number of MRCTI focus areas in the coming year, including:

- The potential of a nutrient trading pilot program to reduce nutrient loading to the Mississippi River.
- The creation of uniform waterfront zoning codes for all city waterfront areas.
- The establishment of a sustainable waterfront development fund.
- The establishment of a Governors' Council for the Mississippi River

Smiley said that MRCTI mayors had recently met with Iowa Governor Terry Branstad and discussed the potential development of a Mississippi River Governors' Council. Smiley indicated all of MRCTI's efforts are designed to treat the Mississippi River as one system from the headwaters to the Gulf, enhance regional collaboration, and create a sustainable system. She said MRCTI's overarching mission is to create an environmentally healthy Mississippi River to ensure a healthy economy for all industries along the River.

Smiley invited Board members to attend the MRCTI meeting in New Orleans on September 16-18, 2014. Dru Buntin said, given the issues highlighted by Mayor Smiley, there seemed to be opportunities for coordination and information sharing between MRCTI and UMRBA states, particularly regarding the successful UMRR-EMP in existence since 1986, spills contingency planning performed by UMRBA for USEPA in the UMR states, as well as discussion of a Mississippi River Governors' Council. Buntin pointed out that UMRBA had recently coordinated a tabletop response exercise in La Crosse, Wisconsin constructed around a hypothetical release of crude oil from a rail shipment. Marv Hubbell agreed with the need for coordination regarding the UMRR-EMP and pointed out that the success of the program has established it as the nation's preeminent large river restoration and monitoring program. Hubbell offered to brief the MRCTI mayors on the program. Colin Wellenkamp said he appreciated these offers and indicated he is particularly interested in the assistance of the UMRBA members in efforts to establish a Mississippi River Governors' Council. Olivia Dorothy said that the NGOs she represents are looking forward to hosting the mayors at a Mississippi River Conference in October in the Quad Cities. Wellenkamp said he was aware of the conference and said Mayor Thompson of Grafton, Illinois is quite interested in attending.

UMRBA 2014 Strategic Plan Priorities

UMRBA Chair Arlan Juhl shared information regarding UMRBA's Strategic Plan Priority Actions for 2014. Juhl pointed out that UMRBA Board members adopted a five-year strategic plan in 2013 which contains 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 order to focus plan implementation, each year Juhl said the Board identifies key action items within each of the seven focus areas. He said the Board also recognizes the importance of engaging with cross-cutting collaborative efforts such as MRCTI, AWI, and the Midwest Governors' Association.

Juhl said the 2014 Strategic Plan Priorities were available in the meeting room for the information of attendees. He highlighted a few of the priority actions. In the commercial navigation focus area, Juhl said the states are interested in continuing their advocacy for investment in inland waterways infrastructure through NESP. Juhl said the July 2014 Upper Mississippi River Navigation Summit is one specific action the Board endorsed to facilitate a dialogue among state agencies, industry, federal partners, and others on issues affecting Upper Mississippi River navigation. In the ecosystem restoration and monitoring focus area, Juhl said UMRBA will continue to advocate for increased funding levels for the UMRR program. On the flood risk management focus area, Juhl said UMRBA will continue to work with the Corps to facilitate discussions with the states regarding the development of flood risk reduction tools. In the spill response focus area, Juhl said UMRBA intends to complete a comprehensive update of the UMR Spill Plan, while continuing to work on regional spill contingency planning and mapping. In the water quality focus area, Juhl said UMRBA will work towards pilot implementation of the *Upper Mississippi River Clean Water Act Monitoring Plan*, while also continuing to facilitate information sharing among states as they implement nutrient reduction strategies. Juhl said the Board recognizes the aggressive nature of the 2014 Strategic Plan Priorities, but indicated the states are committed to these shared priorities.

USACE Updates

Mississippi Valley Division

Tom Holden provided Board members with some perspectives from the Mississippi Valley Division on behalf of Brig. Gen. DeLuca, who had a scheduling conflict. Holden indicated that he would be presenting a variation of information Brig. Gen. DeLuca has presented to the Mississippi River Commission and other groups regarding four revolutions occurring that influence the Corps' mission areas. The first revolution relates to the explosive growth in the nation's agricultural production, a substantial portion of which occurs in the Mississippi River Basin. Holden said this increase in productivity is increasing the draw area for commodities shipped on the Mississippi River. He noted the rail and trucking transportation modes are at capacity, while global demand for food is only expected to increase.

The second revolution involves the increased production of hydrocarbon in the United States. Holden said unconventional extraction methods such as horizontal drilling and hydraulic fracturing of shale have resulted in a dramatic increase in oil and natural gas production in the U.S. Holden said oil production in the U.S. increased by 18 percent last year alone and noted the U.S. is expected to pass the Kingdom of Saudi Arabia as the world's number one oil producing country in 2015. In 2013, the United States passed Russia to become the world's leading producer of natural gas. Holden said this increase in hydrocarbon production affects many other industries, including chemical, plastics, and manufacturing as a whole. It is also resulting in increasing demand and production of tanker barges. Holden said this, along with increasing commodity production, offer an opportunity for growth in inland waterways shipments.

Holden said the third revolution is the return of manufacturing to the United States and to the Mississippi Valley in particular. The United States compares favorably to China in this regard and, after a decline during the recession, domestic manufacturing output has resumed an increase. Holden said energy is the most important commodity as manufacturing is dependent on reliable, cost-competitive energy sources.

