Minutes of the 167th Quarterly Meeting of the Upper Mississippi River Basin Association

August 8, 2023 St. Paul, Minnesota

Rick Pohlman called the meeting to order at 9:30 a.m. Participants were as follows:

UMRBA Representatives and Alternates

Rick Pohlman Illinois Department of Natural Resources

Loren Wobig Illinois Department of Natural Resources (Virtual)

Chad Craycraft Illinois Department of Natural Resources
Tim Hall Iowa Department of Natural Resources

Jake Hansen Iowa Department of Agriculture and Land Stewardship

Grant Wilson Minnesota Department of Natural Resources
Patrick Phenow Minnesota Department of Transportation (Virtual)

Chris Weiberg Missouri Department of Natural Resources

Chris Klenklen Missouri Department of Agriculture

Matt Vitello Missouri Department of Conservation (Virtual)
Jim Fischer Wisconsin Department of Natural Resources

Federal UMRBA Liaisons

Brian Chewning
U.S. Army Corps of Engineers (Virtual)
Mark Gaikowski
U.S. Geological Survey, Midcontinent Region
Sabrina Chandler
U.S. Fish and Wildlife Service, Refuges

Others in Attendance

BJ Murray Illinois Department of Transportation (Virtual)
Brian McCoy Illinois Department of Transportation (Virtual)
Kirk Hansen Iowa Department of Natural Resources (Virtual)
Dave Bierman Iowa Department of Natural Resources (Virtual)
Vanessa Perry Minnesota Department of Natural Resources

Neil Rude Minnesota Department of Natural Resources (Virtual)

Ken HendersonMissouri Department of Agriculture (Virtual)Erin FanningMissouri Department of Natural ResourcesTim AndersonWisconsin Department of Agriculture

Wade Strickland
Wisconsin Department of Natural Resources
Scott Ropke
Wisconsin Department of Natural Resources
Jayson Schrank
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation (Virtual)
Joey Windham
U.S. Army Corps of Engineers, MVD (Virtual)
Samantha Thompson
U.S. Army Corps of Engineers, MVD (Virtual)

Col. Eric Swenson U.S. Army Corps of Engineers, MVP

John Henderson U.S. Army Corps of Engineers, MVP (Virtual)

Bob Stanick U.S. Army Corps of Engineers, MVP

Kristen Moe U.S. Army Corps of Engineers, MVP (Virtual)

Col. Jesse Curry

U.S. Army Corps of Engineers, MVR

Marshall Plumley

U.S. Army Corps of Engineers, MVR

Lance Engle U.S. Army Corps of Engineers, MVS (Virtual)
Shawn Sullivan U.S. Army Corps of Engineers, MVS (Virtual)

John Remus U.S. Army Corps of Engineers, Northwest Division (Virtual)

Chuck Thieling
U.S. Army Corps of Engineers, ERDC (Virtual)
Richard Vaughn
U.S. Department of Agriculture, NRCS (Virtual)

Zach Leibowitz

U.S. Environmental Protection Agency, Region 7 (Virtual)

Steve Schaff

U.S. Environmental Protection Agency, Region 7 (Virtual)

Amy Shields

U.S. Environmental Protection Agency, Region 7 (Virtual)

Kraig McPeek
U.S. Fish and Wildlife Service (Virtual)
Matt Mangan
U.S. Fish and Wildlife Service (Virtual)
Laura Muzal
U.S. Fish and Wildlife Service (Virtual)
U.S. Fish and Wildlife Service (Virtual)
U.S. Geological Survey, Midcontinent Region

JC Nelson U.S. Geological Survey

Jennifer Dieck U.S. Geological Survey, UMESC (Virtual)

Steve Buan National Oceanic and Atmospheric Administration, NWS (Virtual)

Doug Daigle [No Affiliation]
Olivia Dorothy American Rivers

Kim Lutz America's Watershed Initiative (Virtual)

Lindsay Brice Audubon
Brent Newman Audubon

Dale Buckholtz

Tony Houdyshell

Anshu Singh

Canadian Pacific Railroad

Canadian Pacific Railroad

Corn Belt Ports (Virtual)

Maisah Khan Mississippi River Network (Virtual)

