Minutes of the 148th Quarterly Meeting
of the
Upper Mississippi River Basin Association

October 30, 2018
Bloomington, Minnesota

UMRBA Chair Dave Frederickson called the meeting to order at 9:38 a.m. Participants were as follows:

UMRBA Representatives, Alternates, and State Members of the Water Quality Executive Committee:

Rick Pohlman	Illinois Department of Natural Resources
Gregg Good	Illinois Environment Protection Agency (via phone)
Tim Hall	Iowa Department of Natural Resources
Adam Schnieders	Iowa Department of Natural Resources
Sam Hiscocks	Iowa Department of Transportation
Dave Frederickson	Minnesota Department of Agriculture
Patrick Phenow	Minnesota Department of Transportation
Shannon Lotthammer	Minnesota Pollution Control Agency
Chris Klenklen	Missouri Department of Agriculture
Matt Vitello	Missouri Department of Conservation
Dru Buntin	Missouri Department of Natural Resources
Karen Rouse	Missouri Department of Natural Resources
Steve Galarneau	Wisconsin Department of Natural Resources
Jim Fischer	Wisconsin Department of Natural Resources
Greg Searle	Wisconsin Department of Natural Resources
Coreen Fallat	Wisconsin Department of Agriculture, Trade, and Consumer Protection

Federal UMRBA Liaisons:

Brian Chewning	U.S. Army Corps of Engineers, MVD
Marty Adkins	U.S. Department of Agriculture, NRCS (via phone)
Ken Westlake	U.S. Environmental Protection Agency (via phone)
Sabrina Chandler	U.S. Fish and Wildlife Service, UMRS Refuges
Susan Morrison	U.S. Geological Survey, Midwest Region (on behalf of Scott Morlock)

Others in Attendance:

Megan Moore	Minnesota Department of Natural Resources
Glenn Skuta	Minnesota Pollution Control Agency
Steve Buan	National Oceanic and Atmospheric Administration, NWS
Corey Loveland	National Oceanic and Atmospheric Administration, NWS
Craig Schmidt	National Oceanic and Atmospheric Administration, NWS
Jim Cole	U.S. Army Corps of Engineers, MVD
Thatch Shepard	U.S. Army Corps of Engineers, MVD
Ben Robinson	U.S. Army Corps of Engineers, MVD
MAJ Patrick Sullivan	U.S. Army Corps of Engineers, MVP
Chris Erickson	U.S. Army Corps of Engineers, MVP
Emily Moe	U.S. Army Corps of Engineers, MVP
David Potter	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
Scott Whitney	U.S. Army Corps of Engineers, MVR (via phone)
Andrew Goodall	U.S. Army Corps of Engineers, MVR (via phone)
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Steve Price	U.S. Army Corps of Engineers, MVR
Greg Kohler	U.S. Army Corps of Engineers, MVS
Shane Simmons	U.S. Army Corps of Engineers, MVS
Shawn Sullivan	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, Regional Planning Division North
Jeff Houser	U.S. Geological Survey, UMESC
Jennie Sauer	U.S. Geological Survey, UMESC
Olivia Dorothy	American Rivers
Greg Genz	Friends of Pool 2
Paul Rohde	Waterways Council, Inc.
Kirsten Wallace	Upper Mississippi River Basin Association
Mark Ellis	Upper Mississippi River Basin Association
Tyler Leske	Upper Mississippi River Basin Association
Lauren Salvato	Upper Mississippi River Basin Association
Andrew Stephenson	Upper Mississippi River Basin Association

Minutes

Steve Tapp said the Corps' FY 2018 budget report inadvertently included the Winona small boat harbor dredging project. It was completed with FY 2017 allocations and did not receive FY 2018 funds as had been reported. Tim Hall moved and Steve Galarneau seconded a motion to approve the draft minutes of the August 14, 2018 UMRBA quarterly meeting with a note correcting the statement. The motion was approved unanimously.

