

**Minutes of the 135th Quarterly Meeting
of the
Upper Mississippi River Basin Association**

**August 4, 2015
Onalaska, Wisconsin**

UMRBA Chair Dan Baumann called the meeting to order at 9:30 a.m. Participants were as follows:

UMRBA Representatives, Alternates:

Dan Stephenson	Illinois Department of Natural Resources
Tim Hall	Iowa Department of Natural Resources
Dave Frederickson	Minnesota Department of Agriculture
Barb Naramore	Minnesota 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
Susan Sylvester	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Gregory Miller	U.S. Army Corps of Engineers, MVD
Ken Westlake	U.S. Environmental Protection Agency, Region 5 (by phone)
Sabrina Chandler	U.S. Fish and Wildlife Service
Scott Morlock	U.S. Geological Survey

Others in Attendance:

Garrett Pedersen	Iowa Department of Transportation (by phone)
Whitney Place	Minnesota Department of Agriculture
Lorisa Smith	Missouri Department of Natural Resources
Sreedhar Upendram	Missouri Department of Natural Resources
Kathy Heady	Wisconsin Economic Development Corporation
Chris Erickson	U.S. Army Corps of Engineers, MVP
Tom Novak	U.S. Army Corps of Engineers, MVP
Steve Tapp	U.S. Army Corps of Engineers, MVP
Gary Meden	U.S. Army Corps of Engineers, MVR
Ken Barr	U.S. Army Corps of Engineers, MVR
Marv Hubbell	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Tim Eagan	U.S. Army Corps of Engineers, MVS
Kat McCain	U.S. Army Corps of Engineers, MVS
Kelly Baerwaldt	U.S. Fish and Wildlife Service
Sam Finney	U.S. Fish and Wildlife Service
Kraig McPeck	U.S. Fish and Wildlife Service
Tim Yager	U.S. Fish and Wildlife Service
Mark Gaikowski	U.S. Geological Survey, UMESC
Jennifer Sauer	U.S. Geological Survey, UMESC

Amy Beussink	U.S. Geological Survey, Missouri Water Science Center
Mike Welvaert	National Weather Service
Rich Goldstein	Alter Logistics
Tom Boland	Amec Foster Wheeler
Jordy Jordahl	America's Watershed Initiative
Olivia Dorothy	American Rivers
David Johnson	HDR
Colin Wellenkamp	Mississippi River Cities and Towns Initiative (by phone)
Brad Walker	Missouri Coalition for the Environment
Gretchen Benjamin	The Nature Conservancy
Mike Klingner	Upper Mississippi, Illinois, and Missouri Rivers Association
Dru Buntin	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

Minutes

Robert Stout moved and Tim Hall seconded a motion to approve the draft minutes of the May 5, 2015 quarterly meeting as written. The motion carried unanimously on a voice vote.

Executive Director's Report

Association Chair Dan Baumann explained that the Executive Director's Report for this quarterly meeting has an expanded format to allow for more discussion of UMRBA focus area activities. Baumann encouraged partners to participate in the discussion.

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, in the *Aquatic Nuisance Species focus area*, Buntin said UMRBA staff participated in a USACE Great Lakes and Mississippi River Interbasin Study (GLMRIS) stakeholder conference call on May 27, 2015. Kirsten Mickelsen also attended a June 2, 2015 meeting of the GLMRIS Executive Steering Committee in Chicago, Illinois. Both meetings included discussions of the Brandon Road feasibility study development. Mickelsen said the study received an exemption from the time limitations contained in USACE 3x3x3 planning requirements. Gary Meden said the current schedule includes identifying a tentatively selected plan in January 2017 and completing a Chief's Report in January 2019. Dan Stephenson noted that the Illinois Department of Natural Resources has concerns regarding the potential impacts to native fish passage at the Brandon Road site. Illinois has participated in the removal of dams above the Brandon Road site and Stephenson said these efforts could be compromised by some of the aquatic nuisance species control measures under consideration. Dan Baumann said there are numerous state, local, and non-governmental organizations working on aquatic nuisance species (ANS) control and asked if UMRBA staff was tracking such efforts. Baumann said UMRBA's website could potentially be a mechanism to share information on ANS initiatives. Buntin said this is certainly a possibility, but indicated staff's focus to date has primarily been on tracking the GLMRIS report and subsequent analysis.

In the *Commercial Navigation focus area*, Buntin said he, Gretchen Benjamin with the Nature Conservancy (TNC), and Paul Rohde with the Waterways Council, Inc. (WCI) participated in advocacy meetings regarding the Navigation and Ecosystem Sustainability Program (NESP) with Congressional and Administration staff in Washington, DC on July 6-8, 2015. Buntin said the Administration is in the process of preparing its FY 2017 budget request and Congressional delegation members are organizing a letter to the Administration requesting the inclusion of funding for NESP. Buntin said Kirsten Mickelsen attended the Mid-America Port Commission's June 29, 2015 container shipping meeting in

Quincy, Illinois. Mickelsen said issues causing delays in shipping from the west coast have resulted in heightened interest in container shipping on the inland waterways. In response to a question from Jim Fischer, Mickelsen said a variety of materials are shipped in containers, including food products, lower value manufactured good, and non-bulk cargos.

In the *Ecosystem Restoration and Monitoring focus area*, Buntin described some of the challenges in advocacy for Upper Mississippi River Restoration (UMRR) program funding. The House and Senate Appropriations Committees' staff interpretation of the rules prohibiting Congressionally directed spending or "earmarks" have resulted in members being unable to add funding for programs above and beyond what is included in the Administration's budget request. The President's FY 2016 budget includes 19.7 million for UMRR, which is a ---cut from the previous fiscal year. Given the earmarks rule, members are unable to increase funding to the program. Several UMR Congressional delegation members submitted funding requests for UMRR's full authorized amount of \$33.17 million, but were told that these requests are earmarks and thus are prohibited. Buntin said Congressional members can only add funding in the Corps' broad categorical mission, such as ecosystem restoration and compliance, rather than directing funding to specific programs or projects. The Administration then determines how such additional funding is allocated in the Corps' work plan. Buntin said UMRR partners have been advocating that Congressional delegation members support additional funding in the Ecosystem Restoration category in the hopes that such funding would be allocated to UMRR in the Corps' work plan for FY 2016. Buntin indicated that the Senate FY 2016 Energy and Water Appropriations legislation includes additional Ecosystem Restoration categorical funding.

In response to a question from Robert Stout, Marv Hubbell said the primary impact of reduced funding for UMRR would be a delay in the construction schedule for some projects. Hubbell said the existing construction schedules were designed to maximize the efficiency of funding. A funding reduction would disrupt this schedule and have impacts beyond one fiscal year. Buntin said UMRR partners met with staff in the office of the Assistant Secretary of the Army (ASA) for Civil Works regarding UMRR funding. In this meeting, ASA staff suggested that UMRR partners take an approach similar to that used by the restoration program in the Everglades, where projects are scheduled to maximize the efficiency of funding. Buntin indicated that partners have been working with the Corps to focus UMRR's message in this regard.

Buntin said he participated along with a number of other UMRR program partners in briefings and a field tour on July 8-11, 2015 for Mindy Simmons from USACE Headquarters and Claire Purviance from USACE MVD. The event included a series of briefings and site visits at the Illinois River Biological Station at Havana, Illinois, the Mississippi River Museum in Dubuque, as well as numerous habitat project sites near Peoria, the Quad Cities, and Dubuque. Buntin said the visit was very productive. Hubbell said the visit was notable in the amount of time Headquarters and MVD staff spent on site and shows their interest in the program. In response to a question from Jennie Sauer, Hubbell said the primary focus of the field visits was habitat project implementation but the long term resource monitoring database was also discussed during the briefings.