Rick Stoff Our Mississippi (Virtual)

Matt Stokes Safety Training and Response Strategies (Virtual)

Jimmy Hague The Nature Conservancy (Virtual)

Bryan Hopkins The Nature Conservancy

Mark Schulz Wisconsin Conservation Congress

Kirsten Wallace Upper Mississippi River Basin Association

Brian Stenquist Upper Mississippi River Basin Association (Virtual)

Mark Ellis Upper Mississippi River Basin Association

Natalie Lenzen Upper Mississippi River Basin Association (Virtual)

Ken Peterson Upper Mississippi River Basin Association Erin Spry Upper Mississippi River Basin Association Andrew Stephenson Upper Mississippi River Basin Association

Minutes

Rick Pohlman noted a correction to page A-1 of the May 23, 2023 UMRBA quarterly meeting as provided in the agenda packet to him serving as Chair rather than Tim Hall. Pohlman noted that the packet also includes minutes from a January 30, 2023 meeting. Tim Hall moved and Jim Fischer seconded a motion to approve the May 23 meeting minutes as corrected and the January 30 minutes as drafted. The motion was approved unanimously.

Executive Director's Report

Kirsten Wallace announced that UMRBA hired Sam Hund and Ken Petersen as GIS and Planning Assistants to support ongoing Inland Sensitivity Atlas (ISA) work for USEPA Region 5. They started on May 15, 2023 and May 25, 2023, respectively.

Wallace welcomed Mark Gaikowski as USGS's new federal liaison to UMRBA. Gaikowski previously served as the UMESC Center Director and now serves as the USGS Midcontinent Region Deputy Director for Science.

Wallace recognized the tremendous contributions of Cheryl Ball (Missouri DOT) and Dave Busse (USACE St. Louis District).

Wallace pointed to the Executive Director's report in the agenda packet for a summary of the Association's work efforts since the May 2023 meeting. Wallace elaborated on the following highlights and action items:

- UMRBA submitted a work plan to USEPA for UMRBA's support of the Hypoxia Task Force Upper Mississippi River Sub Basin Committee.
- The Upper Mississippi River Restoration (UMRR) Coordinating Committee agreed upon priorities for FY 2024, including capacity planning, project selection process, a programmatic workshop in spring 2024, and implementation issues.
- The Interstate Council on Water Policy (ICWP) hosted a bicameral and bipartisan session on August 1, 2023 informing Congress of the challenges to non-federal sponsors for taking on the liability as prescribed in the Corps' project partnership agreements.

Wallace noted that the Mississippi River Commission will be employing its low water inspection of the Upper Mississippi River on August 14-18, 2023. Wallace said UMRBA will participate in a series of events, including serving on panels related to systemic flood planning and the Navigation and Ecosystem Sustainability Program.

Wallace provided an overview of UMRBA's partnership with NOAA and the University of Minnesota's Institute on the Environment in their efforts to develop downscale hydroclimatic predictions for the Upper Mississippi River basin. UMRBA's role will be to convene three facilitated meetings to increase the usability of the hydroclimatic forecasts and identify effective product delivery mechanisms to facilitate usability of hydroclimatic forecasts. The cost for this work is estimated to be \$12,500. Chris Weiberg moved and Tim Hall seconded a motion to authorize Wallace to enter into an agreement for \$12,500 with the University of Minnesota to support UMRBA's work as Wallace described.

Wallace pointed to UMRBA's May 2023 through June 2023 financial statements provided on pages B-6 to B-14 of the agenda packet. Tim Hall moved and Jim Fischer seconded the motion to accept the Association's budget report and balance sheet as included in the agenda packet. The motion was approved unanimously.

<u>UMRBA Hazardous Spills Prevention and Planning Program</u>

Acknowledging the reality that hazardous spills occur, Mark Ellis stated that the UMRBA Hazardous Spills Prevention and Planning Program convenes intergovernmental coordination to minimize the impacts of spills. The coordination occurs through the Upper Mississippi River Hazardous Spills Coordination Group, which, established in 1989, serves as a forum for information sharing, develops mapping and other planning and response tools, and advocates for federal investment and resources. The Upper Mississippi River Hazardous Spills Coordination Group membership includes state and federal agencies, tribes, counties, and industry (mostly railroads). Ellis emphasized the important role that railroad companies bring to regional hazardous spills response, including by providing resources and training to local entities.