Executive Director's Report

UMRBA staff — Kirsten Wallace introduced Andrew Stephenson, who officially started as UMRBA's Policy and Programs Director on October 15, 2018. Stephenson will begin his tenure focusing on UMRBA's ecosystem-related work as well as flood risk and sediment management planning, aquatic nuisance species, external communications, and advocacy on behalf of the five states' shared interests. His previous experience includes serving as Project Coordinator for the University of Northern Iowa's Center for Social and Behavioral Research, Agroecology Technical Advisory Group Coordinator for the USFWS Eastern Tallgrass Prairie and Big Rivers LCC, and Research Coordinator for the Illinois Natural History Survey Human Dimensions Research Program. Stephenson holds a Master of Science in Wildlife Ecology and Sustainable Agriculture from Iowa State University and a B.A. degree from Grinnell College in Iowa.

Water level management — UMRBA hosted the UMR Water Level Management Regional Coordinating Committee on September 25, 2018. The Committee outlined its goals and objectives for the next two years and provided input to UMRBA for its response to MVD regarding priority pools to implement environmental pool management. UMRBA and MVD have continued their discussion regarding the ability for the Corps to implement environmental pool management and how the states can be helpful in providing a request.

USEPA OPA grant agreement — UMRBA's five-year grant agreement with the USEPA expired at the end of federal FY 2018. Following Board approval at UMRBA's August 14, 2018 quarterly meeting,

UMRBA executed a five-year grant agreement with USEPA Region 5 on September 28, 2018. The grant is structured as a one-year base contract with four option years of $150,000 and a total cap of $1.25 million, allowing for an additional $500,000 to provide support for a work effort(s) not currently prescribed.

Wallace remarked that USCG awarded Mark Ellis in October 2018 with a merit recognition for UMRBA's hazardous spills response and mapping accomplishments, claiming that the Association's work resulted in responses that minimized environmental damages from over 200 pollution cases on the UMRS. The recognition underscored the value of UMRBA's UMR spill response plan and its facilitation of interagency cooperation and training exercises.

UMRS watershed-informed plan — UMRBA submitted a request to the Corps for planning assistance to the states (PAS) for two years with a non-federal commitment of $100,000. The non-federal contributions would involve in-kind commitments by UMRBA and the five UMRS states. The PAS would support a first phase of a watershed-informed planning effort to improve federal-state management of flood risk, the 9-foot navigation channel, and extended drought events. District staff reported that the PAS has been approved and now UMRBA and the Corps are defining the terms of the contract. The District can request funding following an executed PAS contract. Dru Buntin moved and Tim Hall seconded a motion directing Kirsten Wallace to execute the agreement as she had described. The motion passed unanimously.

Financial statements — Wallace pointed to the Association's financial report on pages B-10 to B-13 of the agenda packet, including UMRBA Treasurer Jason Tidemann's review of the financial statement from June 2018 to September 2018. Dru Buntin moved and Rick Pohlman seconded a motion to approve the Profit and Loss Statement and Balance Sheet dated October 16, 2018. The Board unanimously approved the motion by voice vote.

UMRBA WQ Executive Committee Report

Adam Schnieders reported on several actions and activities of the UMRBA WQ Executive Committee, including the following:

UMR Interstate WQ Monitoring Plan — Illinois, Iowa, and Missouri agreed to implement a three-state pilot of the UMR Interstate WQ Monitoring Plan (also known as the UMR CWA Monitoring Plan) in 2020. The geographic extent starts at the Iowa River confluence and ends at L&D 21 – i.e., CWA Assessment Reaches 8-9. The UMRBA WQ Task Force is now considering logistics and developing a more refined scope of work and budget. Schnieders thanked Lauren Salvato for her hard work in coordinating the states' planning.

Hypoxia Task Force — Many members of the UMRBA WQ Executive Committee also serve on the USEPA Hypoxia Task Force, which is scheduled to meet January 29-30, 2019 in Baton Rouge. The Task Force is currently writing a report to Congress regarding progress achieved in implementing the states' nutrient reduction strategies among other related trend information. The Hypoxia Task Force is also creating a federal water subcabinet that will likely be announced shortly.

UMRBA 2019 Work Priorities — With input from the UMRBA WQ Task Force, the WQ Executive Committee directed UMRBA staff advance the following priorities for calendar year 2019: coordinate planning for the Reaches 8-9 Interstate WQ Monitoring Plan pilot project, facilitating discussions regarding the states' nutrient reduction strategies, and supporting the states' consultation of their CWA Section 303(d) impairment listings and TMDLs. The WQ Executive Committee also recommended that the UMRBA Board support a legislative framework proposal that would create a stronger federal-state collaborative in support of nutrient reduction measures and WQ monitoring and research.