Buntin said UMRBA staff continues to provide support services for the development of the UMRR operational plan identifying implementing actions for the UMRR Strategic Plan. Hubbell said the operational planning team will have at least one more meeting prior to reporting back to the UMRR Coordinating Committee. Mickelsen indicated that this topic is included as an informational update only on the UMRR Coordinating Committee meeting agenda tomorrow. The final operational plan is not completed.

In the *Spill Response Planning and Mapping focus area*, Buntin asked Dave Hokanson to provide an update of Association activity. Hokanson said Oil Pollution Act (OPA) project staff continue to work on completion of the Minnesota statewide update of the Inland Sensitivity Atlas, with delivery of the

final project to USEPA anticipated in late August or early September 2015. Hokanson said OPA staff have also begun to compile data for the Illinois update, which is the next state to be completed in the ongoing update process. Project staff also continue to support the development of geographic response plans (GRPs) for selected sensitive areas in the region, with the latest GRP development focused on UMR Pools 5, 5a, and 6. Hokanson said UMRBA's Mark Ellis has also assisted in the development of a GRP for a pipeline route in eastern Wisconsin.

Hokanson said the UMR Spills Group met via conference call on July 21, 2015 to discuss Spills Group-sponsored training activities, the signature process for the memorandum of agreement governing the *UMR Spill Response Plan and Resource Manual*, and the development and use of an e-mail list serve to provide information regarding UMR spill events. The next UMR Spills Group meeting is scheduled for October 2015 in the Quad Cities. On behalf of the UMR Spills Group, Hokanson said he presented the outcomes of the Group's October 2014 functional spill response exercise to participants in the FEMA-sponsored Wisconsin Operation Safe Delivery Exercise on June 10, 2015 in Onalaska, Wisconsin.

In the *Water Quality focus area*, Buntin asked Hokanson to provide an update of Association activities. Hokanson reported that the Association's Water Quality Executive Committee (WQEC) and Water Quality Task Force (WQTF) met in joint session on June 2-3, 2015 in Davenport, Iowa. Topics addressed at the meeting included:

- Updates from all UMR states and USEPA Region 5 regarding implementation of state nutrient reduction strategies
- Presentation from the City of Davenport's Public Works Director regarding stormwater management and green infrastructure
- Conversation with Mississippi River Cities and Towns Initiative (MRCTI) leadership and staff regarding the mayors' upcoming annual meeting in Dubuque, Iowa
- Review of the *Provisional Methodology for Clean Water Act Assessment of the Upper Mississippi River*
- Presentation of recent UMR water quality research
- Update on UMR CWA monitoring strategy implementation
- Demonstration of a web-based UMR water quality viewer
- Discussion of recent spill events on the UMR

WQEC Chair Susan Sylvester said the meeting was extremely productive and expressed her appreciation to everyone who participated. Hokanson noted that Glenn Skuta of the Minnesota Pollution Control Agency succeeded Mohsen Dkhili of the Missouri Department of Natural Resources as WQTF Chair at the conclusion of the June meeting. Buntin indicated that Sylvester is scheduled to give a presentation regarding UMR state water quality work at the MRCTI meeting on September 15-17, 2015 in Dubuque. Buntin said the mayors are particularly interested in how they can assist with state nutrient reduction strategy implementation.

In the *Cross-Cutting Initiatives and Collaboration focus area*, Buntin said he participated in a July 7-8, 2015 America's Watershed Initiative (AWI) meeting in Arlington, Virginia regarding message development for the Mississippi River basin report cards. The report cards are scheduled to be released at an AWI Watershed Caucus in St. Louis on October 14, 2015.

Buntin said he is scheduled to attend an Interstate Council on Water Policy (ICWP) Board of Directors strategic planning meeting on August 11-13, 2015 in Omaha, Nebraska. He said ICWP delivered the FY 2016 streamgauge support letter to House and Senate Appropriations Committee leadership on

June 9, 2015. Buntin said ICWP will be hosting three regional meetings to collect stakeholder input for the newly announced USGS Water Use Grant Program. One of the regional meetings will be held in Chicago during late October 2015. Buntin reminded Board members that UMRBA is a member of ICWP, as are the states of Illinois, Minnesota, and Missouri.

Buntin said UMRBA received the initial draft of the preliminary Upper Mississippi River economic profile from the USFWS Division of Economics in late July. Association staff are working in collaboration with the Nature Conservancy to prepare a brochure highlighting the preliminary results for use at the MRCTI meeting in September. Buntin said the preliminary profile includes chapters on agriculture, manufacturing, mineral extraction, outdoor recreation, commercial navigation, natural resource harvesting, tourism, energy production, natural resource services, and water supply.

Buntin said he attended a May 19, 2015 event in Davenport, Iowa where Lt. General Thomas Bostick, the U.S. Army's Chief of Engineers and Commander of the U.S. Army Corps of Engineers, provided an update regarding the Army's Military Construction Program and the Corps' Civil Works Mission. General Bostick also visited with stakeholders at a reception following the presentation and Buntin indicated he provided information to the General regarding the UMRBA states' collective work. Buntin noted that UMRBA joined TNC, the Quad Cities Chamber of Commerce, the Rock Island Arsenal Chapter of the Association of the United States Army, and the Rock Island Post of the Society of American Military Engineers in sponsoring the event.

Buntin directed the Board's attention to page B-9 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 April 1, 2015 through June 30, 2015. Dave Frederickson offered and Robert Stout seconded a motion to approve the Treasurer's statement. The Board unanimously adopted the motion by voice vote.

In response to a question from Brad Walker, Buntin said that the Office of Management and Budget (OMB) had responded to a UMR Congressional delegation letter requesting the inclusion of funding for NESP in the FY 2016 budget and a copy of OMB's response was available on the back table of the meeting room. In the response, OMB noted that funding for NESP was not included in the FY 2016 budget because the Administration found that the commercial navigation portion of NESP did not have sufficient estimated economic return to warrant inclusion. Buntin noted that the Corps has directed funding to scope an updated economic analysis of NESP.

UMRS-Related State and Federal Agency Recent Activities

Wisconsin

Association Chair Baumann noted this agenda topic, similar to the expanded Executive Director's report, was included to allow an opportunity for discussion regarding state and federal partner activities. He introduced Susan Sylvester to provide an update on Wisconsin activities.

Sylvester described Wisconsin's efforts to focus and prioritize total maximum daily load (TMDL) development in key areas for restoration and protection. Priority areas include those identified through the Wisconsin Healthy Watersheds Assessment and Wisconsin's nutrient reduction strategy, as well as areas where TMDLs are currently in development. Sylvester said a TMDL to address phosphorus impairments on the Wisconsin River is under development with approval by USEPA anticipated to occur in 2017. Wisconsin DNR is providing assistance to Minnesota PCA to develop a sediment/total suspended solids TMDL for Lake Pepin, with submission to USEPA anticipated in late 2015.

