

**Minutes of the 153rd Quarterly Meeting  
of the  
Upper Mississippi River Basin Association**

**February 25, 2020  
Web-Based Conference Meeting**

Rick Pohlman called the meeting to order at 8:03 a.m. Participants were as follows:

UMRBA Representatives and Alternates:

Rick Pohlman	Illinois Department of Natural Resources
Loren Wobig	Illinois Department of Natural Resources
Tim Hall	Iowa Department of Natural Resources
Rita Grimm	Iowa Economic Development Authority
Sam Hiscocks	Iowa Department of Transportation
Barb Naramore	Minnesota Department of Natural Resources
Jennifer Hoggatt	Missouri Department of Natural Resource
Chris Klenklen	Missouri Department of Agriculture
Matt Vitello	Missouri Department of Conservation
Cheryl Ball	Missouri Department of Transportation
Steve Galarneau	Wisconsin Department of Natural Resources
Jim Fischer	Wisconsin Department of Natural Resources

Federal UMRBA Liaisons:

Brian Chewning	U.S. Army Corps of Engineers, MVD
Verlon Barnes	U.S. Department of Agriculture, NRCS (on behalf of Kevin Wickey)
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Scott Morlock	U.S. Geological Survey, Midwest Region

Others in Attendance:

Megan Moore	Minnesota Department of Natural Resources
Nick Schlessner	Minnesota Department of Natural Resources
Patrick Phenow	Minnesota Department of Transportation
Ken Henderson	Missouri Department of Agriculture
Dan Baumann	Wisconsin Department of Natural Resources
Mike Halsted	Wisconsin Department of Transportation
Jessica Brooks	National Oceanic and Atmospheric Administration, NWS
Thatch Shepard	U.S. Army Corps of Engineers, MVD
Terry Birkenstock	U.S. Army Corps of Engineers, MVP
Angela Deen	U.S. Army Corps of Engineers, MVP
Chris Erickson	U.S. Army Corps of Engineers, MVP
Steve Tapp	U.S. Army Corps of Engineers, MVP
Col. Steve Sattinger	U.S. Army Corps of Engineers, MVR
Andy Barnes	U.S. Army Corps of Engineers, MVR
Jodi Creswell	U.S. Army Corps of Engineers, MVR
Andrew Goodall	U.S. Army Corps of Engineers, MVR

Karen Hagerty	U.S. Army Corps of Engineers, MVR
Dennis Hamilton	U.S. Army Corps of Engineers, MVR
Roger Perk	U.S. Army Corps of Engineers, MVR
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Nate Richards	U.S. Army Corps of Engineers, MVR
LeAnn Riggs	U.S. Army Corps of Engineers, MVR
Paul St. Louis	U.S. Army Corps of Engineers, MVR
Kim Thomas	U.S. Army Corps of Engineers, MVR
Greg Kohler	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, MVS
Brian Markert	U.S. Army Corps of Engineers, MVS
Forrest Vanderbilt	U.S. Army Corps of Engineers, IWR
Chuck Theiling	U.S. Army Corps of Engineers, ERDC
Jason Daniels	U.S. Environmental Protection Agency, Region 7
Amy Shields	U.S. Environmental Protection Agency, Region 7
Neal Jackson	U.S. Fish and Wildlife Service, UMRCC
Kraig McPeck	U.S. Fish and Wildlife Service, Illinois-Iowa Field Office
Sara Schmuecker	U.S. Fish and Wildlife Service, Illinois-Iowa Field Office
Susan Cooper	U.S. Fish and Wildlife Service, Illinois-Iowa Field Office
Marybeth Brey	U.S. Geological Survey, UMESC
Mark Gaikowski	U.S. Geological Survey, UMESC
Jeff Houser	U.S. Geological Survey, UMESC
Jennie Sauer	U.S. Geological Survey, UMESC
Jayme Strange	U.S. Geological Survey, UMESC
Denise Bulat	Bi-State Regional Commission
Ray Lees	Tri County Regional Planning Commission
Blake Roderick	Mid-America Intermodal Authority Port District
Gretchen Benjamin	The Nature Conservancy
Doug Blodgett	The Nature Conservancy
Mike Klingner	Upper Mississippi, Illinois, and Missouri Rivers Association
Paul Rohde	Waterways Council
Angela Love	Wood
Marci Kapsch	Private Citizen
Mark Ellis	Upper Mississippi River Basin Association
Lauren Salvato	Upper Mississippi River Basin Association
Andrew Stephenson	Upper Mississippi River Basin Association
Kirsten Wallace	Upper Mississippi River Basin Association

### **Minutes**

Barb Naramore moved and Tim Hall seconded a motion to approve the draft minutes of the October 29, 2019 UMRBA quarterly meeting as prepared. The motion was approved unanimously.

