

**Minutes of the  
Upper Mississippi River Restoration Program  
Coordinating Committee**

**May 22, 2024  
Quarterly Meeting**

Sabrina Chandler of the U.S. Fish and Wildlife Service called the meeting to order at 8:03 a.m. on May 22, 2024. UMRR Coordinating Committee members in attendance were Kelly Keefe (USACE), Chad Craycraft (IL DNR), Kirk Hansen (IA DNR), Vanessa Perry (MN DNR), Matt Vitello (MO DOC), Wade Strickland (WI DNR), and Jeff Houser (USGS). A complete list of attendees follows these minutes.

Sabrina Chandler acknowledged some upcoming changes in UMRR Coordinating Committee membership. Vanessa Perry announced that she accepted a position as Mississippi River Coordinator with the Wisconsin Department of Natural Resources. She will start her new role in mid-June. Chad Craycraft announced that he has accepted a position with the Illinois Department of Corrections.

**Minutes of the February 28, 2024, Meeting**

Chad Craycraft moved, and Wade Strickland seconded a motion to approve the draft minutes of the February 28, 2024, UMRR Coordinating Committee meeting as written. The motion carried unanimously.

**Program Overview**

*FY 2024 Fiscal Update*

On March 9, 2024, Congress passed an appropriations measure that included \$55 million for UMRR. Marshall Plumley reported that the program has obligated \$22,683,924 to date. Plumley said UMRR is executing as expected and aims to obligate 95 percent or more of the appropriated funds this year. Plumley noted that science proposals and HREP contracts anticipated to be awarded in St. Paul and St. Louis Districts this summer are significant upcoming obligations. Consistent funding demonstrates support from Congress and has been transformational for UMRR as it has allowed the program to be proactive in strategic implementation. Plumley expressed appreciation to the partnership for its collective efforts and contributions in effectively executing the program.

*FY 2025 Fiscal Update*

Plumley reported that the FY 2025 President's Budget was released on March 11, 2024 and includes \$55 million for UMRR. Consistent funding for UMRR represents strong Congressional support and has been transformational for the program as it allows the program to be proactive in strategic implementation. The draft FY 2025 plan of work for UMRR at \$55 million is largely consistent with the FY 2024 plan of work with an increase in Regional Program Management. UMRR had been operating regional program management at the \$33 million funding level. Plumley said that UMRR could receive additional funds through the earmark process. Plumley reported that many projects will shift into construction in FY 2025 including Pool 12 Forestry, Quincy Bay, Yorkinut Slough, and West Alton Islands, which were all identified in the last HREP selection process.

Plumley reported that the President's Budget includes \$100 million dollars more for ecosystem programs as

compared to FY 2024. It includes over \$630 million for six ecosystem projects and programs as listed below:

- South Florida Ecosystem Restoration, FL \$443,725,000
- Columbia River Fish Mitigation \$ 75,200,000
- Upper Mississippi River Restoration \$ 55,000,000
- Missouri River Fish and Wildlife Recovery \$ 26,950,000
- Louisiana Coastal Area Ecosystem Recovery \$ 10,000,000

#### *WRDA 2024*

Plumley reported that the Senate’s draft WRDA 2024 language includes two sections relevant to UMRR:

- Sec. 334 – increases the annual authorization for LTRM from \$15 million to \$25 million. If passed, UMRR’s total annual authorized funding level would be \$100 million.
- Sec. 223 – Directs the Government Accountability Office (GAO) to investigate questions related to Project Partnership Agreements (PPAs). If passed, within one year, the GAO would have to report on its analysis and any recommendations for changes to law or policy.

The full draft Senate WRDA language is available at the following link:

[https://www.epw.senate.gov/public/\\_cache/files/b/1/b167600c-12de-4692-9ee6-4f250c749547/C56598E039ECB7FC664532AD3C332761.carper-capito-ans.pdf](https://www.epw.senate.gov/public/_cache/files/b/1/b167600c-12de-4692-9ee6-4f250c749547/C56598E039ECB7FC664532AD3C332761.carper-capito-ans.pdf)

In response to a question from Vanessa Perry, Plumley said previous increases to annual authorized funding helped address inflation, but the increase to the HREP program in WRDA 2022 increased the program’s capacity and reflects a desire for more restoration work. Wade Strickland stated that a full evaluation of the PPA issue would need to consider federal as well as state issues with PPAs. Plumley said he believes the legislative language would allow the GAO to evaluate state and partner input. Kirsten Wallace said that the Office of Management and Budget (OMB) and the ASA’s office coordinated on the language to address USACE concerns over changes to PPAs. Wallace said the UMRBA Board will continue to work on the issue.