The fourth revolution involves impacts resulting from climate change. Holden said recent history shows that precipitation in the Mississippi River Basin has been more intense, with more volume of water in less time resulting in greater runoff. He said there have been a greater number of significant storm events of high intensity. In 2013, there were a record number of storm events causing more than \$1 billion in damage – 41 worldwide with seven of those in the United States. Holden said this has resulted in changes in how the watershed functions. The Corps has documented higher stages on the Mississippi River with the same or less flow as in the past, causing the agency to begin recalculating the flow line for the river. The Corps has also initiated a geomorphology study to better understand resulting changes to the riverbed. Holden said these developments have caused the Corps to consider how to adapt projects to be more resilient to the documented changes.

Holden said on the Lower Mississippi River, MVD is still in the process of recovery from the 2011 flood. The Corps projects that the Mississippi River and Tributaries (MR&T) project will not be built back to pre-flood conditions until 2028, and that the MR&T project will not be completed until 2057 at current funding levels. Holden said there are some indications that Congress may be willing to invest additional resources that would expedite this recovery effort.

Holden provide historical information regarding the nation's investment in infrastructure through the Corps from 1928 to 2011. At its peak in the 1930s, the nation's per person annual investment was approximately \$70. However, recent years have seen a dramatic reduction in this investment resulting in a rate of approximately \$18 per person in the United States. Holden said historically, investments in this infrastructure have resulted in substantial economic benefits. He asserted that not investing adequately in infrastructure will jeopardize the country's economic prosperity.

Holden indicated the Corps would be presenting information regarding public-private partnership opportunities on the inland waterways at the July Upper Mississippi River Navigation Summit in St. Louis. He noted the American Society of Civil Engineers report which rated the nation's infrastructure at a D+. Holden said, given the low investment in the country's infrastructure, it is critical to look at new financing mechanisms.

Holden highlighted the Mississippi River Commission's (MRC) 200-year working vision for the Mississippi River watershed. This vision includes balancing multiple needs, including: national security and flood damage reduction; environmental sustainability and recreation; infrastructure and energy; water supply and water quality; and the movement of goods, agriculture, and manufacturing. In August 2013, the MRC issued a "Call to Action" in which they highlighted key challenges, including: global population growth and corresponding demands on food, water, energy, and trade; increasing demands on transportation infrastructure; unsustainably cumbersome federal processes resulting from numerous laws, policies, and regulations; and extreme natural events including floods and droughts. In light of these challenges, the MRC called for a strong national vision of systemic watershed approaches, and commitment to invest in transportation infrastructure. The MRC also called for exploration of alternative funding mechanisms and efficient management techniques that prioritize resources as well as the streamlining of water resource development processes. Holden asserted that the nation's current glide path on these issues is unsustainable. He stated that we must provide leadership if we are to continue to benefit from the investment of our forefathers.

Holden said he was also asked to provide information to the Board regarding MVD's distribution of operations and maintenance (O&M) funding. He said MVD receives approximately \$425 million in O&M funding annually, with \$25 million of that going toward addressing emergency needs. Holden said roughly \$250 million of the remaining O&M budget is expended on the UMRS. He said MVD has completed approximately \$100 million in unscheduled O&M projects on the UMRS in recent years. Holden said the UMRS is a priority for MVD, but pointed out that the Corps does not receive adequate funding to address all needs. In response to a question from Dru Buntin, Holden said annual expenditures on the MR&T average approximately \$240 million. Dan Baumann asked Holden to comment on whether the UMRS gets its fair share of the Corps budget. Holden said the Corps' overall budget would need to be about 50 percent higher to begin to address all of the identified needs. As a result, the Corps is forced to operate on a risk-based approach. Holden said the Corps is doing what they can to address needs on the UMRS, but the agency must live within its budget.

St. Louis District

St. Louis District (MVS) Commander Chris Hall highlighted the ongoing efforts to address challenges that arose during the low water event on the Middle Mississippi River in the past year. Col. Hall said the highest priority for MVS in FY14, is to continue Phase II of rock removal work. The Corps received full funding for related improvements to the navigation channel and there is a three to four year window to complete this work. Hall said an additional priority for MVS is to expand the UMRR-EMP by identifying projects in the Middle Mississippi River.

Hall pointed out navigation's importance not only to the Mississippi Valley region, but to the St. Louis economy as well. St. Louis is the third largest inland port in the nation, with 60 percent of national grain exports passing through the area to New Orleans annually. He said the Corps anticipates increases in the shipment of liquid cargos. This places extreme demands on the need to dredge, make channel improvements, and address regulating works needs. Hall said the reliability of the inland waterways system is a central issue for the Corps. He highlighted the fact that the main chamber at Mel Price L&D has been inoperable for a number of months, and said the fabrication of replacement lift cables had caused a delay in repairing the structure. This is now projected to be completed in mid-August. In addition, the auxiliary chamber at L&D 27 is currently closed at certain stages due to maintenance being performed. However, Hall said this should be resolved soon. He said all of these factors highlight the fragility of the inland waterways system. The replacement of the protection cell at L&D 27 caused a 10 day closure in recent years, and the economic impact of this closure was projected to be \$2 million per day.

Hall addressed recent developments related to the Corps' regulating works program. There are training structures in the Middle Mississippi River designed to make the channel more efficient and reduce dredging needs. Hall said this approach provides both environmental and financial benefits. He said the training structures remove approximately 2,800 cubic yards of material from the channel. The goal is the removal of 6,300 cubic yards of material from the channel, which would be a permanent improvement. However, Hall said this must be done in a balanced manner.