Sylvester highlighted several examples of citizen engagement efforts related to water quality. She said farmer-led councils in the St. Croix and Red Cedar watershed that are enjoying good success. The

farmers in these watersheds are carrying out conservation incentive program activities, including grass waterway installations, conservation walkovers, soil sampling, field days, cover crop and tillage test plots, instream monitoring, field monitoring, and edge-of-field sampling. Sylvester indicated the projects are being implemented with Wisconsin Clean Water funding and county land conservation and University of Wisconsin Extension staff members are the lead contacts with these councils. Sylvester said the state is coordinating with rural communities and conservation groups in the Rock River basin to develop a Nonpoint Source (NPS) Implementation Strategy. They are working with watershed groups, conservation staff, and the agricultural community to foster implementation of best management practices (BMPs), nutrient management, and soil conservation, as well as the development of nine key element watershed plans. Sylvester said Wisconsin has also developed an erosion vulnerability assessment tool for agricultural lands that can help watershed managers prioritize areas vulnerable to erosion that may be contributing to downstream surface water quality problems. The tool enables prioritization of field-scale data collection efforts, saving time and money while increasing the probability of implementation of BMPs on fields with high sediment and nutrient export.

Sylvester said the state is also working with point source permit holders and the NPS community to support adaptive management and water quality trading projects. Wisconsin has developed and submitted to USEPA a multi-discharger variance to allow point sources to commit to step-wise reductions of phosphorus as well as to help to address nonpoint sources of phosphorus by paying \$50 per pound to implement projects designed to improve water quality.

Sylvester said Wisconsin continues to participate in a variety of UMRR work, including project planning and implementation, monitoring habitat project performance and ecosystem response, development of the 2015-25 Strategic Plan, and long-term resource monitoring (LTRM) in support of restoration. Sylvester asked Jim Fischer to report on additional issues. Fischer pointed out that the LTRM work to identify relevant thresholds of ecological shifts will help with project design. Fischer said UMRR work is also helping to inform the potential development of river-specific language highlighting the global significance of the Mississippi River in the Wisconsin Wildlife Action Plan. Fischer said Wisconsin is working with Minnesota and UMRBA on implementation of a field pilot of the UMR CWA monitoring strategy in 2016.

Fischer noted that the Corps' channel maintenance funding has not kept pace with the current needs. Wisconsin is seeking and facilitating development of alternate beneficial uses of dredged material, though the state is limited in staff and ability to support this. Fischer said current planning efforts are being outpaced by increasing needs for dredging and the resulting volume of material with limited placement sites.

Dan Baumann said the Wisconsin DNR is undergoing a change in alignment. He said the agency has undertaken a large effort to focus on defining core work as well as determining which current work is statutorily required. Baumann said he would keep partners informed as this effort progresses.

Minnesota

Dave Frederickson provided an update for the State of Minnesota. Frederickson described the Minnesota Agricultural Water Quality Certification Program, a voluntary opportunity for farmers and agricultural landowners to take the lead in implementing conservation practices that protect water quality. Those who implement and maintain approved farm management practices are certified and in turn obtain regulatory certainty for a period of ten years. Frederickson recognized Whitney Place, who was in attendance, for her work on the program. Minnesota is using state funding and federal grant funding from the NRCS Regional Conservation Partnership Program (RCPP) to expand the program statewide from pilot implementation in a limited number of counties. To date, the program includes the participation of 48 farms and 30,000 acres, with plans to significantly expand with statewide

implementation. Similar to Wisconsin, Frederickson said Minnesota has developed an evaluation tool to help agricultural producers identify the most appropriate conservation practices for implementation in priority watersheds.

Frederickson said Minnesota Governor Mark Dayton, in conjunction with Pheasants Forever, called a Minnesota Pheasant Summit in December 2014. Attendees at this event identified stream buffer habitat creation as the top priority issue on which state conservation leaders should focus. In response to this input, in January 2015 Governor Dayton proposed that the state legislature enact legislation to establish a 50-foot buffer strip along state waterways – an effort estimated to create 125,000 acres of upland habitat while also providing soil conservation and water quality benefits. Frederickson said the buffer legislation subsequently adopted by the Minnesota legislature, while less stringent than the Governor’s proposal, included a significant increase of waterway buffer requirements. Under the new law, 50-foot buffers must be installed on public waters by November 2017 and 16.5-foot buffers on public ditches by November 2018. The Department of Natural Resources will map all public waters and ditches that will be subject to buffers. Frederickson said the legislature appropriated \$22 million in state funding to watershed districts to implement the law.

Frederickson said the Minnesota Department of Agriculture has initiated a study on the impacts of nitrate on up to 70,000 rural wells. Initial study results have shown nitrate levels of up to 20-30 milligrams per liter in highly impacted agricultural areas.

Frederickson said he also serves as Chair of the Minnesota Environmental Quality Board (EQB), an entity designed to facilitate coordination among state agencies on natural resource issues. He said the EQB is currently finalizing a water report designed to categorize the baseline condition of the state’s waters.

In response to a question from Mike Klingner, Frederickson said he is hopeful that incentive payments at the rental rate can be provided to landowners for implementation of the new buffer requirements. He indicated that NRCS’ Conservation Reserve Program (CRP) might be one mechanism to do this, although such an approach would likely require buffers of at least 30 feet as opposed to the 16.5 feet required in the new law for public ditches. In response to a question from Jim Fischer, Frederickson estimated that the tipping point for economic benefit to producers implementing buffers and receiving CRP payments would be below the current corn price of \$3.01 per bushel. In response to a question from Sreedhar Upendram, Frederickson indicated that the cost of agricultural production is fairly flat with some slow decline.

Frederickson asked Barb Naramore to provide an update on some additional topics of interest. Naramore said the Minnesota Pollution Control Agency (MPCA) is leading a rotating watershed assessment designed to unify multiple planning efforts under a “One Watershed, One Plan” approach. She indicated that the legislature has strongly supported this effort. Naramore said the state is increasing efforts to look at areas where water quality impacts may affect water quantity and the implications for state water withdrawal permits.

Naramore said Minnesota has a comprehensive approach to slow the spread of aquatic nuisance species and the state has data showing the benefits of these efforts. She said the state is hopeful that the closure of the Upper St. Anthony Falls lock, in combination with other efforts, will be effective in addressing the spread of invasive carp.

Naramore provided brief updates on several other topics. She indicated that Minnesota has established a new mussel propagation facility in Lake City, Minnesota. Naramore said the state remains interested in working with the Corps to resolve issues related to problematic indemnification provisions in the agency’s project partnership agreements (PPAs) – provisions that are preventing the state from entering

into new PPAs with the Corps. Naramore said the Minnesota DNR is hopeful that an environmental assessment (EA) on the lock and dam 1 scour repair project will be completed soon. Naramore said the decrease in demand for silica sand has given the state more time to complete the development of new rules governing sand mining.

In response to a question from Robert Stout, Naramore said Governor Dayton's original buffer proposal charged the DNR with enforcement, but the legislation adopted by the Minnesota Legislature provided this authority to local watershed districts and the Minnesota Board of Water and Soil Resources (BWSR). In response to an additional question from Stout, Frederickson said the well testing done by the Minnesota Department of Agriculture is focused on nitrates. Naramore indicated the Minnesota Department of Health does conduct some testing for arsenic. In response to a question from Marv Hubbell, Frederickson said the approach to monitoring and enforcement of the buffer requirements will likely be different in different watersheds as determined by local watershed districts and BWSR.

