

**Minutes of the 143<sup>rd</sup> Quarterly Meeting  
of the  
Upper Mississippi River Basin Association**

**August 8, 2017  
Onalaska, Wisconsin**

UMRBA Chair Tim Hall called the meeting to order at 9:33 a.m. Participants were as follows:

UMRBA Representatives and Alternates:

Rick Gosch	Illinois Department of Natural Resources
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
Patrick Phenow	Minnesota Department of Transportation
Robert Stout	Missouri Department of Natural Resources
Steve Galarneau	Wisconsin Department of Natural Resources
Dan Baumann	Wisconsin Department of Natural Resources
Jim Fischer	Wisconsin Department of Natural Resources
John Petty	Wisconsin Department of Agriculture, Trade, and Consumer Protection

Federal UMRBA Liaisons:

Marty Adkins	U.S. Department of Agriculture, NRCS
Donald Balch	U.S. Army Corps of Engineers, MVD
Col. Sam Calkins	U.S. Army Corps of Engineers, MVP
Sabrina Chandler	U.S. Fish and Wildlife Service
Amy Beussink	U.S. Geological Survey

Others in Attendance:

Randy Shultz	Iowa Department of Natural Resources
Megan Moore	Minnesota Department of Natural Resources
Matt Vitello	Missouri Department of Conservation
Shawn Giblin	Wisconsin Department of Natural Resources
Daniel Jones	National Oceanic and Atmospheric Administration, NWS
David Lawrence	National Oceanic and Atmospheric Administration, NWS
Andrew Mangham	National Oceanic and Atmospheric Administration, NWS
Andrea Thorstensen	National Oceanic and Atmospheric Administration, NWS
Mike Welvaert	National Oceanic and Atmospheric Administration, NWS
Brian Chewing	U.S. Army Corps of Engineers, MVD
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
Andy Barnes	U.S. Army Corps of Engineers, MVR
Jodi Creswell	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
Brian Markert	U.S. Army Corps of Engineers, MVS
John Peukert	U.S. Army Corps of Engineers, MVS
David Morrison	U.S. Environmental Protection Agency
Sam Finney	U.S. Fish and Wildlife Service
Jennie Sauer	U.S. Geological Survey
Kelly Warner	U.S. Geological Survey
Tom Boland	AMEC Foster Wheeler
Olivia Dorothy	American Rivers
Tim Schlagenhaft	Audubon
Brad Walker	Missouri Coalition for the Environment
Gretchen Benjamin	The Nature Conservancy
Nancy Guyton	Neighbors of the Mississippi
Bertha Mae Taylor	Neighbors of the Mississippi
Al Muhlenbruck	Upper Mississippi, Illinois, and Missouri Rivers Association
Ken Lubinski	(No Affiliation)
Mark Ellis	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association

**Announcements**

Tim Hall announced that the UMRBA Board has selected Kirsten Mickelsen to serve at its next Executive Director effective today.

On behalf of the UMRBA Board, Tim Hall expressed sincere appreciation to Dave Hokanson for all of his dedication and excellent work as staff with UMRBA. Hokanson has been an incredible asset in leading the Association’s water quality work and will be truly missed. Mickelsen said Hokanson has been a great colleague and friend and said he will be greatly missed in the office. The Board expressed well wishes to Hokanson in his future endeavors. Hokanson said he greatly appreciates the partnership involved with UMRBA and for all the incredible experiences he received throughout his career with the Association. Hokanson said he is looking forward to crossing paths again.

Steve Galarneau announced that Wisconsin DNR’s realignment is bringing together the Great Lakes and Upper Mississippi into an Office of Great Waters. The result is that Galarneau will assume Wisconsin DNR’s role as the state’s primary Board member. Galarneau said he greatly appreciates the role that Dan Baumann has filled in serving as Wisconsin’s UMRBA member. The other UMRBA Board members recognized Baumann’s many contributions to the Association and thanked him for his partnership and insights.