### **Executive Director's Report**

Kirsten Wallace expressed gratitude to UMRBA staff for their additional workloads during her maternity leave as well as to partners for their patience and understanding during the time.

Wallace pointed to the written Executive Director's written report included in the agenda packet. Monitoring started in December 2019 for the UMRBA Interstate WQ Monitoring Strategy pilot project in CWA Reaches 8-9 – i.e., from the Iowa River confluence to L&D 22. Wallace expressed thanks to

Lauren Salvato and staff from Iowa, Illinois and Missouri for all their hard work preparing for the project.

Wallace pointed to page B-4 of the agenda packet, which includes a formal invitation letter from the co-chairs of the Hypoxia Task Force Coordinating Committee inviting UMRBA to be a formal member. Wallace attended the February 3-5, 2020 meeting in Washington, D.C.

Wallace pointed to UMRBA's financial statements on pages B-5 to B-8 of the agenda packet. Barb Naramore moved and Steve Galarneau seconded a motion to approve Association's budget report and balance sheet as provided. The motion was approved unanimously.

Wallace presented an updated FY 2020 budget for UMRBA that reflects current understandings of revenue and expenditures related to the Reaches 8-9 UMR Interstate WQ Monitoring Pilot and the UMRS flood, sediment, and drought planning effort. This includes hosting USACE CW Director James Dalton in fall 2019. Tim Hall moved and Barb Naramore seconded a motion to accept the revised FY 2020 budget as presented.

### **UMR HEC-RAS: States Perspectives and Questions**

On behalf of UMRBA's member states, Jim Fischer said the states are engaging with the Corps as it develops the HEC-RAS model with funding received in October 2019. The states will be seeking the funding needed to complete the modeling on the Illinois Waterway. Fischer said the model will be helpful for planning purposes. He said the states would also like the model to be useful for regulatory purposes and suggested working with FEMA.

Loren Wobig and Steve Galarneau echoed Fischer's statement, urging the involvement of FEMA as early as possible. In response to a question from Kirsten Wallace, Rick Pohlman directed UMRBA staff to develop a memo requesting a conversation with FEMA regarding its ability to use HEC-RAS modeling for regulatory purposes. Barb Naramore expressed support for that action and requested the direct involvement of state floodplain managers.

Jim Fischer referred to Mike Klinger's comment in the chat feature to convene a public involvement group if and when these conversations with FEMA occur.

### **Interbasin Diversion**

#### *Potential Update to 1989 Basin Charter*

Lauren Salvato reported that UMRBA has convened a small group of representatives from each state to review the 1989 UMRB Charter and to consider any revisions to the Charter to recommend to the UMRBA Board for its consideration. The small group has held two conference calls. The first call held on December 16, 2019 focused on reviewing the existing Charter and historical documentation of its development. On the second call held on March 3, 2020, the small group discussed provisions of the Charter and areas to consider for updating. Initial ideas include a) providing more specific definitions regarding diversions and b) reevaluating the existing threshold of five million gallons per day. For example, is the threshold appropriate in a large riverine system given that it was initially selected based on the similar threshold selected for the Great Lakes? Is the threshold appropriate for the basin given its current and future availability of water considering climate change?

The group reflected on case studies of interstate agreements related to watershed water transfers, including those held by the Susquehanna River Basin Commission, Delaware River Basin Commission, and the New York Department of Environmental Conservation. The group also considered USGS's

Integrated Water Availability Assessment (IWAA) pilot project in the Cambrian-Ordovician Aquifer and the Fox-Wolf-Peshtigo Basin as well as ongoing research on interbasin transfers by Dr. Landon Marsten from the Kentucky State University. The Basin Charter review work group agreed to participate in Dr. Marsten's development of a basin water transfer database.

### *Annual Reporting*

The five UMRBA states are party to the 1989 Upper Mississippi River Basin Charter, which sets forth a notification and consultation process for any new or increased water diversion out of the basin that will exceed an average of 5 million gallons per day during any 30-day period. The Charter requires the signatory states to report on their involvement in qualifying diversion requests at UMRBA's annual meeting. The states reported as follows:

Minnesota — Barb Naramore reported no diversion requests in Minnesota that would trigger interstate consultation. However, Naramore explained that Minnesota DNR performed a preliminary well assessment for a potential water out-of-basin water diversion request. The assessment is a precursor for a permit application. It allows the state to obtain an initial read on whether water would likely be appropriated before going through the permitting process. The proposal involved pumping 486 million gallons of water per year to western U.S. for irrigation needs. On average, the application may have exceeded the five million gallon per day threshold for implementing the Basin Charter. Naramore said that Minnesota is very strict in regards to the use of its aquifers, allowing for withdrawals only when there are no alternatives.