Ellis reported that the Upper Mississippi River Hazardous Spills Coordination Group developed and formally adopted a strategic plan in 2021. Its purpose is to guide members' collaborative work in preparation, planning, and response to spills impacting the Upper Mississippi River. The Group's high-level goals in 2021 through 2027 are to:

- Develop guidance for stakeholders
- Support communication and coordination activities
- Increase participation from other groups
- Ensure sufficient resources
- Identify technologies and resources to advance the Group's interests

Ellis pointed to the Inland Sensitivity Atlas (ISA) as a primary product of the Upper Mississippi River Hazardous Spills Coordination Group. The Oil Pollution Act of 1990 required that USEPA document resources at risk, potential spill sources that would threaten that, and any other relevant information. In particular, UMRBA supports USEPA Region 5's ISA work and therefore maintains the ISA for Illinois, Minnesota, and Wisconsin and in adjacent counties in Iowa and Missouri.

Ellis explained UMRBA's approaches to supporting cooperative response planning. This mostly involves identifying resources at risk and potential sources for spill sources, developing site-specific response strategies and initial Incident Action Plan (IAP), verifying field response strategies, and submitting data and plans to the Regional Response Teams (RRT).

Ellis provided an overview of response plans available for the Mississippi River region. Full contingency plans exist for the USFWS Refuges and key habitat areas, Quad Cities, St. Louis, and Grate Rivers subareas. Most of the Upper Mississippi River has plans, while some may need to be updated. Ellis pointed to gaps in planning in specific geographic locations. Ellis said the Upper Mississippi River Hazardous Spills Coordination Group's strategic plan states a commitment to expanding spills plans at those gap locations as well as revisiting potentially outdated plans.

Ellis concluded that networking is key to highly valuable to the agencies involved in the Upper Mississippi River Hazardous Spills Coordination Group and other coordination activities, including for understanding the capabilities and expertise of individuals.

In response to a question from Rick Pohlman about drone technology, Ellis said the St. Charles County will be testing its drone as part of a response strategy verification in that region later this month. It will help to test the technology for assessing the extent of an oil spill or obstacles to responding to an event. In response to a question from Andrew Stephenson, Ellis explained that the Upper Mississippi River

Hazardous Spills Coordination Group has discussed reviewing areas following the construction of a new habitat project because it could affect waters flows. In response to a question from Bryan Hopkins, Ellis explained that ecological resources are identified as priorities. Sensitive resources are not specifically identified in final products but there are prescribed actions to protect those areas.

Jim Fischer asked if priority for updating plans is informed by stretches of railroad track that might be at higher risk for a derailment. Ellis explained that issues leading to derailments are often unforeseen and noted that spills can enter anywhere along the transportation system as well as from other sources the store hazardous materials.

Sabrina Chandler underscored the value of the UMRBA Hazardous Spills Prevention and Planning Program. The plans have been tested many times over the last decade throughout the Upper Mississippi River System. Resource managers and responders are all aware that these plans and strategies are available. Responders are deeply involved in the planning and coordination. The value is that responders know exactly what to do when they are first to arrive on the scene of an incident. USFWS has successfully used these strategies to protect public trust resources. It is a tremendous asset that is unique to this region. According to Chandler, the Upper Mississippi River partnership has set the standard for spill response planning with the return on investment magnitudes higher than the costs.

In response to a question from Mark Gaikowski about using models such as bathymetry and topobathy, Ellis explained that the Upper Mississippi River Hazardous Spills Coordination Group has discussed the benefits of a flow model to show current velocity at the surface and where hazardous material might dissipate and spread. Gaikowski also suggested identifying key ecosystem indicators to protect and exploring the use of artificial intelligence, as an example, to identify bird species from aerial photography provided by drones.

Canadian Pacific Kansas City Railroad

Dale Buckholtz provided a briefing on the Canadian Pacific Railroad's purchase of the Kansas City Southern Railroad into what will now be named the Canadian Pacific Kansas City Railroad. The company will become the first transcontinental railway with 20,000 miles of track, allowing the railroad to shift commodities without interchange and to reduce congestion in certain areas. More information about the merger is available at https://futureforfreight.com/. Buckholtz also provided Canadian Pacific's commitment to safety and sustainability, focusing on the potential for zero-emissions hydrogen-powered locomotives.