**Minutes**

Dan Stephenson moved and Steve Galarneau seconded a motion to approve the draft minutes of the May 23, 2017 UMRBA quarterly meeting as provided in the agenda packet. The motion was approved unanimously.

**Executive Director’s Report**

Kirsten Mickelsen noted that several UMRBA work items since the May 23, 2017 quarterly meeting will be presented today. Mickelsen said UMRBA staff have been reaching out to partner navigation and economic development stakeholders regarding an interactive, web-based UMRS navigation assets

inventory. The M-35 Advisory Committee recommended this effort at its February 22, 2016 meeting. UMRBA staff will make the asset inventory accessible via the Association's website soon.

Mickelsen said print publications of the Upper Mississippi River Restoration (UMRR) 2016 Report to Congress are available upon request. The report will also be made available on the Corps' UMRR web page and UMRBA website. UMRBA completed this work under a support services agreement with the Corps and in collaboration with the program manager and partners.

Mickelsen said UMRBA Treasurer Jason Tidemann's statement regarding his review of the Association's financial statement for the period of May 2017 to June 2017 is provided on page B-4 of the agenda packet. Dave Frederickson moved and Rick Gosch seconded a motion to approve the Treasurer's statement. The Board unanimously approved the motion by voice vote.

### **States' Updates**

Jim Fischer said Wisconsin DNR continues to be an active partner in the implementation of the UMRR, including the work to develop a Habitat Needs Assessment II; conceptual models defining ecological resilience relationships, thresholds, and indicators; and researching specific scientific questions. For example, Wisconsin DNR analyzing the detection of the invasive plant *Potamogeton crispus* in LTRM summer surveys, estimating its seasonal biomass and nutrient standing stocks, and linking it to water quality conditions in Pools 7 and 8. Wisconsin is also actively engaged in the Corps' Pool 4 dredged material management plan (DMMP). In addition, several Wisconsin representatives participated in UMRBA's July 26-27, 2017 UMRS Flood Risk and Sediment Management Summit in Dubuque.

Dave Frederickson said Minnesota Dept. of Agriculture is developing a nitrogen fertilizer management plan that is focused on application timing. The Department is also actively engaged in the Pool 4 DMMP.

Barb Naramore explained that river flows north of the Twin Cities are lowering to the point that it may trigger a management change of the hydropower facility located in L&D 1. Naramore assured that Minnesota DNR will consult with relevant state and federal agencies.

Naramore reported that Minnesota DNR staff tagged and released one bighead carp for research confirmed that the agency has the authority to do this on a limited basis. In response to a question from Karen Hagerty, Naramore said the fish was caught on the St. Croix River near the King Power Plant.

Patrick Phenow reported that the Minnesota legislature appropriated \$5 million in FY 2018 for port development in the state. Solicitation for projects is open through October. Minnesota also has a new dedicated funding source of \$2.5 million per year for intermodal freight transportation. The funding source will be made available for four years. Phenow explained that no other state has such funding yet and so there is no blueprint for implementation. Project proposals are open for a little over a week.

Tim Hall said Iowa DNR recently completed a stream mitigation framework that is available online. In a companion effort, the agency is also developing an online toolbox to assist in developing stream mitigation and restoration projects. The project is being consulted through STANTEC and informed by a stakeholder process. In response to a question from Marty Adkins, Hall explained that Iowa can begin exploring the potential for a banking system now that a framework is finalized. Hall said Iowa DNR did complete a market study and intends to host workshops this September to evaluate that ability.

Rick Gosch reported that Illinois DNR is revising flood levee regulations in response to a directive from the state's general assembly, including exploring options for enhancing consistency with neighboring states. Draft revisions were distributed for comment last spring that resulted in a few minor changes.

Illinois DNR's legal staff will review the draft regulations soon with the goal of submitting back to the Illinois legislature in December.