Navigation and Ecosystem Sustainability Program

Andrew Goodall explained that the $1 million FY 2019 scope of work to complete NESP's economic assessment includes the following six elements:

1. Engineering reliability — determine reliability of the existing 600-foot lock at each NESP modernization site, using the existing operational condition assessment (OCA) information. This information did not exist for the 2008 study, and could result in a more accurate representation of the potential unscheduled outages.
2. Forecasted barge traffic demands
3. Barge transportation demand elasticity — assess how shippers adjust waterway shipping quantities in response to changing waterway operating conditions and market conditions.
4. Long- and short-run transportation rates — determine the difference between the waterway rate and the lowest cost alternative overland rate, such as rail or truck. The Corps has contracted with the University of Tennessee to estimate these rates.
5. Lock performance characteristics — simulate how congestion builds at the lock sites as traffic increases or reliability decreases, using the waterway analysis models (WAMs).
6. Cost estimate and laydown — index and compare costs for construction of NESP locks. This work is being done collaboratively with the Corps' Cost Center of Expertise.

Goodall said MVR received guidance from ASA(CW) R.D. James on August 23, 2018 with a request to determine the smaller subset of locks and their respective benefit cost ratio by March 2019 and submit the final economic update report by August 2019. As of today's meeting, progress has advanced on engineering reliability, barge transportation demand elasticity, transportation rates, and lock performance characteristics. Goodall explained that results from the six elements are needed as input to generate a benefit-cost ratio using the Corps-certified navigation investment model (NIM), which estimates costs and benefits over a project's life cycle that optimize the net benefits. In particular, NIM uses traffic projections, lock capacity/performance, fleet operating costs, scheduled lock closures, and engineering reliability data. Goodall said NIM was not available for NESP economic reevaluation in 2008, but has since proved helpful in other Corps projects.

In response to a question from Steve Galarneau, Scott Whitney explained that each commodity shipped on the UMRS (e.g., petroleum, grain, ethanol, salt) has a different elasticity given storage availability or market conditions among other factors. Dru Buntin asked if the Corps plans to convene a regional dialogue regarding NESP economic factors, particularly for the states to dig deeper into the economic analysis results and to provide input to the Corps. Whitney observed that it is incumbent upon the Corps to be as transparent as possible but noted that the NESP economic update is for the sole purpose of informing ASA(CW) James in his ultimate recommendation of funding for the program. Whitney said the District received $10,000 for outreach and plans to utilize UMRBA as a forum for connecting with the states and other regional stakeholders. Buntin underscored the importance that the states and stakeholders be informed and said the states should be engaged in any decision making regarding how NESP will proceed. Buntin requested that the Corps work with UMRBA to schedule a meeting in conjunction with the UMRBA February 26, 2019 quarterly meeting focused on NESP and host web-based conference calls in the interim to keep the states apprised of progress and any outcomes.

Gretchen Benjamin expressed support that the District will be consulting with the Corps' Cost Center of Expertise. Olivia Dorothy articulated her concern with the lack of comment opportunity, pointing to the number of assumptions. In response to a question from Paul Rohde, Goodall confirmed that the Corps will employ a new round of shipper surveys.

2018 America's Water Infrastructure Act Report

Brian Chewning reported that the 2018 America's Water Infrastructure Act (P.L. 115-270) was enacted on October 23, 2018. Chewning overviewed the provisions that relate to the Corps' management of the UMRS. Most notably, those provisions include:

- **Corps' organizational options** — Section 1102 directs the National Academy of Sciences to evaluate a) options for improving the Corps' ability to implement its statutory missions and responsibilities effectively and efficiently, including through modifications to the appropriations process and agency hierarchical structure; and b) the merits of transferring the Corps' responsibilities to another Federal agency, considering implications to national security, the Armed Services, and emergency and natural disaster response.
- **Cost/benefit analysis reform** — Section 1103 instructs the National Academy of Sciences to make recommendations regarding the economic principles and analytical methodologies used by the Corps to formulate, evaluate, and budget for water resources development projects. Specifically, the evaluation shall determine whether all potential benefits of project alternatives are fully and appropriately accounted – e.g., societal costs, lost ecosystem services, lifecycle costs.
- **Project authorizations (Section 7001 process)** — Section 1104 authorizes an education and awareness component to the Section 7001 process for authorizing of water resource projects. This outreach through materials and seminars, written notice to local elected officials and potential non-federal sponsors, and assistance in researching existing project authorities and Corps decision documents.
- **Implementation guidance** — Section 1105 requires the Corps to directly engage relevant stakeholders in developing implementation guidance and provide a 60-day public review process to seek and consider input.
- **Aquatic nuisance species research** — Section 1108 expands existing efforts of the Engineer Research and Development Center (ERDC) to research management and eradication of aquatic invasive species, including Asian carp and zebra mussels. While Congress suggests that the study evaluate diverse geographical regions of the country, it specifically calls out the Atlantic, Pacific, and Gulf coasts and the Great Lakes.
- **Channel Management**
    - *Multi-year contracts* — Section 1111 establishes a 10-year pilot program for awarding multi-year contracts for O&M of harbors and inland harbors that would result in a cost savings relative to a single-year or project-based contract. The Corps is directed to provide Congress with a report of findings regarding cost-effectiveness, reliability, performance, cost savings of the multi-year agreement with respect to mobilization and demobilization of dredging equipment, and responsiveness to navigational needs.
    - *Beneficial use pilot program* — Section 1130 extends the authority of Section 1122 of WRDA 2016 to 20 projects from its initial 10 projects. The Section 1122 authority allowed for 10 pilot projects to implement beneficial use of dredged material notwithstanding the low-cost standard.
    - *Beneficial use criteria* — Section 1216 allows the Corps to identify beneficial use solutions when considering options for dredged material management, amending Section 210(e) of WRDA 1986.
    - *Dredged material management plans (DMMPs)* — Section 1116 calls for an expedited process for developing dredged material management plans in order to maximize the use (and relevance) of existing information and any innovative practices and avoid inefficiencies in redundant work.
    - *Beneficial use for storm damage* — Section 1148 allows the Corps to grant a temporary easement to facilitate a one-time placement of sediment necessary to reduce storm damage.

- **Minnesota locks/Disposition** — Section 1225 calls for expedited completion of the St. Anthony Falls L&D disposition study, separate from any other L&D report – i.e., Lower St. Anthony Falls and L&D 1. Section 1168 directs the Corps to consider environmental benefits in the disposition of water resource projects and expedites the process for implementing disposition study recommendations – i.e., the removal of infrastructure.
- **Cedar River (Iowa)** — Section 1223 directs the Corps to report on the path forward and timeline to implement the Cedar River flood risk management project.
- **Levee accreditation** — Section 1123 allows the Corps to provide technical assistance on a reimbursable basis to a local government owning or operating a federally-constructed levee as to the reason for its non-accreditation by FEMA. In cases in which a local government levee is hydraulically-connected to a federally-owned levee, the Corps is encouraged to cooperate to the extent practicable as to the reasons that the locally-owned levee is not accredited. This provision would not require the Corps to do anything beyond technical assistance.
- **Levee and dam safety** — Sections 1144 and 1163 reauthorize the National Levee Safety Initiative and National Dam Safety Program Act through FY 2023, respectively.
- **Chicago Sanitary and Ship Canal Dispersal Barriers** — Section 1142 clarifies that the O&M cost share of the Chicago Sanitary and Ship Canal Dispersal Barriers project is 80 percent federal expense and 20 percent non-federal expense.
- **Natural and nature-based features** — Section 1149 allows for the consideration of nature and nature-based features as project alternatives for aquatic ecosystem projects.
- **Meramec River Basin** — Section 1202(b) expands the authority of the Meramec River Basin feasibility study to include 1) flood risk management as a project purpose and 2) the entire Meramec River Basin (extending the geographic scope).

In response to a question from Kirsten Wallace, Chewning said he would follow-up with UMRBA regarding the status of pilot beneficial use projects authorized in WRDA 2016. Dru Buntin elaborated on the importance of the expanded scope of the Meramec River Basin feasibility study, particularly for addressing legacy contaminants. Gretchen Benjamin reported that Section 1202 authorizes implementation of the Lower Mississippi River Resource Assessment. Benjamin explained that the intent is to replicate UMRR in the Lower Mississippi. Olivia Dorothy observed that WRDA 2018 will essentially require the Corps to expand its St. Anthony Falls L&D disposition study to include an infrastructure removal alternative.