Hall said a 2012 General Accounting Office (GAO) report on the regulating works program found a need to supplement the program's 1973 Environmental Impact Statement (EIS). As a consequence, the Corps is preparing a draft supplemental EIS due to be completed in 2015, with a final EIS expected in 2016. In the interim, Hall said the Corps will complete Environmental Assessments (EA) on individual projects. He said the Corps has released Findings of No Significant Impact on three projects, while a fourth project is still being evaluated.

Hall highlighted the importance of flood risk management on the Middle Mississippi River. He said that, thanks to the efforts of partners in maintaining projects, the Corps estimates that the St. Louis area

has saved \$11 billion in avoided flood damages. Hall said the Corps is considering how to move forward collaboratively with partners to comprehensively address flood risk management in other areas of the basin.

Hall said the UMRR-EMP has proven extremely successful. He said in MVS in particular, many projects have been successfully completed. He stated that the Ted Shanks, Rip Rap Landing, and other projects in MVS are resulting in ecological and economic benefits through UMRR-EMP.

Hall said he will be transitioning out as MVS Commander in June, and there are three issues he plans to highlight with his successor. The first issue is the need for an unbiased approach to the supplemental EIS on the regulating works program. The second issue is the need to advance ecosystem restoration on the Middle Mississippi River, while also extending the success of UMRR-EMP to the Lower Mississippi River. The third issue is to stress the importance of continuing to provide a safe and reliable transportation system on the Middle Mississippi River by looking at the inland waterways as a system and mitigating risk factors. Hall said thoughtful planning and coordination is key in delivering needed products and executing projects.

In response to a question from Dru Buntin, Hall said the work on the L&D 27 auxiliary chamber is projected to be completed in spring 2015. Elliott Brinkman said the Prairie Rivers Network (PRN) has been made aware of research that concludes that the river training structures exacerbate flooding. He said PRN and the National Wildlife Federation have submitted many comments to the Corps requesting a moratorium on river training structures. Brinkman asked Hall if such a moratorium is possible. Hall said this is not the Corps' current approach as the agency is conducting individual EAs on regulating works projects. Hall said the Corps has conducted extensive analysis of the impacts from training structures and the agency does not agree with assertions of impacts on flood heights. Hall said the Corps is committed to implementing the regulating works program in a manner that does not exacerbate flood impacts.

Rock Island District

Gary Meden provided an overview of the Rock Island District (MVR) and highlighted the fact that, out of the 20 locks and dams managed by the district, only one has a 1,200 foot lock chamber. Meden said the district manages three reservoirs in Iowa with significant flood storage that have provided \$2.1 billion in avoided flood damage over their life. MVR is the also lead district in the implementation of the UMRR-EMP, and that program has restored, rehabilitated, and enhanced over 100,000 acres of habitat on the Upper Mississippi and Illinois Rivers. The district also provides operations and maintenance support to facilities on the Rock Island Arsenal. Meden said the district's management of contracts and support for military programs provided a \$63.5 million benefit to the regional economy in FY13.

Meden said annual funding provided to MVR in the FY10-FY13 period averaged approximately \$125 million. He said the FY14 funding provided to the district totaled over \$200 million. This increase in funding was primarily due to increased appropriations for the UMRR-EMP, repairs at the Lockport and Marseilles Locks and Dams, and O&M funding for the UMRS. Meden said the Corps has awarded, or is in the process of awarding, funding for ten PL 84-99 projects in FY14. These projects include repair of levee breaches and pump stations impacted by 2013 flooding on the Mississippi and Illinois Rivers and are estimated to range from \$250,000 to \$2.5 million per project. Meden said the Corps' goal is always to implement such projects prior to the following flood season. Meden pointed out that MVR is designated as a national flood fighting center. As such, the district has approximately 5 million sand bags and other response equipment on hand and also provides contracting assistance expertise. Meden said MVR is also the Corps' Navigation Design Center. The district is responsible for reviewing the

design of navigation lock and dam project. They are currently partnering with other MVD districts, as well as the Pittsburg District on review of specific project designs.

Meden pointed out that NESP has not received funding since FY11. He said the Upper Mississippi River Comprehensive Plan is unlikely to result in implementation of a specific plan. However, he said the authority could be used as a conduit for other flood risk management funding and indicated he would provide more information on this later in the meeting. Meden said another district focus is to work with partners to find innovative investment strategies for aging infrastructure. In response to a question from Arlan Juhl, Meden said the Corps estimates the creation of 300 contractor jobs per \$10 million in contracts.

Flood Risk Management on the UMRS

Gary Meden provided an update regarding MVR's discussions with partners on flood risk management on the UMRS. The district has some remaining funding from the Upper Mississippi River Comprehensive Plan, but Meden said the fundamental issue to be addressed is whether states and other partners see a need for a comprehensive flood risk management strategy on the UMRS. The district is considering using the remaining funding for scoping the development of a mainstem hydrologic and hydraulic (H&H) model. However, Meden said MVR staff have undertaken an outreach effort to better understand the utility partners would derive from such a model and they would like to use UMRBA as a forum to gain input from the states. Flood risk management on the UMRS involves multiple states and may necessitate federal funding, and Meden said the Corps is uniquely positioned to facilitate actions given the agency's modeling expertise. Meden said MVR does not expect new funding for this effort in FY15. However, he asserted that the consequences of inaction are high and said MVR's goal is to develop a regional, systemic approach to flood risk management.