Dan Stephenson reported that Illinois Lieutenant Governor Evelyn Sanguinetti issued a statement on August 7, 2017 regarding the Corps' Great Lakes and Mississippi River Interbasin Study (GLMRIS) Brandon Road Report tentatively selected plan. Stephenson read the statement as follows:

*[The August 7, 2017 draft GLMRIS] report recommends the construction of a \$275.4 million project, of which Illinois taxpayers would be on the hook for over \$95 million in construction cost and another \$8 million in annual operation and maintenance costs. This project will hurt our economy and the commercial navigation industry that moves over \$28 billion of commodities annually through the Chicago Area Waterway System and along the Illinois River. Furthermore, this project at Brandon Road will separate the Des Plaines River and Illinois River ecosystems, disrupting native fish migration patterns.*

Robert Stout reported that Missouri experienced another major flood event in the St. Louis area. This event resulted in record flows on the Meramec River and extensive damages to urban areas. Missouri DNR is working with its state and federal partners in the recovery. The DNR is currently a partner with the Corps in developing a feasibility study for the Meramec River. Right now, this involves determining the most problematic areas and ensuring that federal and state resources are allocated accordingly. Stout said he is hopeful that the relationships being established in this feasibility study will be created in the UMRS watershed study. Stout said Missouri DNR is working with the Corps to resolve 408 permit issues and is reaching out to local municipalities and levee districts regarding issues and potential solutions. Stout reported that Missouri DNR is reviewing the current arrangement of USGS stream gauges – e.g., are there the right number and placement needed to provide the desired information.

### **Federal Agencies' Funding Outlook**

Sabrina Chandler reported that the President's FY 2018 budget includes a \$203 million reduction in discretionary programs. Proposed funding for the National Wildlife Refuge System and ecological services is relatively even from FY 2017. Chandler said the FY 2018 budget includes eliminating the Cooperative Landscape Conservation and Science Support Program, which receives about \$29.9 million annually. The budget includes \$7.9 million for Asian carp programs. Chandler said the House Appropriations Committee's FY 2018 interior spending measure would reduce USFWS's overall budget by \$40 million from FY 2017. The House specified its priorities for the agency in FY 2018 as including delisting T&E species, Refuge operations and maintenance, invasive species, and wildlife trafficking. Chandler said USFWS' resources on the UMRS would remain stable to FY 2017 levels under the House Appropriations Committee's measure. Chandler also noted that the Service is facing a hiring freeze, particularly for senior leadership.

Amy Beussink said USGS' annual budget typically averages \$1 billion. USGS's FY 2017 enacted funding level is \$1.085 billion with the largest amount allocated to its water mission. The ecosystems mission is the second largest funding area within USGS. The agency's UMRS presence includes five water science centers and the Upper Midwest Environmental Sciences Center. A large portion of USGS's work on the river is leveraged with partnership science needs. Beussink reported that President's FY 2018 budget includes \$922 million for USGS, representing a decrease of \$163 million over the FY 2017 enacted funding level. The Administration's priority is to increase efficiency and science support. The House Appropriations Committee's FY 2018 interior spending measure includes \$922 million for USGS, representing a decrease of \$46 million from FY 2017. The final appropriation remains unknown, however USGS may need to consider reprogramming new work with other areas.

Marty Adkins acknowledged that the FY 2018 budget involves a high degree of uncertainty. The President's FY 2018 budget includes \$766 million for NRCS, a 25 percent reduction compared to its FY 2017 budget. The House Appropriations Committee's FY 2018 agriculture spending measure includes a much smaller reduction in funding for NRCS. The Senate Appropriations Committee's FY 2018 measure maintains NRCS's FY 2017 funding level of \$1.024 billion. Adkins said a more pressing issue is the pending expiration of the 2014 Farm Bill at the end of FY 2018. NRCS is currently evaluating its last round of Regional Conservation Partnership Program (RCP) proposals. The program is set to expire at the end of this fiscal year. In addition, Adkins announced that USDA Secretary Sonny Perdue issued an internal reorganization. A newly-created Farm Production and Conservation mission area will focus on domestic issues and will house both the FSA and NRCS under the direction of one undersecretary.