In response to UMRBA's question, Buckholtz explained the railroads expectations of traffic and commodity flow along the Upper Mississippi River. In some areas, that includes nearly a doubling of railcars north of the Quad Cities. Buckholtz explained that future predictions are impacted by climate (e.g., drought affecting grain), intermodal demands, automotive market, seasonal factors, regulatory environment, and non-regulated materials.

Buckholtz explained Canadian Pacific's network of emergency response assets (e.g., boom, fire and foam trailers) and raid air monitoring equipment. Trainings and exercises are viewed as essential for preparing for a potential response, including along the Mississippi River corridor. Buckholtz also explained the impacts of fire and floods to railroads and Canadian Pacific's associated mitigation activities. He offered partnership in working with UMRBA to address flood and drought impacts to transportation resiliency along the Upper Mississippi River.

Tony Houdyshell raised the issue of increasing incidences of barge encroachments on railroad tracks, noting that the Mississippi River is a unique corridor where rail and barge traffic interface throughout the navigation shipping season. It has caused derailment on the Upper Mississippi River. Railbeds and the embankments that are fragile become extremely susceptible to prop wash. Houdyshell said there are efforts to improve safety and awareness, such as the installation of warning signs and adding notifications to navigation charts. Canadian Pacific will continue to work through community awareness and emergency response (CAER) groups will continue to build relationships between maritime and railroad safety and response. Additionally, the CAER groups provide opportunities for the railroad to work with local communities and other responders to enhance their emergency response capabilities. This includes underwater and over ice trainings.

Col. Jesse Curry noted that barge encroachment is also a concern to levee districts. Col. Curry said the Navigation and Ecosystem Sustainability Program includes construction of mooring cells and other navigation aids that should help to address concerns related to encroachment. Col. Curry also encouraged coordination in preparing for emergency response during flood events.

Drought Resilience

2023 Navigation Channel Maintenance Report

Bob Stanick reported on the channel condition updates on behalf of the St. Paul, Rock Island, and St. Louis Districts. The Upper Mississippi River experienced record flooding in the northern stretches that quickly transitioned to low water, which has held consistently throughout the summer. The lack of high water in the St. Louis District has reduced dredging needs throughout the District. However, the potential for low water levels continuing into fall may require significant dredging. Generally, there has been minimum sediment deposition in the Rock Island District. There was one emergency incident in the Caseville area early in the season but that was resolved using the Dredge Goetz. The St. Paul District is currently watching several problematic. Six groundings have occurred this year, but the District was able to respond very quickly and limit impact to navigation. The St. Paul District is continuing to learn from past experience and make process improvements to channel maintenance program.

Stanick opened a larger discussion about capacity to place dredged material in near and long term. Near term capacity is influenced by many unknown variables such as climate – e.g., drought, flood, and changing weather patterns. The Corps is working with partners to develop DMMPs to expand capacity in certain locations. While there is capacity to place material dredged maintain an open channel, there is not placement capacity to maintain the recommended width of the navigation channel. Longer term planning seems to be better focused on reducing sediment runoff to the river.

Stanick explained a suite of challenges that are facing the Corps' channel maintenance programs on the Upper Mississippi River, including capacity of placement sites, cost of doing business, authorizations, regulatory limitations, volatility of different climate scenarios, and competing missions between partnering agencies. As an example, Stanick pointed to the Federal Standard as a limitation to beneficial use.

Noting that sediment deposition in backwater areas is a major concern for partners, Stanick explained that the Corps is limited in its authorization for the navigation program to dredge backwater areas for habitat benefit. Col. Eric Swenson reiterated Stanick's statement confirming that the navigation authority

cannot dredged for non-navigation purposes, Col. Swenson pointed to other authorities such as the Upper Mississippi River Restoration (UMRR) program for addressing those dredging needs.