Naramore said the company is no longer pursuing the proposal, but it raised important contextual questions regarding the 1989 Charter. For example, the Charter is ambiguous about whether it applies to diversions from groundwater sources. Naramore said she would like for the Charter evaluation to consider that question. Naramore said the proposals for pumping water out of the state have raised concerns among state legislators. She suspects that additional standards or restrictions may be coming out of the 2020 legislative session.

Wisconsin — Steve Galarneau reported no diversion requests in Wisconsin. Galarneau said Wisconsin received a similar inquiry that Naramore discussed. He encouraged the states to collectively examine these issues carefully and expressed support for clarifying the Charter's relevance to groundwater sources.

Iowa — Tim Hall reported no diversion requests in Iowa. Hall said Iowa also received a similar request to export two billion gallons of water per year to western states. The applicant may resubmit its proposal to Iowa.

Illinois — Rick Pohlman reported no diversion requests in Illinois. Loren Wobig said questions are being raised in Illinois as to "who owns" wastewater effluent. In other words, would the state be able to regulate water that goes directly from wastewater treatment plants to rail?

Missouri — Jennifer Hoggatt reported no diversion requests in Missouri. The state has not received any out-of-basin water diversion requests that would trigger the Charter's threshold. Hoggatt explained that Missouri does not have permitting for water withdrawals. The state does register water users that exceed 100,000 gallons per day.

Wallace said UMRBA will send letters to the Governors reporting on the results of the annual consultation required under the 1989 Charter. Naramore requested that the letter speak to the recent inquiries for significant water withdrawals and outline UMRBA's effort to review the Charter.

In response to a question from Salvato, Naramore said there will need to be extensive consultation within each agency. The Board may want to give further consideration to the makeup of those involved in the small working group to review the Charter.

### **Federal Agency Reports**

#### *U.S. Army Corps of Engineers*

Brian Chewning provided an overview of the Corps' FY 2020 work plan and FY 2021 budget allocations within each of the agency's major four accounts: investigations, construction, O&M, and Mississippi River and Tributaries. Chewning reported the FY 2020 and FY 2021 funding amounts for the UMRS-relevant programs and projects, as follows:

- NESP received \$4.5 million in FY 2020 funds. The Corps has prescribed that \$3 million be spent on planning for navigation improvements and \$1.5 million for ecosystem projects.
- UMRB received \$33.17 million in FY 2020 and is included in the President's FY 2021 budget to receive the same amount.
- O&M received FY 2020 funds of \$135.7 million on the Upper Mississippi River and \$89.9 million on the Illinois River. As typical of recent years, O&M funding for the navigation system will receive a large sum of money through the work plan process.

Chewning said the Corps continues to advance construction of La Grange lock rehabilitation, major maintenance on the Illinois Waterway, and levee protection surrounding East St. Louis. In addition, the FY 2018 supplemental funds are being used to advance the Cedar Rapids flood risk management project in Iowa and Bois Brule pump station in Missouri.

Kirsten Wallace commended UMRB for another successful year, particularly in meeting the expectations for executing the program's full appropriation given complications caused by the federal government shutdown mid-fiscal year. Wallace applauded USGS and USFWS staff who ensured that they were able to meet the deadlines associated with UMRB projects.

Wallace reflected on the accomplishment of receiving FY 2020 work plan funds for NESP. She thanked Paul Rohde of Waterways Council and Gretchen Benjamin of TNC for their steadfast commitment to NESP over the years. Wallace said the UMRB Board is scheduled to talk with NESP staff on March 4, 2020 regarding how the FY 2020 funds will be spent on the navigation improvements and ecosystem restoration. This will include how to convene the partnership to select projects for ecosystem restoration. In response to a question from Wallace, Andrew Goodall said the Corps does not yet have specific plans for engaging the states during FY 2020.