Don Balch reported that the President's budget includes \$33.17 million for UMR, which is its full annual authorized appropriation level. Kirsten Mickelsen noted the increase in appropriations for UMR operations and maintenance over the last several years and asked if the additional resources are being used to plan for channel maintenance management as requested by UMRBA. Col. Sam Calkins explained that the St. Paul District's O&M spending will primarily be spent on deferred maintenance. Steve Tapp added that most of the District's O&M packages submitted to Headquarters were for O&M needs, but said that there is some additional money for channel maintenance planning. Jim Fischer requested that additional money be spent on dredging and real estate acquisition. Col. Calkins reported that MVP is currently developing DMMPs for Pools 2, 4, 5, and 6. He acknowledged that placement capacity of existing dredged material disposals sites is quickly shrinking and that interagency planning is needed. Col. Calkins reflected on the Pool 4 DMMP controversy acknowledging that dredged material management is challenging and needs to be examined through a multi-purpose lens.

### **Water Level Management**

Kirsten Mickelsen recalled the purpose and outcomes of the April 4-5, 2017 UMR water level management (WLM) workshop, explaining that the intent was to clarify misunderstandings among partners about the mechanics of WLM and to identify partner recommendations for its use as a tool for improving ecological health. UMRBA's May 23, 2017 meeting included a more detailed presentation of the workshop discussion and recommendations. Ultimately, the Board directed staff to propose a one- to two-year action plan for UMRBA in regards to facilitating a regional dialogue and planning effort focusing on WLM. Mickelsen said that, in response, UMRBA consulted with its state, federal, and nonprofit partners and developed a draft 2017-2018 WLM action plan that is provided on page C-1 of the agenda packet. Specifically, the recommended actions include:

1. Determine the composition and roles and responsibilities for a system-wide WLM committee and organize monthly conference calls
2. Request that the Corps implement WLM on a more routine, systemic basis
3. Host a 2018 WLM regional workshop to further advance the conversation and develop a 2018-2019 action plan

Mickelsen said the Corps has offered to utilize planning assistance to the states (PAS) agreement with UMRBA to leverage resources provided by the Association, individual states, and other nonprofit partners. This funding may be helpful in answering partnership questions (e.g., responses of mussels to drawdowns) or specific planning needs.

Marv Hubbell mentioned that, following the April 2017 workshop, the Corps is evaluating options for automating lock gates to facilitate water level manipulations. In response to a question from Jim

Fischer, Hubbell said UMRR may be a potential funding source for the gate automation. Sabrina Chandler said USFWS would support WLM in Pool 3 if the states are also supportive.

Gretchen Benjamin expressed interest in partnering through the PAS agreement with UMRBA, noting that TNC can bring substantial resources to the table. Benjamin said TNC is working with the Corps in a third-year demonstration effort in Pools 24-26 to hold water levels at the low end of the operating band for as long as possible. Benjamin said the vegetation responses seen so far are incredible. The plant community is shifting. In response to a question from Chandler, Benjamin said TNC's Sustainable Rivers Program is funding monitoring.

Olivia Dorothy also expressed interest in being involved through the PAS agreement. Jennie Sauer said USGS would like to remain involved in the WLM conversations and offered the agency's assistance in learning more about the ecological responses. Amy Buessink noted that USGS sensors may be helpful in forecasting and manipulating water levels. Chris Erickson said PAS agreements are excellent cost-sharing mechanisms for the Corps. The non-federal contribution may be completely in-kind.

In response to a question from Robert Stout, Benjamin explained that monitoring efforts are currently focused on vegetation. She expressed interest in getting a better understanding of benefits related to trapping sediment and nutrients. There are not enough resources available now to evaluate all of the potential benefits to WLM. Tim Schlagenhaft expressed appreciation to UMRBA for its leadership on this issue.

In response to a question from Mickelsen, the UMRBA Board expressed support for the 2017-2018 action plan as provided in the agenda packet and to enter into a PAS agreement with the Corps for the purposes of WLM planning.