In response to a question from Ken Westlake, Meden said it is yet to be determined if an H&H model would analyze the effects of the retention of more water on the landscape. However, he said such modeling is possible and he indicated it could also be a tool for local floodplain agencies to use. In response to a question from Nancy Guyton, Meden stated that additional flood risk reduction analysis could be undertaken if the states and the Corps could reach agreement on the need for such. Arlan Juhl asked if the Corps planned to use a model format that the states could use. Meden said the Corps has considered developing the same type of modeling used by the National Weather Service (NWS) in flood events. Juhl stated that better modeling could potentially improve NWS forecasting. Tom Holden said a similar effort has been undertaken on the Lower Mississippi River and it is expected to help improve NWS stage forecasting. Dan Baumann said it will be important to involve the Federal Emergency Management Agency (FEMA) early in the process to ensure the resulting product would be acceptable for National Flood Insurance Program (NFIP) purposes. Meden agreed, but point out that FEMA typically includes a lag in modeling application to allow local governments to adjust to changes in floodplain mapping. Baumann said it is important that these systems are integrated if a comprehensive approach is desired. Mark Fuchs said new modeling systems exist that would allow the Corps to incorporate multiple models. In response to a question from Robert Stout, Meden said model development would take two to three years provided the Corps had the necessary funding. Stout asked if the Corps has sufficient existing data to build the model. Michael Tarpey said the Corps plans on using existing data and does not anticipate collecting new data. In response to a question from Ken Westlake regarding the potential use of the model in addressing the potential effects of climate change, Tarpey said the primary purpose of the model is anticipated to be a better understanding of the impacts arising from specific events.

Missouri Nutrient Reduction Strategy

Joe Engeln provided an update regarding Missouri's development of a state nutrient reduction strategy. Engeln said Missouri is a bit behind other states in strategy development because they have used an extensive outreach process to work with partners in individual sectors in strategy development. Missouri modeled this approach after the Missouri Department of Natural Resources' *Our Missouri Waters* initiative, a comprehensive, adaptive management-based watershed planning approach designed to address water quality and quantity through extensive stakeholder engagement. Engeln said Missouri has the advantage of a dedicated sales tax that funds soil and water conservation and state parks. He said Missouri anticipates distributing approximately \$31 million in soil and water funding this year. Some partners involved in strategy development include NRCS, the University of Missouri Extension, producer groups, communities, environmental groups, and state agencies.

Engeln said Missouri is not setting reduction goals for the entire state in the strategy, but will instead address goals at the sub-watershed (sub-HUC 8) level. They have identified 14 watershed scheduled for assessment this year and some of those watersheds are seen as significant nutrient contributors. While these watersheds were not selected specifically for nutrients, they will allow the state to address the nutrient issues. This approach includes a five-year cycle for assessing all watersheds. At the end of the cycle, Engeln said the state will use adaptive management to modify approaches in specific watersheds based on observed responses.

Engeln said the data shows that Missouri has made significant strides in improving upland soil loss, with a 47 percent reduction since the 1980s. The state has also made progress in reducing phosphorus loading. The state has seen less success in nitrogen reduction, due in part to an increase in tile drainage and weather patterns that have increased streambank erosion. However, Engeln said they have observed some success in reducing nitrogen loading in urban areas. For example, analysis shows a clear reduction in loading in the St. Louis area. Engeln indicated that, through interaction with municipalities in strategy development, some have indicated a willingness to pursue additional nutrient reductions if a trading framework can be established.

Engeln said Missouri plans to have their nutrient reduction strategy completed by the end of June 2014. In response to a question from Dru Buntin, Engeln said communities in Missouri are interested in understanding the lessons learned from existing nutrient trading programs. Elliot Brinkman asked if the strategy included ways to address the reduction in conservation program participation. Engeln said that, while they are certainly aware of this issue, commodity prices are a large factor in determining participation. In response to a question from Bob Clevenstine, Engeln said they did consider the state's wildlife action plan in formulating the strategy and coordinated with the Missouri Department of Conservation. However, he said there is not always a clear overlap as the wildlife action plans are often looking at areas to preserve that are typically not the same as those targeted for nutrient reduction. Robert Stout said the cyclical nature of the *Our Missouri Waters* initiative is designed to encourage these types of opportunities for increased coordination.

Soil and Water Conservation in Missouri

Colleen Meredith said Missouri is fortunate to have a dedicated one-tenth of one percent sales tax to support soil and water conservation activities and the state parks system. She said the tax is now in its 30th year and has been renewed by voters three times. Revenue generated by the tax is divided equally between Missouri State Parks and the Soil and Water Conservation Program. The Governor's FY15 recommended budget projects over \$49 million will be available in the next year for soil and water conservation activities. Of this amount, \$31 million will go to producers implementing cost share practices. In order to implement this effort, the Soil and Water Conservation Program has established

cooperative working agreements with the state's 114 soil and water conservation districts, NRCS, and the Missouri Soil and Water Conservation Commission. Meredith said Missouri's Soil and Water Conservation Program provides baseline training for local soil and water conservation district staff. She said the state also makes training available to local district staff seeking certification to approve the implementation of specific conservation projects.