#### *HREP Selection*

Plumley reported that UMRR will need approved fact sheets in FY 2025 to implement in FYs 2026 – 2030. The UMRR Program Planning Team (PPT) provided updated guidance to Corps District-based River Teams on topics related to overlapping boundaries with completed projects, environmental justice area identification and outreach, revisiting completed fact sheets, and cost estimation.

Plumley said it is important to consider the size and range of projects to build a balanced portfolio. The Corps has provided the river teams with a regional map viewer that will be used to capture restoration needs across the system. The river teams have initiated workshops to identify restoration needs, including a joint meeting on April 9-10, 2024, between the FWIC and RRAT specific to the Illinois River.

In July 2024, the PPT will meet to share updates and reflect on the process to-date and to make any necessary adjustments to the process going forward. As currently scheduled, the PPT plans to review the collective draft project fact sheets in August 2024 and share the initial recommendations to the UMRR Coordinating Committee at its February 2025 quarterly meeting. Following a review in spring 2025, during its May 2025 quarterly meeting, the UMRR Coordinating Committee would consider endorsing the set of fact sheets to submit to MVD for review.

## *Report to Congress*

Plumley reported that, in November 2022, the UMRR 2022 Report to Congress (RTC) was submitted to the ASA(CW)'s office for review. The ASA(CW)'s office transmitted the report to Congress in late-March 2024. Plumley reviewed the key messages, conclusions, and recommendations within the report and said he will send the final approved report as a PDF to Coordinating Committee members this week. Rock Island District Public Affairs will post the report to the UMRR website in the coming weeks and issue a press release and post on social media. Plumley will distribute the link to the online version when it is available with a request to Coordinating Committee members for the desired number of hard copies for each agency. Plumley noted that he will adjust planning and tracking processes for the next Report to Congress. Plumley expressed appreciation to the report contributors and all UMRR partners for their thoughtful review and comments in the report development. Chad Craycraft expressed appreciation to UMRBA and Andrew Stephenson for his role in developing the report. [Note: The UMRR 2022 Report to Congress is available at the following link: <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/6930>]

Plumley said the UMRR Communications and Outreach Team is helping to develop a four-page flier for the RTC. The Previous RTC's flier was used extensively for communication efforts. Stephenson encouraged additional discussion regarding development of a communications toolkit for the RTC, like for the Status and Trends Report, with geographically specific talking points.

## *Ten-Year Outlook*

Marshall Plumley said there were no updates on project schedules to report.

## *Strategic Planning*

Plumley provided an overview of activities related to the scoping and development of the next UMRR strategic plan. The plan will support the strategic management of UMRR and enhance collaboration among the partnership. Plumley reported that on February 28, 2024, Chrissa Waite led the UMRR Coordinating Committee and quarterly meeting attendees through an initial Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis (see pages C1-C5 of the meeting agenda packet).

Plumley reported that, on April 29, 2024, he distributed an email to UMRR partners, river communities, and stakeholders requesting existing documents and resources addressing opportunities, challenges, and perspectives pertaining to the river and floodplain. Resources might include organizational strategic plans, comprehensive plans or economic development plans with a UMRS focus, or reports and studies on community perspectives, among others. Plumley said the Strategic Planning Team will review and analyze provided resources for alignment with the UMRR authorization. Plumley reported that nearly 20 resources have been received to date. He requested additional resources be provided to himself and Andrew Stephenson by May 27, 2024.

Plumley said the Strategic Planning Team is scheduled to meet July 23-25, 2024, in the St. Paul – Minneapolis Metro area. The Team will review input from the quarterly meetings, workshop, existing resources request and 2015-2025 Strategic Plan review to develop draft goals and objectives for the next strategic plan.

## *UMRR Workshop*

Plumley reported that UMRR held a workshop on May 7-9, 2024, in Bettendorf, Iowa. The last UMRR habitat-related workshop was held in 2019. The goals of the workshop were to transfer knowledge and connect UMRR partners. The workshop had 105 in-person participants and 15-20 virtual participants representing 16 agencies and organizations. The workshop was attended by more NGO participants than the

2019 workshop. Plumley noted that nearly one-half of workshop participants have worked on UMRR for less than five years. The workshop agenda allowed for many breakout sessions and small group discussions. PollEverywhere was used to promote input on many issues. Plumley said that important items not addressed at the workshop will be addressed through program-wide webinars or other efforts. Plumley expressed appreciation to the presenters, those involved in planning the workshop, and to UMRR partners for supporting their staff attending the workshop. Andrew Stephenson agreed and said the program will see returns from the workshop for years to come.