MVP Integrated Watershed Modeling

Emily Moe provided an overview of the Corps' Water Management System (CWMS) modeling that is used to constantly monitor meteorological and hydrological conditions, primarily for purposes of informing the agency's operations decisions nation-wide. Moe explained that the Corps uses CWMS for data visualization and watershed monitoring, forecast simulation, and inundation map generation. Moe illustrated the CWMS capabilities with a few output examples and discussed how various elements (e.g., precipitation) are used as inputs to ultimately estimate consequences of hypothetical operations decisions. Moe concluded that the CWMS modeling can be used regionally to inform various "what-if" scenarios.

In response to a question from Rick Pohlman, Moe said the CWMS model is built for the Corps' software, but a public version is available on the HEC-RAS webpage. The model is used to perform a damages assessment of flood events. In response to a question from Karen Hagerty, Moe confirmed that the Iowa-Cedar River watershed model is still under development. In response to a question from Jim Fischer, Moe said CWMS is not yet calibrated to provide sediment load or bed load movement

information. She explained that refining the model to a smaller scale would be dependent on location, data available (e.g., LiDAR), and scope of the assessment. Kirsten Wallace observed that CWMS could be helpful for the UMRS flood risk, channel management, and extended drought study. Moe observed that the model is useful at a 30,000-foot scale but not as relevant at a more refined scale.

Floodplain Restoration Decision Support Tool

Kris Johnson presented on the development of a decision support tool to inform prioritizing floodplains to restore. Johnson discussed the value of floodplains and return on investment in restoring healthy floodplains. Forty-one million people live in floodplains and are at risk of being affected by disasters with $5 billion in economic assets at risk of loss. Given TNC's successful restoration in key areas, including at Emiquon Preserve and National Wildlife Refuge, the big question is how to scale up investment and where to place that investment. According to Johnson, floodplain restoration is a cost-effective tool for flood risk reduction.

Johnson said priorities for floodplain restoration include improving water quality conditions locally and in the Gulf of Mexico; reducing flood risk exposure, damages, social vulnerability; and increasing biodiversity and particularly species, important habitat, and connecting river-floodplain landscapes. Johnson illustrated how to use the online Floodplain Explorer decision support tool to help identify and prioritize areas where floodplain conservation and restoration projects are most needed and effective. The Explorer integrates multiple spatial datasets to provide a comprehensive mapping of floodplain extents, allowing resource managers to select factors determining priorities – e.g., nutrient removal, estimated flood damages. Erickson cited TNC's online publication that describes the Explorer and how to use it.

In response to a question from Dru Buntin, Erickson said simulating the results of specific management actions is beyond the Explorer's capability at this point although TNC would like to expand the tool to support that analysis. Kirsten Wallace said she attended MRCTI's September 2018 annual meeting where Erickson gave a similar presentation. The mayors were very receptive to the images and illustrations. Wallace observed that the Floodplain Explorer can also serve as an important communication tool.

Flood Forecasting and Modeling

Steve Buan provided an overview of the NWS's forecasting tools for supporting decision makers related to flood preparedness and response. Forecasting tools will become increasingly important, noting the World Economic Forum's finding that water crises and extreme weather events have the greatest likelihood of occurring and potential impact. Buan explained that the NWS's strategic goal is to build a "weather and water ready nation," with better forecasts and warnings, actionable environmental intelligence, consistent products and services, and connecting forecasts with decision making.

Buan reported that NWS has hosted numerous stakeholder engagements since 2012, locally in major river basins and in Washington, D.C. Primary feedback received through these engagements included the need for consistent, high resolution water analyses, transforming information into intelligence, and integrating social sciences to create acceptable actions. Additionally, the National Academy of Sciences published a report highlighting capability gaps.