Meredith said Missouri's Soil and Water Conservation Program contracted with the Texas Institute for Applied Environmental Research at Tarleton State University to develop a Nutrient Tracking Tool (NTT). The NTT was initially built to facilitate nutrient trading, but it also provides the ability to more accurately assess the results of conservation practice implementation. Meredith said the NTT is internet-based, allowing for widespread use by technicians. It is a single, national model with site-specific soil, climate, and calibration coefficients. Meredith said the NTT allows for the evaluation of structural conservation practices such as filter strips and tile systems, and also cultural conservation practices such as nutrient management.

Meredith said Missouri plans to distribute approximately \$26 million to local soil and water conservation districts at the beginning of the next fiscal year, with a focus on highly erodible land. The state has also allocated roughly \$1 million for producer implementation of nutrient and pest management plans, and over \$3 million for grazing management plans. This allocation framework also allows the state to focus on issues such as endangered species. For example, the next fiscal year allocation for sensitive areas is nearly \$2 million. A large portion of cost share dollars have historically been, and continue to be, allocated to address sheet, rill, and gully erosion, with over \$17 million allocated in FY15. The allocation approach also allows the state to vary the implementation of different practices based upon the needs of specific areas of the state. As an example, Meredith said irrigation is most concentrated in southeast Missouri, and the FY15 allocation for irrigation management of over \$1 million is predominately targeted in this geographic area. Meredith said that, while only a portion of Missouri is in the Upper Mississippi River watershed, the allocation framework allows the state to target nutrient and pest management projects in areas that will assist in reducing nutrient loading to the Gulf of Mexico.

In response to a question from Arlan Juhl, Meredith said the dedicated sales tax generates annual revenue that provides an average of \$24 million to \$26 million to landowners for the implementation of conservation practices. Bryan Hopkins asked Meredith to explain how the Soil and Water Conservation Program assisted local soil and water conservation districts in applying for Mississippi River Basin Initiative (MRBI) funding. Meredith said state program staff developed a template for local districts to use and then worked with the districts to provide technical and grant writing assistance specific to the project area. She said this proved to be extremely successful and the funding from the dedicated tax put the state in a position to match the federal dollars. In response to a question from Marv Hubbell, Meredith said the program's monitoring resources are primarily directed toward edge-of-field monitoring of MRBI projects.

NRCS Initiatives in Missouri

Harold Deckerd provided Board members with an overview of NRCS activities in Missouri. He said NRCS has a number of strategic initiatives designed to address water quality issues, and cited the agency's focus on healthy, sustainable soils and the role they play in improving water quality. Deckerd said the major pollutants causing water quality impairments in Missouri include sediment, nutrients, pathogens, heavy metals, and chemicals. NRCS is focused on a systemic approach to addressing nutrient loading. This includes: avoiding loading through the implementation of nutrient management plans and prescribed grazing; controlling loading through the application of no-till, residue management, and cover crops; and trapping nutrients with filter strips, water and sediment control

basins, and wetlands. In the last decade, Deckerd said NRCS has provided over \$350 million in federal funding to over 16,000 producers in Missouri to reduce nonpoint source pollution. Over the course of the last ten years, NRCS has also executed over 1,000 conservation easements through various programs on over 150,000 acres of land. He said the agency's goal is to focus on the most vulnerable lands that offer the greatest opportunity for nutrient loading reductions.

Deckerd said Missouri participates in two national landscape conservation initiatives – MRBI and the National Water Quality Initiative. Each of these initiatives serves to accelerate conservation over and above existing efforts. Deckerd said the Mississippi River watershed is extremely significant as it drains 41 percent of the lower 48 states, is home to some of the richest farmland in the world, is vital to inland navigation and shipping, and drains into the Gulf of Mexico – a critically important fishery. As such, the purpose of MRBI is to:

- Raise awareness and stimulate interest in Mississippi River water quality issues
- Target resources to optimize efficiency
- Engage partners and participants to expand capacity
- Promote conservation application in a systems approach
- Dedicate funding in addition to base programmatic funding to accelerate results
- Monitor, evaluate, and model to determine outcomes

Deckerd presented a map showing the location of the 22 MRBI projects funded in Missouri. Partners involved in implementing MRBI projects in the state include local soil and water conservation districts, the Missouri Department of Natural Resources, the U.S. Department of Agriculture Agricultural Research Service, the University of Missouri, the U.S. Geological Survey, the U.S. Forest Service, and other local partners. Deckerd said NRCS has awarded over \$40 million in MRBI funding to projects in Missouri. Of this total, nearly 1,000 contracts on over 100,000 acres have already been executed with payments totaling over \$13 million.

Deckerd said NRCS' National Water Quality Initiative is a national program to implement conservation systems to reduce nitrogen, phosphorus, sediment, and pathogen contributions from agricultural lands. It is similar to MRBI, but is available across the entire country and addresses additional water quality impairments. Deckerd said the initiative focuses on small HUC 12 watersheds in an attempt to concentrate practice implementation. To date, NRCS has obligated nearly \$2 million in funding in Missouri and has executed 60 contracts covering nearly 6,000 acres.

Deckerd indicated that NRCS has an increased focus on monitoring in order to evaluate the performance of conservation systems. He said edge-of-field and other monitoring is important in providing accountability for conservation investments. Monitoring is also necessary to validate and calibrate models and inform on-farm adaptive management.