Matt Vitello said the workshop ran smoothly and expressed appreciation for providing a virtual connection that allowed additional participation. Vitello said the breakout sessions were very effective and allowed many voices to be heard. Jim Fischer concurred and said he is in awe of the program’s evolution and ability to address complex topics and advance strategic planning through creative and interactive experiences such as the workshop. Plumley said the value of the current strategic plan is evident and the need to think about strategic issues will remain.

### **Strategic Planning Exercise**

Chrissa Waite provided an overview of the multi-phase strategic planning process as follows:

<u>Phase</u>	<u>Timeframe</u>
— Phase 1: Understanding Strategic Issues	February – May 2024
— Phase 2: Develop Strategic Goals and Objectives	June – August 2024
— Phase 3: Strategies and Actions	September – November 2024
— Phase 4: Public Review	December 2024 – February 2025
— Phase 5: Finalize Strategic Plan	March – August 2025

Waite said that a communication plan is being developed to accompany each phase of the process. Waite reported that participants at the May 7-9, 2024 UMRR Workshop reviewed the initial SWOT analysis results and identified the following critical issues facing UMRR over the next 10 years:

- Capacity: partner staff, USACE staff, contractors to support the growing program to most effectively address environmental needs, maintain quality and retention
- Increasing resiliency of projects to better combat climate change threats/invasives/watershed influences
- Data collection and analysis prior to projects

Waite led the UMRR Coordinating Committee and quarterly meeting attendees through a breakout group discussion of how UMRR strengths may help to address the critical issues facing UMRR over the next 10 years. Two breakout groups met in the room, and one was held virtually. Waite asked for each breakout group to highlight one strength from their discussions. Marshall Plumley reported that his group discussed capacity concerns among agencies and highlighted UMRR’s ability to leverage the partnership to enhance efficiency and resource allocation. The group also discussed opportunities to expand to new partners with untapped capacities as well as how new and emerging issues may attract new participants. Vanessa Perry reported that her group discussed increasing resiliency of projects to better combat climate change and other threats. Perry emphasized the importance of stable funding to allow for greater adaptive management of projects and maintaining strong connections between HREPs and the scientific outputs from LTRM. Waite reported the online group focused on data collection and analysis prior to projects. The group discussed UMRR’s extensive spatial and long-term monitoring data that enables comprehensive analysis on a basin-wide scale. This broad data can support a more integrated view of projects rather than isolated insights.

Additional exercise outcomes captured on the flip charts will be discussed by the strategic planning team in July and incorporated into the strategic planning process.

## **Communications**

### *Communications and Outreach Team*

Rachel Perrine reported that the UMRR Communications and Outreach Team (COT) is finalizing plans for its inaugural UMRR photo contest. Contributed photos will bolster UMRR’s program materials and communication efforts. The photo contest will be open to all UMRR partners. The photo submission period will be August 1 to October 31, 2024; however, photos can be from any season or taken during prior years. Photos can be submitted under one of the following categories:

- Before/After, Construction, or Benefits of HREPs
- Connecting People with Nature, Human Use, or Public Interaction
- Natural Features, Scenic Views, or Landscapes
- Cultural or Historic Features
- LTRM – Monitoring in Action

Perrine said that winners will be featured in the Spring 2025 edition of “Our Mississippi” magazine and may potentially receive UMRR gear or a framed copy of their photo. Perrine will distribute an explanation of the photo contest to UMRR Coordinating Committee members to share with their agency staff. Andrew Stephenson expressed appreciation to Randy Hines, Susan Tesarik, and Michael Anderson for sharing lessons learned from past photo contests and helping to develop the process for UMRR to implement as well as to Kim Schneider for coordinating the upcoming feature in Our Mississippi magazine. Perrine thanked COT members for their involvement, noting the value of bringing their experience and expertise to bear on various efforts, and invited additional volunteers to join the COT.

Perrine reported that she presented on the COT’s activities during the May 7-9, 2024, UMRR workshop. Perrine said the COT will review communication needs and priorities identified by UMRR workshop participants. Marshall Plumley expressed appreciation to Perrine for her leadership of the COT and said there was considerable discussion at the workshop on communication needs that will inform the development of the next strategic plan. Jim Fischer echoed appreciation to Perrine and thanked COT state members for their involvement.