Iowa

Tim Hall provided an update on UMRS-relevant issues on behalf of Iowa. Hall said the Iowa Department of Natural Resources has been working with the Iowa Department of Transportation to modify the mitigation approach to compensate for stream impacts from transportation projects in the same HUC-8 watershed where the impacts occur. The Iowa DNR has been coordinating with neighboring states to gather lessons-learned from other state mitigation programs. Hall indicated that DNR would be submitting a report on the mitigation approach to the Iowa Legislature in January 2016 and the agency hopes to implement the new approach in 2016.

Hall asked Garret Pedersen to provide Iowa's update on transportation issues related to inland waterways. Pedersen said Iowa is interested in continuing to work with other UMR states on the M-35 Marine Highway. The Iowa Department of Transportation joined with the departments of transportation from the other four UMR states to request the M-35 designation from the Administrator of the Maritime Administration (MARAD) and this designation was granted in 2014. The M-35 corridor runs from the Twin Cities to Grafton, Illinois. Since the designation, the five states have been working through UMRBA and the Association's Navigation Work Group to develop the governance architecture for the corridor. Pederson said the M-35 designation has already been successful in bringing more visibility to the importance of the UMRS.

Pedersen provided information regarding the development of Iowa's State Freight Plan. The Moving Ahead for Progress in the 21st Century (MAP-21) transportation authorization legislation enacted in 2012 strongly encouraged states to develop state freight plans. Pedersen said the Iowa's approach in developing the state freight plan has entailed inclusion of the state rail plan update. The anticipated date for completion of the Iowa Freight Plan is July 2016. Pedersen said Iowa believes it important for all UMR states to include inland waterways strategies and issues in state transportation planning. He said the U.S. Department of Transportation has suggested that states use these planning efforts to identify bottlenecks in their respective transportation networks. In response to this recommendation, Iowa completed a freight mobility study with DOT districts and regional and local planning organizations to identify constraints across all transportation modes. Pedersen said this study includes information and feedback received on river-specific issues such as some swing-span bridges impacting river commerce. He said Iowa welcomes input from the Corps and other partners on additional ways to highlight inland waterways issues. Pedersen indicated that Iowa's Transportation Commission has an upcoming meeting in early fall in Northeast Iowa and this meeting may include a site visit to Lock and Dam 10 near Guttenberg, Iowa.

Illinois

Dan Stephenson provided an update for Illinois. Stephenson said Illinois' Nutrient Loss Reduction Strategy is completed and is now being implemented. The strategy was developed by a policy working group led by the Illinois Water Resource Center-Illinois Indiana Sea Grant, the Illinois Environmental Protection Agency, and the Illinois Department of Agriculture. Group members included representatives from state and federal agencies, agriculture, and non-profit organizations as well as scientists and wastewater treatment professionals.

Stephenson said the Illinois UMRR field stations continue to work on expanding use of LTRM protocols to other areas of the state. Use of LTRM protocols now occurs on the entire Mississippi River, as well as the Ohio and Wabash Rivers. Stephenson said the Department of Natural Resources is working with the Forest Preserve District of DuPage County as well as the Excelon Corporation on mussel propagation in the state.

Stephenson said Illinois continues to work on various efforts to control invasive Asian carp. The state provides funding to commercial fishermen harvesting the invasive carp and has also undertaken netting aimed at controlling the carp from Starved Rock to the Brandon Road Lock and Dam site. Stephenson indicated the Asian carp invasion front on the Illinois River has not significantly moved since 2006 although a few young non-reproducing carp have been found above Starved Rock. He said some of the harvested carp are used in fertilizer production. In response to a question from Dan Baumann, Stephenson said they are not seeing emerging markets for Asian carp as the cost of harvest of 10 to 12 cents per pound is too high to sustain identified markets. In response to a question from Barb Naramore, Stephenson said the incidental impacts to other fish species from the invasive carp netting efforts is fairly low as the methods used are selective. He indicated many larger invasive carp have been harvested and the state is considering reducing the net size in future efforts. In response to a question from Baumann, Stephenson said there is no comprehensive data on the existing population of Asian carp present in the system. Consequently, it is not possible to determine the percentage of the overall invasive carp being harvested. However, he said it appears that the amount of carp harvested is playing a role in the stability of the invasion front. In response to a question from Mike Klingner, Stephenson said he was unaware of the status of the update to the Illinois administrative code related to the state's floodplain management program. He indicated he could refer Klingner to staff within the state Water Resources Office for an update.

Missouri

Robert Stout provided an update for Missouri. Stout said the Missouri DNR decided a few years ago to undertake a watershed-based planning effort known as *Our Missouri Waters*. The effort is designed to address Missouri's 66 HUC-8 watersheds in recurrent five-year cycles. Stout said the planning effort is somewhat similar to the farmer-led initiative in Wisconsin as the state identified the importance of involving local partners early on in the process. Stout indicated that Missouri sought and received an NRCS RCPP grant to support the water quality priorities identified in the targeted watersheds. As a result, Missouri will receive approximately \$6 million in NRCS funding that will be leveraged by \$15.6 million in state soil and water conservation expenditures. Stout said there were a number of additional RCPP projects involving multiple partners that were funded in Missouri, including:

- Addressing resource needs involved with the creation of a 345-acre water supply lake on Little Otter Creek in Caldwell County, Missouri by providing a dependable rural water supply, reducing flood damages, implementing wildlife and habitat management, and mitigating stream and wetland impacts.
- A project coordinated by the Missouri Department of Conservation (MDC) to restore glades and woodland communities for threatened species in the Ozarks of southeast Missouri.

- A project designed to focus on addressing water quality, water quantity, soil health, and at-risk and declining wildlife species issues that affect both rural farms and smaller urban farms in Jackson County, Missouri
- A project coordinated by Ducks Unlimited in southeastern Missouri that focuses on sustaining the future of rice production.
- A project coordinated by MDC to create and implement management strategies that integrates habitat needs of grassland-dependent birds on grazing lands and maintains the tall grass prairie ecosystem.

Stout said DNR is involved in multiple efforts to increase the use of the Mississippi and Missouri River inland waterways. Stout indicated that Harry Bozoian of DNR has been meeting with a variety of stakeholders in support of this goal. He said Missouri DNR is working with the Missouri Department of Transportation in support of implementation of the M-35 marine highway corridor. Stout said Missouri remains interested in seeing funding appropriated for the implementation of NESP and continues to support the dual purpose approach of the program's commercial navigation and ecosystem restoration projects.

Stout said Missouri has begun the process of updating the State Water Plan. He said Missouri is also preparing to sign an agreement on a Corps' feasibility study designed to analyze potential approaches to addressing contamination in the Big River watershed resulting from 200 years of lead mining. Stout said addressing this contamination will require a partnership between the state, USEPA, and the Corps. USEPA has remedial action authority, while the Corps has authority to undertake restoration. Stout said DNR hopes the study will result in a blueprint for restoration after USEPA's Superfund remedial actions are completed. He said the state has negotiated natural resource damages (NRD) settlements on the lead mining impacts and has a significant amount of funding to address remedial and restoration needs in the watershed. Stout said additional partners on these efforts include TNC, USGS, MDC, and regional planning commissions.

Stout noted that Missouri DNR sent a letter of support to Corps leadership for the development of a UMRS HEC-RAS model.

Corps of Engineers

Gregory Miller of MVD provided an update for the Corps of Engineers. Miller said MVP hosted a recent meeting and open house regarding the Mississippi River Headwaters Master Plan. The plan was last updated in 1977. The Corps plans to release the draft plan for public comment next month.