Dru Buntin asked Deckerd if he could provide information on the new Regional Conservation Partnership Program (RCPP) authorized in the Farm Bill. Deckerd said the state NRCS staff have not yet received enrollment information for RCPP. He said NRCS is still working through the implementation details on a number of Farm Bill provisions, but that RCPP will likely incorporate several existing programs. Deckerd pointed out the fact that a fact sheet on RCPP was included in the agenda packet.

Lower Mississippi River Economic Profile

Bryan Hopkins said the Executive Committee of the Lower Mississippi River Conservation Committee (LMRCC) decided to pursue an economic profile in order to better assess the economic value of the diverse resources on the Lower Mississippi River (LMR). Hopkins introduced LMRCC Coordinator Angie Rodgers who provided additional background on LMRCC and the lower river economic profile. The LMRCC is dedicated to implementing collaborative conservation projects in the region as well as to raising awareness of the many values of the Mississippi River. With staff leadership provided by the USFWS, LMRCC's twelve state agencies work together with federal partners for consistent habitat, water quality and public access improvements along the Lower Mississippi River. Rodgers said LMRCC activities include: habitat restoration, including the notching of wing dikes; a resource assessment due to be completed next year; a fishing guide to help sites become more accessible for users; and the economic profile.

Rodgers introduced Dr. Dominika Dziegielewska-Parry, who was involved in the preparation of the LMR Economic Profile. Dr. Dziegielewska-Parry said the approach to the economic profile included a county-level examination. The LMR region encompasses more than 71,000 square miles and includes 113 counties in seven states: Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana. They created a 2011 state of the river analysis, though it also included information from the 2005 to 2012 period. In preparing the profile, they attempted to define specific sectors that either explicitly depend on the river or use its resources to significant advantage. Dr. Dziegielewska-Parry said they sought to include the value of ecosystem services, but, while data is being developed, sufficient data does not currently exist for inclusion in the study.

Dziegielewska-Perry said the study calculated \$151 billion in benefits derived from nine sectors, including manufacturing, tourism, agriculture, mineral resources, energy, navigation, outdoor recreation, harvest of natural resources, and water supply. Manufacturing was found to be the largest sector in terms of revenues (70 percent) and employment (35 percent). The river provides a means of transporting raw materials to manufacturing facilities, as well as primary and finished products from production sites to distributors. Manufacturers also draw water directly from the river for use in production processing, washing, and cooling.

The tourism sector includes annual expenditures of \$15.5 billion and employs over 190,000 people. Tourism activities associated with the river include direct use for river cruises and festivals, as well as indirect benefits arising from its desirable location and role in the initial settlement and creation of cities and towns. Dziegielewska-Perry pointed out that the tourism sector is extremely sensitive to events such as hurricanes, recessions, and oil spills. However, she said there was less of an impact to tourism than anticipated after the Deepwater Horizon spill due to efforts to communicate the true impact of the spill at specific locations.

The agricultural sector was found to provide annual revenues of \$8.7 billion and employment for 56,000 individuals. A key factor in this sector was the low cost of transportation for inputs of agricultural production and delivery of agricultural products to markets. Water supply from the LMR is also necessary for conventional and irrigated agriculture. The fertility of alluvial soil was also considered as a benefit.

The mineral resources sector provides \$7.8 billion in annual revenues and employs over 40,000 people. Mineral resources encompass both fossil fuel and non-fuel mineral extraction such as salt, clay, crushed stone, and sand and gravel. The low cost of transportation is also important in this sector. The LMR also provides a source of water necessary for many mineral extraction activities.

The energy sector on the LMR was found to contribute annual revenues of \$6.7 billion, while the sector provides employment for more than 2,700 people. Once again, the low cost of shipping coal and other materials to power plants was an important factor. The LMR also provides a significant source of cooling water for fossil fuel and nuclear power plants.

The economic profile found that the navigation sector contributes \$4.2 billion in annual revenue and employs nearly 19,000 individuals. Annual shipments on the LMR total nearly 475 million tons of agricultural, energy, mining, and manufacturing commodities. Numerous ports that store, load, unload, and transport cargo also showed significant effect. Dziegielewska-Perry noted that the Panama Canal extension has the potential to increase this sector's benefits.

Outdoor recreation on the LMR was found to contribute \$1.3 billion and employ nearly 55,000 people. The primary outdoor activities analyzed included hunting, wildlife watching, and fishing. Trip related expenditures such as food, lodging, and transportation were included in this analysis. Dziegielewska-Perry said outdoor recreation is not typically included as an independent sector, but the study team thought it important to quantify the potential benefits. She said there is possibly some overlap with the tourism sector in this sector's analysis.

The harvest of natural resources sector was found to contribute over a half a billion dollars, while providing employment for nearly 14,000 individuals. This sector includes timber harvesting, freshwater and marine fishing, hunting, and trapping.

The analysis showed that the water supply sector provides annual revenues of nearly half a billion dollars and employs approximately 600 people. However, Dziegielewska-Perry noted that the employment totals may underrepresent actual employment in this sector.

Dziegielewska-Perry again noted that the study team had sought to assign value to the ecosystem services sector, but were unable to do so successfully. As an example, she said the market for carbon storage has not fully developed. However, quantifying a value for this and other ecosystem services such as wetlands and habitat may be possible in the future.