#### *U.S. Fish and Wildlife Service*

Sabrina Chandler reported that USFWS's enacted FY 2020 budget includes \$502.4 million for the Refuge System. That is the highest funding level the Refuge has received since FY 2010 when it was appropriated \$503 million. The FY 2020 appropriation also includes funding increases for maintenance, fish and wildlife habitat conservation, visitor services (including urban conservation), and law enforcement. Chandler said Congress included provisions related to trapping as well as the border wall in Texas. The President's FY 2021 budget includes \$2.9 billion for USFWS, with \$1.4 billion allocated to discretionary programs and \$1.5 billion for permanent authorities. Chandler observed that USFWS operates and maintains UMRB habitat projects with very limited funding.

Chandler reported that the USFWS realignment to 12 unified regions is complete. USFWS Headquarters has not yet responded to a request to maintain the UMR Refuges chain-of-command. Leadership has directed staff to refrain from any formal discussion about the reorganization. For now, the UMR Refuges will report to Region 3, maintaining the status quo.

The Senate confirmed the USFWS Refuges Director, Aurelia Skipwith, on December 12, 2019. Skipwith recently visited the UMR, including the UMR Pool 8 Islands habitat project and the Genoa fish hatchery.

#### *U.S. Environmental Protection Agency*

In response to a question from Ken Westlake, Wallace said UMRBA will send a letter soon accepting its invitation to serve on the Hypoxia Task Force.

Westlake reported that the President's FY 2021 USEPA budget includes a 20 percent reduction from its enacted FY 2020 funding level of \$9.1 billion. Westlake reflected that President Trump's budget proposals for USEPA have been substantially restored by Congress. The ultimate appropriation is unknown.

Compared to FY 2019, Westlake said FY 2020 funding levels were flat for CWA Section 106 projects and state revolving funds but slightly increased for CWA Section 319 projects. State specific funds for the two categories are as follows:

	<b>CWA State Revolving Funds</b>	<b>Drinking Water Act State Revolving Funds</b>
Illinois	\$72,597	\$41,542
Iowa	\$21,725	\$17,443
Minnesota	\$29,503	\$16,808
Missouri	\$44,498	\$19,411
Wisconsin	\$43,395	\$18,766

Loren Wobig asked if the CWA state revolving funds may be allocated to stormwater projects. Ken Westlake and Jason Daniels encouraged states to expand their use of the state revolving funds for nonpoint source projects, including for stormwater projects.

#### *U.S. Geological Survey*

Mark Gaikowski said he anticipates that USGS will formally name the directors of its new unified regions in mid March 2020. Gaikowski reported that the President's FY 2021 budget proposes a 3.4 percent decrease in USGS's funding compared to FY 2020 and a restructuring that results in five mission areas. Currently, USGS is organized in seven mission areas.

USGS's FY 2021 budget includes \$127 million for the ecosystems mission area and \$180.8 million for the water resources mission area. The budget includes a specific allocation of \$5.6 million for Asian carp research and \$20.9 million for the Climate Adaptation Science Center. Gaikowski noted that the budget proposes consolidating several of its climate adaptation science centers into a single center. The FY 2020 appropriation included standing up such a center in the Midwest.

Kirsten Wallace said NRCS staff was unable to join today's conference call due to an unforeseen conflict. Wallace can make available NRCS's PowerPoint slides upon request.

## **Upper Mississippi River Port Statistical Area Proposals**

Kirsten Wallace explained that, after UMRBA's October 29, 2019 quarterly meeting, the proposed PSA has expanded into three subproposals that cover a larger geographical area. Today's briefing includes an update from a representative of each of the three PSAs as well as from the Corps regarding the purpose and use of PSAs.

### *Mississippi River Ports of Eastern Iowa and Western Illinois (MRPEIWI)*

Denise Bulat provided an update on the Bi-State Regional Commission's application to create a federally-recognized port statistical area (PSA) called the Mississippi River Ports of Eastern Iowa and Western Illinois (MRPEIWI). The Commission's goal is to obtain the PSA designation by September 2020.

In addition to promoting and marketing the region's transportation capacity, Bulat explained that MRPEIWI would allow the region to be more competitive for federal investment. The Administration uses PSAs for statistical reporting purposes. Bulat stressed that MRPEIWI would not impact current or future port commissions. A single municipality would not hold a substantially dominate position. Rather, MRPEIWI would involve several counties.

Bulat said MRPEIWI would not involve a bonding or taxing authority. Its primary responsibilities would be planning, marketing, lobbying, and education in order to achieve the region's goals. Counties must formally agree to be recognized as part of MRPEIWI. Bulat emphasized that MRPEIWI's focus is on existing navigation-related infrastructure and existing units of government.