Miller said the Mississippi River Commission will be hosting public hearings on the MV Mississippi in conjunction with their low-water inspection tour. The Commission will hold hearings on August 14, 2015 in Cape Girardeau, Missouri, August 17, 2015 in Memphis, Tennessee, and August 19, 2015 in Lake Village, Arkansas.

Miller said the Chief of Engineers, General Thomas Bostick, is scheduled to visit St. Paul, Minnesota in September 2015. General Bostick will also be touring the Fargo-Morehead project area. In response to a question from Barb Naramore, Miller said the specific date for Lieutenant General Bostick's visit is still being determined.

U.S. Environmental Protection Agency

Ken Westlake provided an update on behalf of USEPA. Westlake said attendees are likely aware that USEPA and the Corps issued the Waters of the United States rule this year and the rule will become effective at the end of August 2015. The intent of the rule is to clarify the jurisdiction of the Clean Water Act. Westlake said USEPA and the Corps have developed a fact sheet for the public to address

frequently asked questions related to the rule and are working to develop a national database for jurisdictional determinations of waters of the United States.

Westlake said USEPA is very interested in helping communities develop adaptation approaches to respond to the impacts resulting from climate change. USEPA has developed a tool through the agency's *Climate Ready Water Utilities Initiative* for municipalities to use in developing adaptation approaches for local utilities. Westlake indicated he would provide to Association staff for distribution a web link to an example of the City of Faribault, Minnesota's use of this tool (<https://youtu.be/qhka0Xm-hNw>). Westlake complemented the State of Minnesota for their work on climate change adaptation.

Robert Stout indicated that he had reviewed information available on USEPA's Report on the Environment website (<http://cfpub.epa.gov/roe/>) and he complemented the agency for the impressive work done to provide this information. Westlake said he appreciated the input and indicated that USEPA has spent a great deal of effort in emphasizing the use of social media and other tools to provide information to the public.

U.S. Geological Survey

Scott Morlock provided an update on behalf of USGS. Morlock said the agency has undertaken an initiative to study the potential use of dredged material as sand for hydraulic fracturing. USGS is in the lab analysis stage of this study, but they are seeing increasing demand for use of sub-premium sand in shallow fracturing plays. Consequently, the agency thinks there may be a market for the types of sand found in dredged material.

Morlock said USGS Science Centers are installing an increasing number of "super gages" that have additional capacity for continuous monitoring of nutrient loading. Ten super gages are being installed in Illinois, primarily in the Mississippi River basin. Morlock said the USGS Midwest Region is working with the agency's state science centers on nutrient monitoring efforts. He said the agency is interested in looking at state nutrient loss reduction efforts to better understand if existing monitoring capacity is sufficiently providing data sufficient to address outstanding questions. Morlock said USGS welcomes input from partners on this topic and indicated additional information would be coming to partners soon. In response to a question from Robert Stout, Morlock said the super gages cost approximately \$25,000 up front, with an annual O&M cost of \$50,000 per year. Amy Beussink said USGS is looking at optimal monitoring locations, but she said portions of the monitoring infrastructure may already exist in some of these areas. Robert Stout noted that many states are looking at additional monitoring and other nutrient-related tools and suggested that USGS make sure these additional efforts are taken into account when future comprehensive monitoring related to nutrients is contemplated.

U.S. Fish and Wildlife Service

Sabrina Chandler provided an update on behalf of the U.S. Fish and Wildlife Service (USFWS). Chandler noted that Kelly Baerwaldt would provide an update later in the meeting regarding the USFWS coordination activities on managing the Asian carp threat in the UMRS. Chandler reported that Dr. Teresa Lewis has recently been hired as the Director of the USFWS Fish Technology Center in La Crosse, Wisconsin.

Chandler said President Obama issued an executive order last year designed to promote the health of honey bees and other pollinators. As a result, the USFWS and USGS are working with state partners and others on a variety of habitat creation strategies for pollinators – especially for monarch butterflies as a keystone species. Chandler said the agency is also engaged with the governments of Mexico and Canada on an initiative to promote the creation of monarch habitat in the I-35 corridor.

Chandler said Congress is considering the reauthorization of the Land and Water Conservation Fund (LWCF) and partners are advocating that Congress also increase the authorization amount for the program. She noted that the Upper Mississippi River National Wildlife and Fish Refuge has benefited greatly by the use of LWCF funds over the years.

Chandler said refuge staff are working on a habitat management plan and anticipate having a draft available for review by the end of 2015. She said the review of compatible use determinations will be a focus of refuge staff in 2016.

Chandler said she wanted to make sure partners were aware of the Mississippi River Connections Collaborative. The collaborative is a new effort to focus on large landscape, river-long resource restoration and protection that relies on a network approach to amplify the depth and reach of individual parks, trails, and refuges in aggregate and to monitor the relationship of human populations to these resources. Chandler said the USFWS is participating in the collaborative along with a network of local, state, and federal refuge, park, and trail managers, as well as nonprofit organizations.

Chandler also informed partners about a Mississippi River Geotourism Program being coordinated by the National Geographic Society. The program seeks to capture and promote the culture, heritage, and ecological diversity of the people and places that are connected to the Mississippi River through the voices and stories of the people that live along the shores in the 10-state corridor. Chandler noted that the USFWS is participating in the program. National Geographic and its partners are working with local organizations, businesses and residents to map the best travel experiences, stories, and businesses along the Mississippi River. Chandler noted that National Geographic will be hosting public meetings on the program next week in Onalaska, Wisconsin and Winona, Minnesota. She said there is also an upcoming meeting in Minneapolis, Minnesota. The website for the program can be found at: <http://mississippiriver.natgeotourism.com>.

Channel Maintenance Planning – St. Paul District

Steve Tapp provided an update regarding navigation channel maintenance planning in the St. Paul District of the Corps. Tapp reported on the results of the Corps' after-action review following issues with dredging the navigation channel and place materials at the Grand Encampment site in 2014. The review found that the problems with the project arose when the placement site could not hold the dredged material and in-water placement was required. Tapp said the situation was exacerbated from delays with the unloading contract and limitations of the Dredge Goetz that were not sufficiently communicated in project planning. The review recommended process improvements to prevent a recurrence of the issue, including the use of GPS coordinates at the discharge location, creation of a template for future jobs, and improvements to communication.

Tapp said the Corps also performed an after-action review on the 2014 dredging season. The goal of the comprehensive review was to identify potential steps to avoid future widespread channel closures similar to those that occurred in 2014, as well as best practices that were used in 2014 that could be continued.

Tapp provided background on the history of channel maintenance planning efforts in the UMRS. He said there is a long history of partners working collaboratively on planning efforts. Specifically, Tapp cited a number of planning documents executed and other planning efforts in past years, including:

- The 1974 Interagency Study of Dredging Issues
- A 1981 Channel Maintenance Forum
- A 1991 River Resources Forum focused on channel maintenance planning

- The execution of partnering agreements and/or charters
- The development of balance multi-resource approaches to river management
- The creation of various channel maintenance management plans

Tapp shared a chart showing numerous dredged material management planning documents executed in past years. Most of these planning documents were completed in the early 1980s, with only two planning documents executed since the 1996 Channel Maintenance Management Plan. Tapp said there are currently four dredged material management plans under development in MVP. He said the Corps needs to work with partners to review and prioritize all river reaches. The goal this year is to identify tasks to update channel maintenance plans and develop a schedule for the effort. Tapp said the Corps will work with the River Resource Forum on this effort.