Dziegielewska-Perry said there are a number of things missing from the analysis. She said the values from the Upper Mississippi River were not included in the economic profile. An economic profile of the Upper Mississippi was completed in the 1990s, and she said there is a window of opportunity to update UMR data for a more comprehensive economic profile of the Mississippi River. The study team did not include the potential losses resulting from climate change, nor did they include the potential gains from adaptation activities.

In response to a question from Diane Ford, Dziegielewska-Perry said the human health benefit arising from the use of natural areas was not considered in the LMR economic profile. Ford asked if the analysis had potential application in the attraction of businesses to the region, and Dziegielewska-Perry said the results could be used in marketing efforts. In response to a question from Sreedhar Upendram, Dziegielewska-Perry said only direct numbers were used in the analysis. She said she agreed that an input-output economic model could be used to assess indirect impacts from the recreation and tourism sectors, but the study's focus was within the LMR region. In response to a question from Marv Hubbell, Dziegielewska-Perry said the LMR economic profile project cost approximately \$75,000. However, she indicated the cost for a similar study on the UMR would depend on how detailed the analysis was proposed to be. In response to a question from Dru Buntin, Rodgers said the Walton Family Foundation funded the study through LMRCC and the organization contracted directly with Dziegielewska-Perry and Industrial Economics, Inc. Buntin said depending upon Board interest, UMRBA staff could reach out to the Walton Family Foundation to gauge their willingness to fund a similar effort on the UMR. Bryan Hopkins said the MRCTI mayors received a briefing regarding the

LMR economic profile and were very enthusiastic about the report. Bob Clevenstine pointed out that the 1990s analysis on the UMR had significant gaps that should be addressed if an updated analysis is pursued.

Navigation

Inland Rivers, Ports, and Terminals Association Activities

Aimee Andres provided background on the Inland Rivers, Ports, and Terminals Association (IRPT) as well as an update on recent IRPT activities. IRPT is a trade association for the nation's inland waterway, port, and terminal professionals. Its mission is to provide a platform for such professionals to improve their businesses. IRPT also seeks to inform policy makers on the needs and economic benefits of the industry. Andres provided information on IRPT members and said the organization has established individual river basin working groups that have begun to discuss and address issues specific to their basins. Following the previous presentation on the LMR economic profile, Andres pointed out that IRPT members are interested in an analysis regarding the economic benefit of the inland waterways system. Andres said some of the issues currently being addressed by IRPT include tonnage reporting, dredging concerns, as well as the economic impact study previously mentioned.

Andres said the issue of the potential underreporting of tonnage was first raised by IRPT members in September 2013. IRPT subsequently hosted a tonnage reporting webinar and met with Corps officials to discuss the issue. The issue was further discussed at IRPT's annual conference held in St. Louis in April 2014. IRPT is continuing to work with members and the Corps to investigate strategies to improve the accuracy of tonnage reporting.

Andres said IRPT has established a dredging focus group to work state departments of transportation, the Corps, ports, USDOT, and contractors to improve the efficiency of dredging activities. IRPT members have proposed legislation that would establish matching funding for ports to increase dredging activities. Andres said dredging is critically important in improving the reliability of the inland waterways system.

Andres said IRPT is interested in working with partners to undertake an economic impact analysis to estimate the benefits of inland waterways operations. This would include the economic benefit resulting from private terminals, public ports, waterways operators, commodity shipments, and other factors. Andres said no collective study projecting such benefits currently exists. In response to a question from Dan Baumann, Andres said she was unaware if the LMR economic profile considered the benefit derived from dredging activities. In response to a comment from Olivia Dorothy, Andres said she is aware of a loan program in Louisiana designed to provide funding for capital improvements on the waterways. In response to a question from Brad Walker, Andres said IRPT envisions that a study of the economic value of the inland waterways would be comprehensive, but also be broken down into specific geographic areas in order to calculate the specific economic benefit of the industry in a given region. Bill Paape said that the Maritime Administration is partnering with the American Waterways Operators on an economic study of the inland waterways and hopes to have it completed by the end of this year.

Legislative Update

Paul Rohde provided an update on federal legislative activities affecting the inland waterways. He indicated that the President is expected to sign the 2014 Water Resources Reform and Development Act (WRRDA) in the next few days. He said a number of factors combined to make the WRRDA process particularly challenging. Nearly half of the members of the House of Representatives were not in office when the last water resources authorization bill was passed in 2007. In addition, members debates

extensively on streamlining provisions such as the three-year limit on project studies, the \$3 million limit on study cost, and the three levels of project review. Rohde said debate over the federal share of the Olmsted project, as well as the differing view regarding how to authorize projects without conflict with the rules on Congressionally directed spending also proved challenging. Rohde highlighted some specific WRRDA provisions of significance to the inland waterways system, including:

- A requirement for project managers to have training and certification
- Assessment of locks based on the risk of failure as well as the economic impact resulting from said failure
- Provisions requiring the early involvement of contractors in projects
- Establishment of at least one center of expertise
- Standardization of lock design
- Further definition of the role of the Inland Waterways Users Board (IWUB)
- Establishment of a baseline for rehabilitation
- Requirement that the Assistant Secretary of the Army and the IWUB prepare a twenty-year program for system capital investments
- Modification for the remaining cost share on the Olmsted project
- Requirement for public input on the reduction of service at locks

Rohde said one significant issue not addressed in WRRDA is the increase to the fuel tax requested by the industry. The WRRDA bill does establish a pilot program for public-private partnerships (P3s) on Corps projects, and Rohde said he was aware that this issue would be discussed at the UMR Navigation Summit in July. He said the Soy Transportation Coalition has completed a study on the potential of P3s on the Upper Mississippi River. Rohde said WRRDA also includes a requirement that an increased amount of revenue into the Harbor Maintenance Trust Fund flow to harbor projects. The new law also requires the closure of the Upper St. Anthony lock on the UMRS.