Buan described the National Water Model's (NWM's) existing and likely future capabilities, including model inputs and outputs. The NWM was first implemented in August 2016 and upgraded in May 2017, and provides multi-scale hydrologic forecast guidance and a full suite of water balance information. The NWM is particularly valuable in underserved locations where there is very limited data available for forecasting. Buan illustrated the model's output by simulating flooding occurring throughout the Midwest from April 2017 to May 2017. Planned expansions to the NWM include the development of centralized water forecasting in FY 2015-2019, flash flood and urban hydrology in FY 2016-2020, and

coastal total water level in FY 2017-2021. Longer-term goals are to integrate the NWS model with a) groundwater and transport models to predict low-flows, drought, and fire impacts; and b) key water quality datasets, models, and tools to begin water quality prediction.

In response to a question from Ken Westlake, Buan said the National Water Model would inform terrestrial flow into the Great Lakes.

UMRS-Related DOI Policies and Functions

Planned DOI Reorganization

Susan Combs described the purpose, vision, and development of the planned DOI reorganization into new watershed-based unified regions. Combs explained that the purpose is to resolve conflicting differences among various DOI agencies that are challenging for states and other stakeholders to navigate. The inter-agency conflict often resulted in decision making being elevated to Department leadership in Washington, D.C. The vision is for DOI to hold one voice and engagement point with external stakeholders. The goal is for enhanced clarity to DOI's priorities and positions and to enhance efficiency and effectiveness in DOI's external matters (e.g., recreation, conservation, permitting) and internal matters such as human resources and procurement.

Dru Buntin expressed appreciation to Combs for her explanation of the planned Department-wide reorganization and the focus on states' interactions with DOI. However, Buntin expressed concern with the boundaries that appear to disregard interstate waters. Particularly, using the Mississippi River as a dividing boundary between DOI regions and excluding the state of Missouri from the Missouri River watershed region while there are legal challenges to an ongoing and extremely controversial biological opinion. Buntin underscored the importance that Missouri not be omitted from Missouri River management decision making, noting that all of the state's residents depend on the river as a water supply.

Combs recalled that the DOI leadership struggled substantially with boundary outlines, trying to consider watersheds, ecosystems, and tribal nations. Ultimately, the DOI agreed to draft regional boundaries based on state lines with some exceptions. According to Combs, the DOI should not reduce any collaboration with partners based on the new regional boundaries, but said she anticipates enhanced communications and access to DOI resources. Combs pointed UMRBA Board members to Mike Celata, who is serving as the Mississippi River unified regional facilitator. Celata works for the Bureau of Ocean Energy Management. Combs also noted that Charlie Wooley is the facilitator for the Great Lakes unified region.

Combs said DOI will name new regional directors following the reorganization scheduled for July 1, 2019. Buntin expressed concern that the DOI main point-of-contact for Missouri will be located either in New Orleans or Denver. Jim Fischer asked how existing programs and projects that overlap the Mississippi River will continue (e.g., USGS and USFWS involvement in the Upper Mississippi River Restoration program) and whom within DOI should be contacted. Combs explained that the DOI unified regional facilitators are only necessary to resolve inter-bureau conflicts, which are more challenging for the DOI in the western states. Additionally, the regional directors would rotate every two to three years. In response to a question from Ken Westlake, Combs said DOI has not yet made any decisions regarding regional headquarters. Kirsten Wallace noted the national attention on the challenges the Corps faces with a similar leadership rotation.

Dave Frederickson asked how UMRBA might be involved in the reorganization planning going forward. Combs offered to convene a working group to address Mississippi River-related issues. In response, UMRBA Board members agreed to request a discussion with Celata and Wooley and then consider drafting a letter to DOI leadership expressing the states' concerns.

In response to a question from Board members, Sabrina Chandler acknowledged that USFWS is consulting internally to alleviate confusion regarding how it will report and communicate with leadership regarding UMRS programs and projects – e.g., USFWS refuge boundaries that transcend two states.

Sandy Morrison said USGS anticipates operating as usual because the agency is not involved in regulation.

Alignment with State Fish and Wildlife Law and Policy

Chandler referenced pages F-8 to F-15 in the agenda packet regarding a September 10, 2018 memo issued from Secretary Ryan Zinke to DOI bureau and agency leadership. In essence, the memo confirms state consultation that already occurs. Chandler reported that USFWS recently completed a thorough investigation of its regulations, and eliminated several unnecessary regulations while simplifying or reducing the burden of others.