Tapp said he recognized and shared concern regarding the capacity of currently identified placement sites. There are several ongoing placement site unloading projects in various phases from planning to construction. Tapp provided pictures and brief summaries of some of these projects, including:

- Crats Island Unloading Project in Pool 4 – 900 cubic yards of removal anticipated
- Wabasha Gravel Pit Unloading Project in Pool 4 – planned removal of material to restore site capacity
- Grand Encampment Unloading Project in Pool 4 – due to be completed in October and entails material barged for truck loading with anticipated removal of 550,000 cubic yards of material
- Lost Island Unloading Project in Pool 5 – planned project located near river mile 745 with anticipated award in late FY2016 or early FY2017
- Dakota Island Unloading Project in Pool 7 – material from project used in I-90 bridge project and has been successful in terms of cost savings
- McMillan Island Unloading Project in Pool 10 – contract awarded to the same contractor as the Grand Encampment project, with 150,000 cubic yards of removal anticipated

Tapp showed a chart depicting the schedule of all placement site unloading schedules through FY 2020. The chart also showed a timeline of when sites will near capacity as well as when sites will exceed maximum capacity.

Tapp provided information regarding a Lower Pool 2 Channel Study designed to address narrow bends in the area often resulting in groundings. Options being analyzed include potential installation of structures to increase channel width and concentrate flow in the navigation channel. Tapp said the final study report is scheduled to be completed in December 2015. The results will then be coordinated with the River Resources Forum.

Tapp said beneficial use of dredged material is a priority for MVP. The District's goal is to place material where it can be used productively in upland improvements, island construction, stockpiling for removal, etc. Tapp said the Corps appreciates the engagement of partners on channel maintenance issues and the support they have shown. Jim Fischer thanked Tapp and Corps staff for their work and indicated that partners recognize the challenges the agency is facing on channel maintenance. Fischer said there are similar challenges in MVR. He said Wisconsin does not have adequate disposal site capacity and noted that the memorandum of understanding with MVR expired four years ago. Fischer said this underscores the lack of sufficient resources allocated for channel maintenance.

Managing the Asian Carp Threat in the UMRS

Kelly Baerwaldt provided a report on the USFWS coordination activities on Asian carp prevention in the Upper Mississippi and Ohio River basins. In the Water Resources Reform and Development Act (WRRDA) of 2014, Congress directed the USFWS to submit an annual report to Congress on Asian carp prevention efforts and the expenditures in the Upper Mississippi River basins in the prior two years. The WRRDA legislation also charged the USFWS with leading a collaborative multiagency effort to slow the spread of Asian carp in the two basins. Baerwaldt noted that she presented information regarding the first Report to Congress at a previous UMRBA meeting, but she provided a brief summary of the components contained in the report, including:

- Observed changes in the range of Asian carp during the previous two years
- Summary of federal agency and nonfederal partner efforts to control the spread of Asian carp in the previous two years
- Research that could improve the ability to control the spread of Asian carp
- Quantitative measures proposed for use to document progress in controlling the spread of Asian carp
- Cross-cut accounting of federal and nonfederal expenditures to control the spread of Asian carp during the previous two years

Baerwaldt said the report found that all four species of Asian carp (bighead, silver, grass, and black carp) increased their range in the Upper Mississippi River basin in the 2012-14 period. Silver carps' range increased upriver in the UMR by over 100 miles and 50 miles in the Ohio River basin. Black carp exhibited the least range expansion and are currently present 305 miles from Lake Michigan, although Baerwaldt said a lack of targeted sampling make these findings less certain. All catches of black carp are those reported by commercial fishers. Baerwaldt said black carp are arguably the most destructive species of Asian carp due to their preference for mollusks, and the fact that they are longer lived than other species.

Baerwaldt said the report found that \$94.5 million was spent on Asian carp prevention from June 2012 to June 2014 with \$12.2 million of this amount spent outside of the Chicago Area Waterway System (CAWS) and Great Lakes. Asian carp management strategies have been developed for portions or all of both the Upper Mississippi and Ohio River basins. Baerwaldt said prevention activities are being conducted in both basins and include such actions as early detection and monitoring, risk assessment, public outreach, law enforcement, and the development of new control tools. However, she said opportunities exist for enhanced collaboration and leveraging of resources and efforts.

Baerwaldt said the USFWS has initiated work with partner organizations on the 2015 Report to Congress. In this next report, state and federal agencies will report expenditures for their respective fiscal year 2015. Baerwaldt said the USFWS will refine the characterization of relative abundance map for bighead and silver carp in the next report. The agency will also work with USGS to update the description of control tools and technology under the research and development portion of the report and will outline how these tools are being applied in the respective basins. Baerwaldt said the USFWS is evaluating strategies to transition from monitoring to more of a control and eradication focus.

Baerwaldt provided information on additional FY 2015 appropriations for Asian carp prevention efforts. The USFWS received an additional \$2 million in base funding for Asian Carp prevention efforts outside of the Great Lakes basin. Projects identified as priorities by the states were funded with FY 2015 funding and implementation is underway. The approach of assembling sub-basin teams was based on the model of the Asian Carp Coordinating Committee. Baerwaldt said these projects are focused on actions in support of strategies to reduce existing populations and increase monitoring and intensive

sampling. The USFWS is continuing to implement high-priority monitoring and prevention projects as identified and requested by partners.

Baerwaldt said the USFWS has been working with the Mississippi Interstate Cooperative Resource Association (MICRA) and state partners to develop mechanisms to distribute the additional \$2 million in base funding to partners. MICRA is a partnership of 28 state natural resource agencies with fisheries management jurisdiction in the Mississippi River basin. The partnership was organized in 1991 to improve management of inter-jurisdictional fish and other aquatic resources. Baerwaldt said several federal agencies and tribal entities are partnership members, including USFWS and USGS. The state and federal partners have formed six sub-basin groups to deal with regional issues in major tributaries and sections of the Mississippi River, including the Upper Mississippi River, the Ohio River, the Tennessee and Cumberland Rivers, the Missouri River, the Lower Mississippi River, and the Arkansas and Red Rivers. Baerwaldt said MICRA serves as an umbrella organization that brings these six sub-basin groups together to provide basin-wide coordination and communication across the different sub-basins on basin-wide issues such as Asian carp prevention and control. Baerwaldt said Greg Conover of the USFWS has been engaged to help in coordination with the sub-basin teams to develop projects and the mechanisms to fund them. An advisory committee has been formed in MICRA focusing on this effort and includes the Corps and the National Park Service.

Baerwaldt said the USFWS work on the relative abundance of Asian carp is the first comprehensive characterization bringing in data from not only new areas of invasion, but also information regarding occurrences in areas with established populations. She indicated the partners have found this information very useful as they shape sub-basin activities and priorities.

Baerwaldt provided information on the control approaches being used in areas with abundant populations of carp. She said data has shown that commercial fishing is blunting the spread of Asian carp. The USFWS is focusing the monitoring approach in these areas on such factors as the evaluation of measures of reproduction, and the employment of intensive sampling in areas of the leading edge of invasion fronts.

Baerwaldt said in areas where only individual captures of Asian carp have occurred, the focus has been more on early detection monitoring, rapid assessment and response, and public outreach. The early detection monitoring approaches include targeted sampling with traditional fisheries gear, environmental DNA (eDNA), and contracted commercial fishing. The rapid assessment and response approaches include intensive sampling efforts following collection, and targeted removal. All of these approaches are designed to prevent an increase in abundance and reproduction.