Rohde said, while WRRDA did not increase the fuel tax, a Sense of Congress provision indicating that existing revenues are insufficient and citing industry support for an increase. He said industry has been working with members of Congress and other partners in an attempt to get a 9 cent increase in the fuel tax included in tax reform and extender legislation currently being considered in the House and Senate. Rohde said absent action on this increase, and coupled with the significant IWTF dollars dedicated to the Olmsted project, it is unlikely that the UMRS locks authorized in the 2007 Water Resources Development Act would receive a new start prior to 2040. In response to a question from Arlan Juhl, Rohde said industry is willing to discuss the potential of P3 projects, but many questions remain regarding how to draw private investment without forcing shipments off the river.

Upper Mississippi River Navigation Summit

Kirsten Mickelsen reminded Board members and attendees that UMRBA will be hosting a Navigation Summit on July 9-10, 2014 in St. Louis. The first day of the summit will include panel discussions on a variety of topics of significance to navigation on the UMRS. The second day will include only state participants, allowing the state agency representatives to discuss issues and decide a path forward for potential collective advocacy. Topics to be discussed at the summit include:

- Upper Mississippi River System shipments, the importance of the system, status of the infrastructure, and investment priorities
- Creating an intermodal transportation network that enhances the inland waterways

- The potential for public-private partnerships on UMRS projects
- Strengthening regional partnerships among UMRS ports

Mickelsen invited anyone interested in these issues to attend the summit.

Hazardous Spills Exercise

Dave Hokanson provided the Board with an update regarding an April 16, 2014 tabletop spill response exercise held in La Crosse, Wisconsin and facilitated by the Upper Mississippi River Hazardous Spills Coordination Group (Spills Group). Hokanson said the exercise included 72 participants from state and federal agencies, local emergency response organizations, industry, elected officials, and UMRBA staff. The goal of the effort was to bring together local, state, federal, and private sector partners to exercise specific capabilities and areas of concern. The exercise also was designed to test and use existing plans and tools such as the UMR Spill Plan and the Inland Sensitivity Atlas, and to support the development of new tools such as the Pool 8 geographic response plan. Hokanson said the initial response portion of the exercise focused on communications and notification, incident management, safety, and public information management. Other key focus areas included wildlife and environmental issues, transportation and infrastructure impacts, and other longer-term issues.

Hokanson said the event scenario used in the exercise was a derailment and release near mile marker 293 on the Wisconsin side of the river. In the scenario, five rail cars spilled approximately 150,000 gallons of Bakken crude oil into the river. The spill reached the river in the Goose Island area and started spreading across the river in the scenario. In the tabletop exercise, the spill happened at approximately 2:00 a.m. There was not a large fire associated with the spill, but the stopped train was backed up into La Crosse and interfered with road traffic. The scenario spill occurred during the fall migration season with waterfowl congregated in the area.

Hokanson said the exercise uncovered a number of response issues and considerations, including:

- Complications arising from the number of potential entities involved
- Issues surrounding the implementation of incident command
- Challenging nature of the geography of the location
- Limited nearby response resources and amount of time required for sufficient equipment to arrive
- Control of access to the area by both land and water as well as the number of personnel needed to secure the area
- Safety issues, the effect on response, and monitoring related to safety (i.e., air monitoring)
- Impacts to local traffic
- Potential need for evacuation
- The importance of public communication
- Need for volunteer management plans
- Large waterfowl presence

Hokanson said the exercise was successful in the breadth of groups represented and the exchange of information. Notification, safety, and waterfowl impacts were areas addressed well in the effort. Hokanson said additional attention is required to address the establishment and structure of an incident command system as well as internal and external communication. A need for subsequent activities was

also found regarding specific response tactics, the use of the UMR Spill Plan and Inland Sensitivity Atlas, and the Natural Resource Damage Assessment (NRDA).

Hokanson said next steps include the development of the Pool 8 Geographic Response Plan and a possible functional exercise in Fall 2014.

Administrative Issues

Office Lease

Dan Baumann offered and Diane Ford seconded a motion authorizing the Executive Director to execute a new five-year lease for UMRBA's existing office space in the Hamm Building in St. Paul and to expend an amount not to exceed \$5,000 for upgrades to the office space. The motion was adopted unanimously on a voice vote.

UMRBA FY2015 Budget

Robert Stout offered and Dan Baumann seconded a motion to adopt the FY2015 UMRBA budget. The motion was adopted unanimously on a voice vote.

Future Meeting Schedule

Buntin said the next meeting series will be held August 5-6, 2014 in East Peoria, with the UMRBA Quarterly meeting on the 5th and UMRR-EMP CC on the 6th. The November meetings will be held November 17-19, 2014 in St. Paul with the UMRBA WQEC meeting on the 17th, the UMRBA quarterly meeting on the 18th, and UMRR-EMP CC on the 19th. The February quarterly meetings will be held February 10-11, 2015 in the Quad Cities.

With no further business, Robert Stout offered and Dan Baumann seconded a motion to adjourn. The motion passed unanimously, and the meeting adjourned at 4:43 p.m.