Fischer acknowledged the authorization limitation, but then explained the challenge within UMRR to balance costs of habitat construction by beneficially using dredged material from the navigation channel rather than dredging the backwaters and gaining that ecological habitat. Given that UMRR and NESP are the authorizations that allow for backwater dredging, then it will be important to balance ecological benefit of using the dredged material from the backwaters for UMRR island construction with the cost savings from using the dredged material from the navigation channel. Fischer recognized the inherent challenge from sediment deposition in both the navigation channel and backwaters. Col. Swenson said he agreed with Fischer's assessment.

In response to a question from Bryan Hopkins, Stanick explained that the ability to beneficially use dredged material is calculated on an individual case basis. Generally, costs for transporting the dredged materials would need to be close in proximity to the dredge location.

Stanick said opportunities include the Navigation and Ecosystem Sustainability Program, beneficial reuse, new technologies (e.g., bedload collector), and funding for partner agencies to address upland and stream erosion. Stanick called on partners to share ideas for opportunities.

Chad Craycraft agreed that reducing sediment runoff to the river is important. Fischer agreed with Stanick's assessment, calling for new creative approaches and to do so in collaborative partnerships. Fischer asked specifically about how UMRBA can be helpful by focusing on policy, including through new legislation or commenting on Corps policy. Fischer agreed with Stanick's comment about expanding the involvement of DOTs and watershed groups in the St. Paul District River Resources Forum. Mark Schultz underscored the challenge of the stressors to the river coming from the watershed. Schultz explained challenges to local governments to disposing dredged sediment to deepen backwater lakes.

In response to a question from Fischer about limitations from easement, Stanick said the Corps was able to receive a waive the land ownership requirement to instead use easements. The Corps may still be required to purchase land for long term placement sites. Stanick said the St. Paul District should be able to meet the Chief of Engineer's recent goal of beneficially using 70 percent of dredged material. Co. Swenson confirmed that the St. Paul District is working aggressively to resolve real estate issues for obtaining placement sites with less than fee title as described in the regulations. Col. Swenson mentioned the partnership with the City of Winona using the Section 217 authority, which allowed the Corps to given the city a tipping fee to remove sediment and use to their benefit. Col. Swenson said eminent domain will likely need to be a solution in some places, and he would anticipate seeking support from UMRBA in areas where eminent domain is necessary to keep the navigation channel open. He said the goal is to dredged to the authorized width particularly around the river bends, acknowledging that this would be a substantial undertaking.

Stanick acknowledged the shortage of sand nationally and internationally and called upon partners to be innovative, create partnerships, and resolve the policy impediment to beneficial reuse. Chuck Theiling shared that the Corps' Engineering Research and Development Center (ERDC) is currently evaluating the use of Upper Mississippi River dredged sands to support beach nourishment projects across the country. The District receiving the sand may be able to counter the transportation costs.

Wallace noted UMRBA's interest in systemic, integrated channel maintenance planning. In the last couple of water resource development acts, Congress has tried to expand the Corps' channel maintenance planning authorities and use of dredged material. Wallace mentioned an opportunity for interagency planning.

BJ Murray noted the implementation challenge for Illinois that accepting beneficial reuse to place on farm fields becomes a regulated use. Theiling mentioned that states have differing regulations, but pointed to Minnesota's regulations that are useful for beneficial reuse. Mike Halstad echoed Murray's concern and the challenge at which sediment contains contaminants and the associated risk given the use. Fischer confirmed that dredged material is considered waste. The question is how clean is clean enough to be allowable for certain uses. Wisconsin is currently working internally to evaluate tiered standards in tandem with updating its memorandums of understanding for channel maintenance with the Corps.

Fischer referred to Wallace's comment, and called for systemic planning at least at the pool scale rather than individual DMMPs to provide flexibility with multiple opportunities for placement.

Missouri River Basin Water Management

John Remus explained the authorities and processes for managing water through the reservoir system on the Missouri River. Remus provided contextual information about the Missouri River's geography, the Congressionally-directed authorized purposes for the Corps' operations, the reservoir system storage zones and allocations, the water control requirements, and the navigation flow targets. Remus underscored that the Corps is not authorized to manage the Missouri River for any Mississippi River benefits.