State and Federal Updates

USGS — Sandy Morrison reported that, at MRCTI's September 20, 2018 annual meeting, USGS entered into an agreement with the Corps, USDOT, and navigation industry to deploy nutrient monitors on barges that transect the Mississippi River with the goal of protecting source water. USGS is also working with NOAA to improve navigation safety – e.g., automate real-time water level data with rate of change and information on bridge clearance.

USACE — Brian Chewning acknowledged MVD Commander MG Richard Kaiser serving as the Corps' signatory to the MRCTI agreement as Morrison reported.

Illinois — Rick Pohlman reported that the State of Illinois' FY 2019 budget includes funding for a Fox River L&D reconstruction project and the DNR's initiative to remove low-head dams. Pohlman also described the interests of the state's executive and legislative branches to modify the state's levee regulations. Illinois DNR continues to provide data to the Rock Island District needed for its CWMS modeling.

Iowa — Tim Hall said the Iowa DNR Director Chuck Gipp retired and Bruce Trautman is currently serving in an acting capacity.

Missouri — Dru Buntin reported that Missouri recently emerged from an extensive drought that left three communities within weeks of running out of water. Significant rainfall has refilled two of three large reservoirs in the state. Buntin also noted that Missouri DNR is in the middle of updating its state water plan and that the state is actively pursuing litigation against North Dakota regarding its diversion projects.

Minnesota — Glenn Skuta reported that Minnesota finalized its sediment reduction strategy for the Minnesota River in January 2015 and is currently in the process of updating the strategies based on new modeling capabilities. The Minnesota River strategies emphasize conservation practices and soil bank erosion reduction. Patrick Phenow said the Minnesota legislature appropriated $5 million for port improvements, with two projects on the Mississippi River. Minnesota DOT is planning a major update in 2019 to its existing statewide ports and waterways plan, first completed in 2014.

Dave Frederickson said that, on November 1, 2018, the second phase of the Minnesota buffer law will take effect that essentially expands the 50-foot buffer requirement to public drainage systems. Frederickson anticipates that Governor Mark Dayton will soon sign a new nitrogen fertilizer management rule.

Administrative Issues

UMRBA Personnel Manual

Kirsten Wallace explained that UMRBA is excited that Andrew Stephenson and his wife will be welcoming a new baby in mid-December. That triggered an evaluation of UMRBA's personnel manual regarding its parental leave policy. Typically, UMRBA follows Minnesota's employee agreement with the Middle Management Association that allows for six weeks of parental leave.

Wallace also recognized the tremendous value of its project staff working on OPA hazardous spills mapping and planning and recommended that temporary staff employed with the Association for one full year receive 10 percent of their salary in lieu of benefits.

Dru Buntin moved and Steve Galarneau seconded a motion to amend the UMRBA Personnel Manual to:

A) A leave of absence shall be granted to a natural parent or an adoptive parent for up to six weeks within six months following the birth or adoption of their child. The employee must be employed at UMRBA for at least 12 months, working for at least 1,250 hours during the year immediately preceding the leave. At the Executive Director's discretion, the qualifying employee may be allowed intermittent or reduced schedule use of leave.

B) The base salary of project staff who are employed by the Association for one calendar year and who are scheduled to work at least 1,044 hours in any twelve consecutive months shall be increased by 10 percent.

The motion passed unanimously via a voice vote.

FY 2021 UMRBA Dues and WQ Assessment

Tim Hall reported that the UMRBA Board has extensive deliberation regarding how to consider more frequent, modest increases in state dues and WQ assessment and avoid larger increases. Tim Hall moved and Galarneau seconded a motion to set UMRBA FY 2021 dues and WQ assessment to $61,500 and $20,500, respectively. The motion passed unanimously.

Future Meeting Schedule

February 2019 — Dubuque

- UMRBA quarterly meeting — February 26
- UMRR Coordinating Committee quarterly meeting — February 27

May 2019 — St. Louis

- UMRBA quarterly meeting — May 21
- UMRR Coordinating Committee quarterly meeting — May 22

August 2019 — La Crosse

- UMRBA quarterly meeting — August 20
- UMRR Coordinating Committee quarterly meeting — August 21

With no further business, the meeting adjourned at 3:03 p.m.