### **Upper Mississippi River Restoration Program**

Marv Hubbell acknowledged the importance of UMRR's partnership collaboration and expressed appreciation to UMRBA for its steadfast support for the program and involvement in its implementation.

Hubbell reported that UMRR's total FY 2017 allocation is \$33.17 million. Congress appropriated \$20 million to UMRR in its May 5, 2017 FY 2017 Consolidated Appropriations Act. In addition, the Corps allocated \$13.17 million to the program in its FY 2017 work plan released on May 24, 2017. Hubbell said UMRR's anticipated execution is between 98 percent and 99 percent. He applauded the partnership's dedication to program implementation and underscored this as a remarkable achievement.

Hubbell said the President's FY 2018 budget and Senate and House Appropriations Committee's energy and water spending measures include \$33.17 million for UMRR. While this is great news for the program, Hubbell explained that the partnership will need to address implementation questions associated with moving from a \$20 million program to a \$30 million plus program. In the next few months and years, it means that the UMRR partnership will need to accelerate its restoration and science efforts. Noting the implications for state staff, Hubbell said the Corps is interested in exploring ways to provide financial support for the additional capability needed. Jim Fischer acknowledged that Wisconsin has benefitted tremendously from the UMRR partnership and that the increased funding is a great opportunity. However, the states will be faced with extra pressure to assist in executing the program and will need to determine what is required to effectively remain as strong partners.

Hubbell explained that each UMRS District is developing a six-year plan to determine planning needs and potential issue areas. Barb Naramore observed that the states will need to uphold their review standards and requested that the Corps involve permitting staff early in the project development process.

In response to a question from Hubbell, Naramore said permitting staff will have a limited ability to attend meetings but she said staff will be available for the Corps to consult with directly. Robert Stout echoed Naramore's suggestion to involve permit staff early in project planning.

Jennie Sauer recognized that there is also increasing pressure to implement science efforts quickly and expressed appreciation to the states for their quick response to FY 2017 funding proposal requests. Hubbell acknowledged Sauer's comment and suggested that UMRR develop a science plan to focus activities.

In response to a suggestion by Gretchen Benjamin for UMRR habitat project planning to move from a 3-year to 2-year planning process, Hubbell explained that District staff do not have control over the Corps' internal review processes and approvals. Hubbell said there are various issues that are prohibiting certain projects from advancing, including the states' inability to execute Corps' cost share agreements. Hubbell said there was a deliberate choice to complete the development of the ecological resilience frameworks and HNA II before beginning the process of identifying the next generation of habitat projects so that there could be direct connections to the program's vision statement and habitat work on the ground.

Hubbell also mentioned that the Administration has increased its scrutiny on UMRR's budget and is tracking small amounts of money in specific line items. In response to a question from Ken Lubinski, Hubbell explained that Congress understands that the regional partnership supports UMRR and believes that its achievements are important. OMB is mostly concerned with execution and accomplishments – e.g., number of acres restored and cost per unit restored. The ASA(CW)'s office is interested in high-level accountability metrics – e.g., whether Districts completed the work as planned and within the schedule and budget. Headquarters is more interested in programmatic details and how well the Districts are executing and coordinating the program within the partnership and in line with the mission statement.

Hubbell reported that other major accomplishments within the past year include the completion of the 2016 UMRR Report to Congress and the UMRR Database, which houses historical documents, information on more than 91 complemented and planned habitat projects, and financial summaries. Hubbell said UMRR has constructed 55 habitat projects as of April 2017, has five projects under construction, and is currently planning 31 projects. Olivia Dorothy requested that historic documents are digitized and made available via the web – e.g., the GREAT reports.

### **UMRS Flood Risk and Sediment Management Summit**

Kirsten Mickelsen explained that the economic and ecological disruptions from flood events and constrictions of the navigation channel have created an acute awareness for the need to better understand how the watershed is influencing the river-floodplain and how to better manage the floodplain. The impacts have been increasing over many years leading many regional stakeholders from various interest groups to request that UMRBA help to facilitate regional collaboration in improving flood and channel maintenance management.