Baerwaldt provided a summary of the 2015 Asian carp projects identified in the Upper Mississippi River. These include comprehensive surveillance to define presence, invasion, and established fronts, evaluation of Asian carp and native fish passage at Locks and Dams 8 and 19, and contract fishing to reduce abundance in Pools 17-20 and implement targeted surveillance in Pools 13-16. Baerwaldt said the UMR states of Illinois, Minnesota, and Missouri identified projects that could be implemented immediately and received funding to do so. Illinois received \$175,000 for surveillance monitoring to determine the presence and invasion fronts in the UMR. Minnesota received \$140,000 for surveillance monitoring to determine the presence and invasion fronts in the UMR as well as for evaluation of Asian carp and native fish passage at Mississippi River locks and dams. Missouri received \$85,000 for the evaluation of Asian carp and native fish passage at Mississippi River locks and dams.

Baerwaldt identified several next steps for the USFWS coordination work with partners on Asian carp control. The USFWS will continue work to improve the understanding of the Asian carp invasion in order to inform management actions, while maximizing prevention and control efforts using the best available information and science. Baerwaldt said the agency will also evaluate and leverage tools and

technologies developed by the Great Lakes Restoration Initiative, and look for opportunities for collaboration and additional leveraging between the Great Lakes, Upper Mississippi River, and Ohio River basins. Baerwaldt said the USFWS will also refine the overarching strategy using adaptive management.

Baerwaldt updated partners regarding some new developments. She reiterated the early reference by Sabrina Chandler to Dr. Teresa Lewis being named as the new Midwest Fisheries Center Director. Baerwaldt noted that MICRA recently released a new report on grass carp. Baerwaldt also noted that UMR eDNA results for 2015 are now available. Baerwaldt said the USFWS is working with partners to update the Asian carp website to be more inclusive of river-related information. The website can be found at: www.Asiancarp.us.

In response to a question from Barb Naramore, Baerwaldt said all of the eDNA results from targeted locations in the UMR were negative. Jim Fischer noted that the relative abundance information seems to correlate with water quality and habitat conditions and asked Baerwaldt if the USFWS had conducted any analysis in this regard. Baerwaldt said she agreed with Fischer's observation and said the USFWS plans to analyze UMRR LTRM data because they are seeing similar findings on the Illinois River. Mark Gaikowski said Minnesota is looking at phytoplankton food web structure in Pool 10 and this may also have an effect. In response to a question from Mike Klingner, Baerwaldt said the USFWS has not compiled relative abundance information for Asian carp in the Lower Mississippi River, but it is assumed that the abundance is greater downstream. Baerwaldt indicated that there is not as much data in areas where Asian carp are already common. Given the requirements in the WRRDA legislation, the USFWS is expanding early detection capabilities in the Upper Mississippi and Ohio River basins. In response to a question from Naramore, Baerwaldt said she is not aware of specific analysis of areas where commercial fishing success has improved the condition of native species. However, Baerwaldt said there may be somewhat of a time lag in the ability to document beneficial results for native species.

America's Watershed Initiative Report Card

Jordy Jordahl provided background information regarding the America's Watershed Initiative (AWI) and the upcoming release of the AWI report cards. Jordahl said he serves as AWI Executive Director and is an employee of the Nature Conservancy (TNC), but he reports to the AWI Steering Committee. Jordahl said he grew up in Wisconsin and his initial connection to the Mississippi River was duck hunting in Pool 9 of the Upper Mississippi River as a child. Jordahl said AWI has spent the past two and a half years gathering input from stakeholders in the sub-basins of the Mississippi River watershed on the report card project. Jordahl said the message he has heard is that the Mississippi River is the backbone of the nation, but longstanding challenges such as aging infrastructure exist throughout the basin as well as new threats such as aquatic nuisance species. However, AWI has also heard a desire of stakeholders to work together to address challenges that individual stakeholders or groups cannot address alone. Jordahl said the number of individuals and groups working on river-related issues is impressive and AWI's approach has been to support and work with existing structures and organizations.

Jordahl said the mission of AWI is to promote collaborative solutions to watershed-wide land and water use challenges that optimize benefits for society, the economy, and nature. AWI is a collaboration of groups, industry, agencies, and nonprofit organizations committed to seeking mutually beneficial outcomes in contrast to single purpose advocacy. AWI seeks to link and augment the strong efforts of leadership in tributary watersheds to create a broader partnership that can serve as a unified voice for the whole system, while supporting the effective resolution of issues that span multiple regions. Jordahl said the leaders of AWI have been working on river issues for decades, but formed AWI following discussions beginning in 2009 and culminating at the 2010 Inner Coast Summit in St. Louis. Jordahl said the founders of AWI identified a number of challenges and needs at that time, including:

- The need for a shared vision for the Mississippi River Basin that encompasses the whole system in an integrated way, including ecological, social, and economic factors, and leads to commonly accepted priorities.
- The need for more effective institutional structures to coordinate management of the river and turn the vision into reality.
- The need for institutional arrangements that break down unresponsive, unconnected silos.
- A need to overcome complexity by linking together disparate pieces of existing management activities rather than creating a comprehensive structure that reaches across the whole basin.

Following the 2010 summit in St. Louis, participants asked TNC and the Corps to bring together the initial AWI Steering Committee. Jordahl identified the current AWI Steering Committee members, including:

- Dru Buntin – Upper Mississippi River Basin Association
- Stephen Gambrell – Mississippi River Commission and Corps
- Teri Goodmann – City of Dubuque, Iowa
- Steve Mathies – Lower Mississippi River Basin
- Nancy DeLong – DuPont Pioneer
- Sean Duffy, Sr. – Big River Coalition
- Sue Lowry – State of Wyoming
- Dan Mecklenborg – Ingram Barge Company
- Rob Rash – Mississippi Valley Flood Control Association
- Michael Reuter – North America Freshwater Program, the Nature Conservancy
- Rainy Shorey – Caterpillar Inc.
- Charles Somerville – Marshall University and Ohio River Basin Alliance

Jordahl said the first action of the initial AWI Steering Committee was to create six key goals for the entire Mississippi River watershed. These goals are to:

- Maintain supply of abundant clean water
- Provide reliable flood control and risk reduction
- Support local, state, and national economies
- Provide world-class recreational opportunities
- Support and enhance healthy and productive ecosystems
- Serve as the nation’s most valuable river transportation corridor

Building off the 2010 Inner Coast Summit, AWI brought together nearly 200 leaders at the first AWI Summit in St. Louis in 2012. Participants at the 2012 summit initiated the report card project and identified the AWI focus of strengthening connections between river organizations. In undertaking the report card project, AWI leaders broke the larger Mississippi River watershed into sub-basins, including the Upper Mississippi River, Ohio River, Tennessee River, Lower Mississippi River, Red River, Arkansas River, and Missouri River basins. AWI leaders and staff traveled to every sub-basin in the watershed to gain input on the indicators and data sources for the report card from experts and stakeholders. Consequently, Jordahl said the AWI report cards were built in the basins based on the input of residents and basin-scale information. Jordahl said AWI received diverse input from over 700 individuals and 400 organizations from the public and private sector. The final published report card

will include grades and key information about the watershed and basins for each of the six AWI goals. Jordahl indicated that preliminary report card results were discussed with stakeholders at a 2014 AWI summit in Louisville, Kentucky. AWI received more than 200 comments at this summit and spent the intervening time refining the report card results.