Bulat explained that MRPEIWI is being proposed for the following purposes:

1. Enable outbound/inbound shipments in the tri-state region above Mel Price L&D to be accurately tied to federally recognized PSAs
2. Enable the "Corn Belt Ports" to be nationally ranked in order for them to be more visible, marketable, and economically competitive
3. Demonstrate the value to the nation and region of waterborne commerce above Mel Price L&D
4. Enable more effective regional economic and multi-modal transportation system planning and development

Bulat raised the issue that MVR is the only Corps District on an inland waterway system that is not co-located with a federally-recognized port. She said there is a clear gap in tonnage moving on the river and the recognition that the Iowa and Illinois ports receive on a national level, and help the region compete for various federal grant funding. For example, Bulat said Iowa is the only state that ships enough tonnage on the waterways system to be ranked as a top 100 port. And that comes from only eight counties. Bulat said models for the MRPEIWI include the Central Ohio River Business Association (CORBA) and the Ports of Cincinnati and Northern Kentucky.

Bulat said the PSA could potentially allow the region's ports to be competitive for grant opportunities related to transportation and economic development grants as well as funding sources from Department of Homeland Security (e.g., Port Security Grants) and Department of Energy.

### *Illinois Waterway Ports and Terminals*

Ray Lees said the steering committee for the Illinois Marine Transportation System Plan raised the idea for a PSA to federally recognize the Illinois Waterway at its November 13, 2019 meeting. The applicants include the Heart of Illinois Regional Port District (TransPORT) and the North Central

Illinois Council of Governments. The PSA would include 11 counties, extending from river mile 98 to 273. The applicants are anticipating that the process will result in an approved PAS by September 2020.

Lees said the cargo volume in 2018 passed through the Illinois Waterway ports and terminals would place the proposed PSA between the currently-ranked fifth and sixth highest ranking U.S. ports. The proposed Mid-America Port PSA (presented next) would precede the Illinois Waterway PSA and the proposed MRPEIWI PSA would immediately follow.

Lees said the PSA would significantly elevate the Illinois Waterway's ports and terminals on a regional, national, and international stage, noting that the top 100 ports are more competitive in receiving grants and other economic opportunities. Lees pointed to the backlog of over \$500 million in navigation-related O&M needs on the Illinois and Mississippi Rivers as a case-in-point.

Lees explained that the PSA would develop a multi-modal port region that would support marketing, economic development, regional identity, and regional, national, and global visibility and competitiveness.

#### *Mid-America Intermodal Port District*

Blake Roderick explained that the Mid-America Port was created after the 1993 flood with counties in Illinois, Iowa, and Missouri. About 14 million tons of product move through the District's ports. Roderick explained that the District is developing a PSA proposal and is currently asking ports within the Mid-America Intermodal Port District if they wish to be a part of the PSA. He said the PSA's greatest potential benefit is for its marketing purposes.

#### *USACE Waterborne Statistics*

Forrest Vanderbilt explained the authority for the Corps' Institute for Water Resources Navigation and Civil Works Decision Center (IWR NDC) requirement to collect navigation statistics and implementation of commerce statistics provisions. Databases within NDC are used to support decision making for budgeting, planning and operations, and investigations.

There are approximately 550 identified port or port areas nation-wide and about 325 of them provided tonnage data for FY 2018. The NDC's Waterborne Commerce Statistics Center (WCSC) collects, processes, checks, distributes, and archives domestic and foreign vessel trip and cargo data. Federal law requires companies to report domestic waterborne commercial vessel movement. Foreign data is captured through the U.S. Customs and Border Protection, U.S. Census Bureau, and Port Import Export Reporting Service.

Vanderbilt explained that the navigation community provides data related to vessel ID and operator, origin and destination port and dock, departure and arrival date, route, draft, commodity, and tonnage. In addition, ports voluntarily provide information about vessels that called and associated arrival and departure dates. The challenge is that vessel operators identify origins and destinations inconsistently, referencing one example location that is reported by 42 operators in 200 different ways. Inaccurate reporting is problematic for the federal government's performance-based budgeting and prioritizing investment for new projects and O&M resources. It is also limiting development of regional economic indicators and information for private investment decisions. Vanderbilt noted that a statistical port is not a Corps project.

Vanderbilt said the Corps is developing an enterprise-wide statistical port boundary polygon feature class within GIS. The Corps is working with ports to determine the accurate boundaries. Vanderbilt



provided examples of this work at the Port of Houston Authority, Santa Cruz municipal area, the Port Arthur dock, the Port of Palm Beach District, and the Helena Harbor.