Mickelsen explained that the Corps and UMRBA staff agreed that a Section 729 authority would be the best mechanism for a regional study process. UMRBA submitted an October 26, 2016 letter to the Corps expressing interest in serving as the non-federal sponsor of such a study. Mickelsen explained that UMRBA and the Corps agreed to integrate flood risk and channel maintenance as part of the same study given that the challenges, information needs, and potential solutions overlap or are closely related. Mickelsen listed the purposes of the Section 729 study as follows:

1. Develop an integrated, comprehensive, and systems-based approach to minimize the threat to health and safety resulting from flooding by using structural and nonstructural floodplain management measures;
2. Develop new, or renew existing, comprehensive long-term channel maintenance management strategies that are sustainable, cost-effective, and ecologically sensitive;
3. Make communities and economies adjacent to, or dependent on, the Upper Mississippi River System more resilient to flooding and drought events;
4. Identify opportunities to support environmental sustainability, restoration, and water quality goals for the Upper Mississippi River and Illinois River channel and floodplain; and
5. Seek opportunities to address, in concert with flood risk and channel management measures, other floodplain specific problems, needs, and opportunities.

As a first step, UMRBA hosted a July 26-27, 2017 UMRS Flood Risk and Sediment Management Summit as a means to bring regional stakeholders together and to scope the Section 729 study. Mickelsen thanked Brian Stenquist of Minnesota DNR for all of his efforts developing the agenda and facilitating the meeting. She also expressed appreciation to Steve Buan (NWS), Larry Weber (Iowa Flood Center), Scott Whitney (Corps), and JC Nelson and Jon Nania (USGS). One key insight that resonated with participants is that the UMRS funnels a large volume of water and sediment that is moving at an increasing velocity. There were over 100 participants that included federal and state agencies, levee districts, municipalities, navigation industry, agriculture interests, Congressional staff, and conservation groups.

Mickelsen said UMRBA solicited input via an online questionnaire about stakeholders’ concerns and potential actions and solutions to frame the discussion based on initial perspectives. The results were as follows:

<b><u>Concerns</u></b>	<b><u>Actions, Solutions</u></b>
Land use changes	Long term, systemic plan
Laws and policies	New flood, sediment storage areas
Contingency planning	Monitoring, research, modeling
Dredged material management	Conservation practices
Resource constraints	Flood defenses
Forecasting capabilities	Wetlands and floodplain forest protection, restoration
Sediment accumulation	Capacity to place sediment
Early warning, communications	Streamline real estate acquisition
Other	Early warning systems
	Modify homes and other structures
	Flood barriers

Mickelsen explained that eight federal and state agency staff helped to facilitate four groups of participants that were sorted randomly. On the first day, the groups were asked to locate their most pressing issues and problems within a watershed and floodplain context. Then on the second day, the groups focused on solutions and current and future actions. In summary, participants called for a unifying vision and set of guiding principles, integrating knowledge into decision making, increasing investment in structural and nonstructural measures, and establishing a forum for ongoing dialogue and decision making.

Mickelsen said participants provided very positive feedback to the summit approach, noting that the discussion was inclusive, engaging, and “eye opening.” Many participants applauded Stenquist for his facilitation expertise and for creating a productive agenda approach. Next steps include developing a

meeting summary, defining the Section 729 study scope, and fostering ongoing communications, information sharing, and stakeholder relations.

Noting his participation as a facilitator, Marty Adkins observed that the approach offered participants to learn about the many different perspectives. Participants were candid and open about their experiences and hopes for the future. Megan Moore said she learned that trust is a major issue and the agenda format fostered relationship building. At the end of the summit, it appeared that trust was less of a concern although still relevant. According to Moore, maintaining the diverse stakeholder partnership will be very important and she asked who will serve in the leadership capacity.