Jordahl provided the Board with the overall watershed grades contained in the report cards scheduled to be released in St. Louis in October 2015. He said those working on the report cards found that some important data are simply not available or are not reliable. Jordahl also said some important issues do not necessarily easily lend themselves to a report card format. As an example, Jordahl said that AWI heard that the Mississippi River and Tributaries Project (MR&T) performed as hoped in the 2011 flood as it was able to convey a flood of record. However, Jordahl said AWI is also aware of the challenges of maintaining aging flood control infrastructure. AWI also identified a need to better understand the connection between surface and groundwater resources, as well as the economic role of the waterways in the basin. Jordahl indicated the grades are not meant to compare the basins, but rather to serve as a tool to clearly identify common challenges for potential collaborative efforts.

Jordahl reiterated that the report card results will be announced at an October 2015 Caucus of Watershed Leaders in St. Louis, Missouri. Following the rollout and communication of the report card results, Jordahl said AWI will turn attention to working with partners to identify potential actions to raise the grades for the Mississippi River watershed. Jordahl expressed appreciation to the UMRBA Board and member states for their support of AWI. In response to a question from Sreedhar Upendram, Jordahl said AWI was aware of, and reviewed, the information contained in the 2014 Lower Mississippi River Economic Profile and AWI is supportive of the development of such analyses in other sub-basins. However, given that comparable information does not exist in all of the sub-watersheds, inclusion of the LMR profile results in the report card was not possible. Dru Buntin said the development of standardized economic profiles for all of the sub-basins in the Mississippi River watershed could be a potential action item which AWI could support.

Mississippi River Cities and Towns Initiative

Colin Wellenkamp provided information regarding recent activities of the Mississippi River Cities and Towns Initiative (MRCTI) as well as the topics to be addressed at the MRCTI Annual Meeting in Dubuque, Iowa on September 15-17, 2015. Wellenkamp indicated that MRCTI has been working with UMRBA staff on several topics scheduled to be included in the annual meeting, including the release of the preliminary results from the Upper Mississippi River Economic Profile, a focus on the UMR program, and a session on water quality. Wellenkamp said MRCTI is seeing strong interests in Mississippi River economic profile results from members of the Mississippi River Congressional Caucus. MRCTI is extremely interested in having an updated UMR profile available for use with the results from the Lower River Economic Profile completed in 2014.

Wellenkamp said MRCTI estimates that more than 20 million residents of the Mississippi River watershed receive their drinking water from the river. MRCTI mayors also understand that their citizens greatly benefit from recreational and industrial use of the river. Wellenkamp said MRCTI is working with Archer Daniels Midland, Nestle, and other partners on a Field to Market project looking at methods on the transaction side of the food market to support sustainable agricultural practices. Wellenkamp said MRCTI members are also interested in working with states on nutrient reduction strategy implementation to determine how municipalities can assist in these efforts. Wellenkamp indicated that Susan Sylvester, the Chair of UMRBA's Water Quality Executive Committee, will participate in a water quality panel discussion at the MRCTI Annual Meeting.

Wellenkamp said Patricia Beneke with the United Nations Environment Program will be attending and presenting at the MRCTI meeting to discuss climate change initiatives and the upcoming UN Climate Change Conference to be held in Paris, France from November 30 to December 11, 2015. Wellenkamp

said a delegation of MRCTI mayors will be attending the UN Climate Change Conference in order to communicate on adaptation efforts with other major food-producing basins in the world. The mayors are interested in exchanging information with leaders in these basins in an effort to sustain the integrity of agricultural production. The mayors are also interested in learning about adaptation efforts of others related to municipal infrastructure in light of the potential for greater flow variability.

Wellenkamp said MRCTI will elect new leadership at the annual meeting, including naming a new executive committee and new co-chairs. In response to a question from Dru Buntin, Wellenkamp indicated that Major General Michael Wehr, Commander of the Corps' Mississippi Valley Division, will be presenting information regarding the UMRR program at Eagle Point Park in Dubuque, Iowa at the meeting on the morning of September 16, 2015. Wellenkamp said UMRBA Board members are welcome to attend the MRCTI Annual Meeting and should contact him to confirm attendance.

Navigation and Ecosystem Sustainability Program

Gary Meden provided a brief update regarding the Navigation and Ecosystem Sustainability Program (NESP). Meden reminded the Board that NESP was authorized by Congress in 2007, and is a long-term \$4 billion program of navigation improvements and ecological restoration for the UMRS over a 50-year period that will be implemented in increments through integrated, adaptive management. Meden said the Corps allocated approximately \$50,000 in FY 2015 to develop a scope of work to update the program's economic analysis. Meden said that, as lead district on the program, MVR identified a FY 2016 capacity for \$3.75 million in work on navigation project planning and \$1.75 million for ecosystem restoration project design. Meden said MVR identified FY 2017 capacity for \$4.75 million in navigation project design work and \$2.5 million in ecosystem restoration project design work. Meden said FY 2016 construction capacity was \$6.5 million for navigation projects and \$2.5 million for ecosystem restoration projects.

In response to a question from Robert Stout, Meden said, given the current Inland Waterways Trust Fund revenues and the increase in the navigation fuel tax, it could be six to eight years before any additional major construction would be undertaken, depending on the model used. In response to an additional question from Stout, Meden indicated the Trust Fund runs a zero balance from year to year. In response to a question from Ken Westlake, Meden indicated the numbers he previously reported are capacity estimated by MVR and requested by the district in the budget development process. In response to a question from Mike Klingner, Meden said it is likely that the updated economic analysis would take more of a probabilistic approach.

On a related note, Meden said he is aware of the interest of UMR states in the review of the Corps' project partnership agreements called for in WRRDA 2014. Meden indicated he would inform UMRBA when the contract for this review has been awarded to the National Academy of Public Administration. In response to a question from Dru Buntin, Meden said MVR would provide the letter submitted to MVR by UMRBA on this issue for inclusion in the review.

In response to a question from Dan Baumann, Marv Hubbell indicated that MVR is working through the Lean Six Sigma process improvement initiative for UMRR. Hubbell said a flow chart aimed at identifying bottlenecks is included in the UMRR Coordinating Committee meeting packet.

Administrative Issues

UMRBA FY 2016 Budget Amendment

Dru Buntin said discussions with USEPA had led to a modification of projected revenues and expenditures for the Oil Pollution Act (OPA) project in FY 2016. Consequently, the Board has discussed a FY 2016 budget amendment to more accurately depict expected revenues and expenditures.

Robert Stout offered and Dave Frederickson seconded a motion to adopt the FY 2016 budget amendment for the Association. The motion was approved unanimously on voice vote.

Future Meeting Schedule

Buntin said the next meeting series will be held November 16-18, 2015 in St. Paul, Minnesota with the UMRBA Board and Water Quality Executive Committee joint meeting on the 16th, the UMRBA Quarterly meeting on the 17th, and the UMRR Coordinating Committee on the 18th. The February meetings will be held February 23-24, 2016 in Rock Island, Illinois with the UMRBA quarterly meeting on the 23rd, and UMRR Coordinating Committee on the 24th. The May quarterly meetings will be held May 17-18, 2016 in St. Louis, Missouri with the UMRBA quarterly meeting on the 17th, and the UMRR Coordinating Committee on the 18th. **[Note: The May meeting dates were subsequently changed to May 24-25, 2016 in St. Louis, with the UMRBA quarterly meeting on the 24th, and the UMRR Coordinating Committee on the 25th.]**

With no further business, Robert Stout offered and Dave Frederickson seconded a motion to adjourn. The motion passed unanimously, and the meeting adjourned at 3:07 p.m.