Vanderbilt said assistance is needed to increase the accuracy of commodity origin and destination and to assure congruence between port authorities and the Corps' tonnage statistics. The Corps is increasing its transparency of the public statistical port boundaries. The Corps is working to increase compliance of its reporting requirements regarding tonnage and commodities moving on the inland waterways.

In response to a question from Cheryl Ball, Vanderbilt said PSAs can be helpful by providing tonnage data in aggregate faster than the Corps is able to publish the data. Additionally, the data provided by PSAs helps to validate the Corps' database. In response to a question from Bulat, Vanderbilt explained that tonnage data is published about eight months after the calendar year. There is not a consistent deadline regarding the submission of data. That is also a big challenge for the Corps.

### **Spring Flood Forecast**

Jessica Brooks summarized the NWS's forecasts for potential flood risk on the Upper Mississippi River in spring 2020. There is high confidence of moderate to major flooding on the Mississippi River, while low confidence related to peak severity on the eventual flooding. Fall moisture was very high going into the winter and, therefore, there will be little groundwater absorption capacity. As a result, the potential exists for high amounts of runoff into the river system. Extremely wet soils throughout the watershed is the primary contributor to the high risk assessment for flooding in the spring. Flood risk will remain high until soils dry out. Brooks explained that the rate of snowmelt will strongly influence the severity of flooding that occurs in spring 2020.

Brooks said minor to moderate flooding is expected on the Missouri River, contributing additional volume to the volume of water on the Mississippi River. Brooks added that warm weather resulting in thinner ice has limited the potential for ice jams on local rivers.

### **Asian Carp Barrier at L&D 19**

Marybeth Brey explained that acoustic deterrents are being evaluated for their potential to limiting movement of Asian carp through river locks. The acoustic system being employed at L&D 19 has never been tested but would provide the "technology readiness" necessary for installation at Brandon Road L&D. Similarities between the two sites make L&D 19 an appropriate place to test the technology. This includes the two sites as pinch points of Asian carp movement where Asian carp can only pass through the lock and cannot pass upstream over the dam. Moderate populations of Asian carp exist below the locks. And upstream passage of both Asian carp and native species is documented.

Brey said the science objectives of Asian carp barrier at L&D 19 are the following:

- Design, install, test, and monitor the performance of an acoustic deterrent system in the downstream lock approach of L&D 19
- Evaluate the effectiveness of the acoustic deterrent system to prevent upstream passage of bigheaded carp and native fishes into L&D 19
- Assess the behavior of bigheaded carp and native fishes
- Monitor system performance of the acoustic deterrent system during the deterrence effectiveness testing

Brey said the project is being funded by the Great Lakes Restoration Initiative (GRLI) and is being done in partnership with state and federal agencies. Deployment of the acoustic deterrent system is scheduled for early calendar year 2021. The study will be implemented for three years.

Paul St. Louis said the acoustic deterrent system testing has the potential to inform its use at other locations – e.g., Chicago Area Waterway System and Ohio River Basin. This includes reducing operational cost and increasing safety for navigators as an alternative to electric barriers. The study will inform how turbulence, barge impacts, and sediment will affect the equipment.

Challenges to the project include safety during installation and testing, scheduling, the novel design, durability, maintenance requirements, and coordination with industry. At L&D 19, Ameren Missouri has the authority to operate the dams for hydropower, the Corps has the authority to operate the dams and lock for navigation purposes, and USEPA is funding the acoustic deterrent system through the Great Lakes Restoration Initiative.

### **Administrative Issues**

#### *Election of Officers*

Kirsten Wallace and UMRBA Board members thanked Rick Pohlman for his service as Board Chair over the past year. Barb Naramore moved and Tim Hall seconded a motion to nominate Steve Galarneau to serve as UMRBA Chair, Dru Buntin to serve as UMRBA Vice Chair, and Jason Tidemann to serve as UMRBA Treasurer. All three motions carried unanimously by voice vote.

#### *Future Meeting Schedule*

May 2020 — St. Louis

- UMRBA quarterly meeting — May 19
- UMRR Coordinating Committee quarterly meeting — May 20

August 2020 — La Crosse

- UMRBA quarterly meeting — August 11
- UMRR Coordinating Committee quarterly meeting — August 12

October 2020 — St. Paul

- UMRBA quarterly meeting — October 27
- UMRR Coordinating Committee quarterly meeting — October 28

With no further business, the meeting adjourned at 12:00 noon.