Remus reported that navigation flow levels will be 1,500 cubic feet per second (cfs) below full service for the remainder of the 2023 season and will end December 1, noting the dry soil moisture conditions over much of the Missouri River Basin and the long range forecast for lower-than-average precipitation.

Wallace explained that UMRBA has letters to the Corps from the late 1990s and early 2010s that suggest there was authority for the Corps to consider the interconnectedness of the Mississippi River to the Missouri River management. Wallace asked whether the navigation authority is solely defined as encompassing only the Missouri River or whether the navigation authority could extend to other river uses. Remus referenced past deviation requests for a Mississippi River need that were denied when not having a direct quantified connection to Missouri River management.

Missouri River

Chris Wieberg shared Missouri's newly renewed Drought Mitigation and Response Plan and conditions and impacts of the 2023 drought in Missouri. Wieberg characterized the Drought Mitigation and Response Plan as allowing for a very adaptive approach to managing and mitigating drought impacts, pointing to a matrix of actions based on the myriad of potential conditions and impacts.

Wieberg applauded National Weather Service for its assistance in detecting and tracking drought conditions. Drought mostly retreated in winter 2022-2023 but rebounded throughout spring with drought mostly covering the state by summer. Missouri experienced the driest April and May combined since 1980 with high temperatures and low precipitation throughout summer. Precipitation in Missouri throughout the last three years (2021, 2022, and 2023) was below the long-term average.

Wieberg discussed the unique challenges of this drought to livestock because of the timing of the drought over the April and May growing season for tall fescue. Missouri DNR has spent considerable time working with farmers dealing with the drought impacts, learning about the impacts and listening to their concerns.

Wieberg provided an overview of Missouri DNR's actions, which included organizing the Drought Assessment Committee, opening the conservation reserve programs to allow for grazing, and assisting farmers with technology support and connecting them to federal assistance programs. Wieberg also noted Missouri's concern about impacts to navigation particularly in light of what occurred in fall 2022.

Water Resources Development Act

Kirsten Wallace explained that the intent for this segment of the meeting is to hear from UMRBA partners and river stakeholders about their respective priorities for Water Resources Development Act (WRDA) of 2024. In addition to presenting these ideas today, Wallace directed comments that partners want to submit to UMRBA to umrba@umrba.org.

The Senate Committee on the Environment and Public Works requested that members submit their WRDA 2024 requests by early October 2023. That is why UMRBA has begun to coordinate its priorities for WRDA and is now listening to partners ideas for its consideration.

Wallace reported that UMRBA will continue to advocate for reforming the liability provisions within the Corps' project partnership agreements (PPAs). The UMRBA Board is evaluate priorities related to the Corps applying for state permits, the use of easements as a preference over fee title, a systemic flood risk study similar to the authority on the Missouri River, as well as other matters.

Bob Sinkler said the Corn Belt Ports is prepared to advocate for PPA reform. Additionally, UMIMRA will request UMRBA support for legislation. Wallace mentioned the array of organizations working collaboratively to resolve the PPA impasse and the efforts that UMRBA is involved with to expand advocacy for PPA reform nationally, including through the Interstate Council on Water Policy.

In response to a question from Bryan Hopkins, Kirsten Wallace explained that the UMRBA Board is considering requesting an increase in the authorized annual appropriation for UMRR's long term resource monitoring. Jimmy Hague expressed appreciation for PPA reform and requested UMRBA support for UMRR long term resource monitoring. Wallace explained UMRBA's priorities for coordinating with the UMRR Coordinating Committee to evaluate the appropriate request given the program's recent information needs assessment. Jim Fischer pointed to increasing needs for monitoring and science capacity on the Upper Mississippi River System, but also raised the need to evaluate capacity to ensure capability is ready for the increased authorization.

Other Business

Future Meeting Schedule

October 2023 – St. Louis, Missouri

- UMRBA Quarterly Meeting October 24
- UMRR Coordinating Committee quarterly meeting October 25

February 2024 – Virtual

- UMRBA Quarterly Meeting February 24
- UMRR Coordinating Committee quarterly meeting February 25

May 2023 – St. Paul, Minnesota

- UMRBA Quarterly Meeting May 21
- UMRR Coordinating Committee quarterly meeting May 22

With no further business, the meeting adjourned at 2:00 p.m.