In response to a question from Olivia Dorothy, John Peukert said federal funding for the study is unknown but that a PAS agreement may be a good option until the Section 729 study receives a new start. Initial work may include fully scoping the study and doing an information gap analysis. Robert Stout suggested that the next steps involve clearly defining the elements of the study plan – e.g., a regulatory framework. Al Muhlenbruck requested that the Upper Mississippi have the same level of flood protection that is provided in the Lower Mississippi.

Adkins observed that many participants called for increasing water storage upriver. That would require a much broader constituency in the planning process. Adkins suggested engaging watershed stakeholders early in the process. Tim Hall agreed with Adkin's suggestion while noting the challenge to doing so. Hall said the Section 729 study will likely involve an iterative process.

### **UMR Clean Water Act Monitoring Strategy**

Dave Hokanson provided an overview of UMRBA's water quality work since 2010 that was done in collaboration with the UMR states and USEPA. UMRBA's 2014 Recommended CWA Monitoring Plan was an outgrowth of the 2010 UMR Biological Assessment Report and the 2011-2013 UMR CWA Monitoring Strategy Product. The purpose of the monitoring plan was to "*...develop a monitoring strategy framework via a collaborative interagency process to aid the UMR states in moving forward with more comprehensive, consistent, and accurate CWA assessments of the river, leading to both a better understanding of its condition and improvements to its water quality.*" The plan's goal is to build a more robust, consistent data set and improve the ability to characterize water quality condition and trends. More specifically, the Plan is intended to support improved assessment under the CWA and to aid other key CWA program functions including standards development, NPDES permits, TMDLs, stressor identification, and nutrient and sediment load measurements. The monitoring plan's scope focuses on the main channel extending the entire UMRS and targets four major designated uses: aquatic life, aquatic recreation, drinking water, and fish consumption.

Hokanson reported that Wisconsin and Minnesota DNRs recently completed a pilot of the CWA monitoring plan in UMR Reaches 0-3, extending from the Twin Cities to La Crosse, to test the logistical and technical elements of the coordinated monitoring approach. The pilot was implemented from May 2017 to April 2017 in partnership with the Minnesota Pollution Control Agency, DNR, Department of Health; Met Council; Wisconsin DNR and State Laboratory of Hygiene; and UMRBA.

Shawn Giblin provided details of the technical aspects of the pilot monitoring approach and results. Giblin discussed the observations recorded for total suspended sediment, dissolved oxygen, light, phosphorus, pH, transparency, nitrogen, ammonia, chlorophyll, *E coli*, and other variables. In addition, Giblin discussed the results for fish and vegetation. Giblin said the preliminary condition assessment for aquatic life in all reaches was good. For aquatic life, Reaches 0-1 are ranked as fair and Reaches 2-3 are ranked as good. Reach 0 is ranked fair for fish consumption and Reaches 1-3 are ranked as poor.

Hokanson said UMRBA has published a report on the preliminary results and insights gained from the pilot implementation as well as recommendations for the future. The report is available on UMRBA's website. Next steps include finalizing report documents, pursuing options for coordinated monitoring, securing financial resources, developing a shared data platform and identifying a single laboratory for analysis, and testing the monitoring approach in other reaches.

In response to a question from Marty Adkins, Giblin explained that the increase in chloride in recent years may be due increased use of road salt and water softeners. In addition to a question from Karen Hagerty, Giblin said there may be opportunities to leverage resources with LTRM or other existing monitoring efforts.

## **Spill Response Planning and Prevention**

### *Recent UMR Spill Planning Efforts*

Mark Ellis presented on UMRBA's spill response planning and prevention work. Ellis said the work is completed under a contract with the USEPA to meet its Oil Pollution Act planning objectives. Site-specific spill response strategies suggest response actions and equipment needs and include photographs, boom placement diagrams, and response tactics. The benefits include improving resource protection, impact mitigation, awareness and communication, and knowledge of resource availability. In addition, the planning work encourages training and preparedness. The site-specific plans clarify agency roles and responsibilities, highlight local response considerations, and provide the emergency contact information.

UMRBA has hosted three spill response training exercises that also enhance familiarity with the plans and improve preparedness of emergency responders and river managers. The plans were used in real-life situations in response to the train derailments in Brownsville, Minnesota in 2016; Alma and Galena, Wisconsin and Balltown, Iowa in 2015.

Ellis said UMRBA documents all resources at risk of potential spills, creates maps for all five states, hosts a regional database to support planning and response, and develops responses plans for all mapped areas. Ongoing activity includes completing Illinois' atlas update, collecting data in Wisconsin, maintain a regional database, and supporting sub-area planning in the Minneapolis/St. Paul metro area.

UMRBA is also completing a similar planning narrative, spill response strategies, and a web-based interactive map for the St. Croix National Scenic Riverway under contract with the National Park Service. Staff plan to complete the plan and associated materials by the end of calendar year 2017, prepare for field verification, outreach to tribes, and perform a stream flow data analysis.

### *USEPA Roles and Perspectives re Prevention*

David Morrison said one of USEPA's top priorities is to prevent, prepare for, and respond to oil spills that occur in and around inland waters of the nation. Morrison explained that the mission of the Twin Cities Sub-Area Contingency Plan Steering Committee is "to achieve unified prevention, preparedness, and response to environmental threats within the metropolitan area, across all levels of government and industry, consistent with all applicable authorities." The Plan is designed to coordinate timely and effective response among various emergency responders and river managers in order to minimize damage resulting from releases of oil or hazardous substances, pollutants, or contaminants. Morrison explained that there are several public and private plans for ensuring spill response occurs quickly and effectively. He asserted that training exercises are extremely important for ensuring preparedness and consistent approaches in responses. In response to a question from Shawn Giblin, Morrison said there has not been any commonality in the cause of the various train derailments.

## **UMRS Economic Profile**

Kirsten Mickelsen reported that USFWS Division of Economics recently shared preliminary economic profile figures for the Illinois River. This represents the third iteration of a UMRS economic profile. According to USFWS, Illinois River generates \$238 billion in economic activity every year and directly supports over 717,000 jobs. The economic profile is as follows:

	<u>Revenue</u>	<u>Employment</u>	<u>Employee Compensation</u>
Manufacturing	\$193.1 Billion	404,720	\$32.6 Billion
Tourism	\$28.9 Billion	247,000	\$8.0 Billion
Agriculture	\$8.0 Billion	33,578	\$318.6 Million
Energy Production	\$4.0 Billion	6,735	\$307.3 Million
Mineral Resources	\$2.3 Billion	4,514	\$728.0 Million
Outdoor Recreation	\$1.1 Billion	17,473	\$689.7 Million
Water Supply	\$211.1 Million	804	\$62.3 Million
Commercial Navigation	\$933.0 Million	1,319	\$99.5 Million
Harvest of Natural Resources	\$1.1 Million	948	N/A

Mickelsen said the Illinois and Mississippi River combined economic activity generated is \$584 billion annually supporting 1.86 million jobs. In response to a question from Robert Stout, Mickelsen said the decline in manufacturing jobs is likely associated with automation and increased worker productivity.

## **Administrative Issues**

### *Investment Authorization*

Dave Hokanson explained that a formal investment authorization from the Board is required for Kirsten Mickelsen. In response, Rick Gosch moved and Robert Stout seconded a motion to appoint Mickelsen to make investment decisions on behalf of the Association. The motion passed on voice vote.

### *Future Meeting Schedule*

November 2017 — St. Paul

- UMRBA quarterly meeting — November 7
- UMRR Coordinating Committee quarterly meeting — November 8

February 2018 — Quad Cities

- UMRBA quarterly meeting — February 6
- UMRR Coordinating Committee quarterly meeting — February 7

May 2018 — St. Louis

- UMRBA quarterly meeting — May 15
- UMRR Coordinating Committee quarterly meeting — May 16

With no further business, the meeting adjourned at 3:42 p.m.