Perrine reported that the COT also participated in World Migratory Bird Day on May 11, 2024, with a coordinated social media post. The COT also held initial discussions regarding updating UMRR outreach materials and kiosks at interpretive centers along the river and is providing ongoing support for the release of the 2022 Report to Congress.

### *External Communications*

Communication and outreach activities in the second quarter of FY 2024 include the following:

- Sabrina Chandler said the USFWS will celebrate the 100<sup>th</sup> anniversary of the UMR National Wildlife & Fish Refuge on June 7, 2024. Events will be held on June 7, June 8, and June 22. Chandler reported that, on May 22, 2024, the [Mississippi River Traveler](#) podcast released an episode focused on the refuge and the May/June volume of Big River Magazine includes articles referencing UMRR and the UMRS partnership.

- Chandler said the USFWS participated in a joint social media effort with UMRR partners to celebrate World Migratory Bird Day and continues to identify UMR projects to leverage IRA funds.
- Vanessa Perry said that Governor Tim Walz held the Governor’s annual fishing opener on the Mississippi River in Lake City. Perry added that Minnesota DNR will host a table at the June Refuge event and that, in September, Minnesota will host Great River Road Month.
- Plumley announced that, on June 13, 2024, Jeff Houser and Ed Britton will present webinars on UMRR as part of the Mississippi River Network’s River Days of Action.

## **Habitat Restoration**

Angela Deen reported that MVP has five active HREPs. The Big Lake HREP feasibility report was submitted to MVD for approval and Elliot Stefanik presented on the project at the UMRR workshop. The Robinson Lake PDT identified seven alternatives. Robinson Lake’s location in an ineffective flow area with no “no rise” concerns allowed the team to consider larger project features. Reno Bottoms is a large floodplain forest project that will be implemented over three stages. Stage 2 is being designed by an Architecture/Engineering (A/E) firm and is nearing the 65 percent review milestone. A site visit is anticipated to occur in June. A construction contract is anticipated to be advertised next week and awarded by August for the Lower Pool 10 HREP. Deen reported that three hundred trees were planted during an Earth Day event at McGregor Lake HREP that was attended by many partner agencies. Placement of fines and berm mixing are anticipated to be completed this summer. Andrew Stephenson suggested recording Stefanik’s Big Lake HREP presentation. Plumley agreed and said it could be a webinar for practitioners and underscores the benefits of HREP and LTRM integration.

Marshall Plumley reported that MVR has ten active projects with many anticipated to move from feasibility to construction in FY 2025. Plumley said construction at Beaver Island HREP is nearly complete and a ribbon cutting is anticipated for late-summer 2024. Public meetings were held for the Lower Pool 13 Phase II and Pool 12 Forestry HREPs on April 30 and May 1, respectively. Planning is ongoing for Pool 18 Forestry, Quincy Bay, and Green Island HREPs. On February 29, 2024, an MOA was signed with the USFWS for Lower Pool 13. The project will now move to design of Stage 1. On March 3, 2024, a design contract was awarded for Steamboat Island Stage 2 and on May 15, 2024, a design kickoff meeting was held for Steamboat Island Stage 3. A design kickoff meeting for Lower Pool 13 Stage 1 is scheduled for May 30, 2024. The contractor at Steamboat Island Stage 1 has completed all riprap placement and a final survey is under review. The Steamboat Island Stage 2 contractor is dredging and placing material but a protest against the contract award is still being addressed. The contractor at Keithsburg Division Stage 1 is placing washed stone on the Articulated Concrete Mats. Vegetation assessments and supplemental plantings are anticipated to occur at Huron Island this summer. In FY 2024, a forestry MATOC will address work at Steamboat, Lower Pool 13, and Spring Lake HREPs. Project evaluation report (PERs) site visits are scheduled to occur between June and August 2024 at Rice Lake, Princeton, Pool 11 Islands, and Lake Odessa HREPs.

Brian Markert said MVS experienced minor flooding that is impacting some HREPs. MVS has nine active projects across the Upper Mississippi River, the open river, and the Illinois River. Feasibility for West Alton Islands is ongoing with Missouri DOC and USFWS as sponsors with unique project areas. The report is anticipated to be sent to MVD for approval later this summer. In-progress reviews are upcoming for Gilead Slough and Reds Landing HREPs; both projects are identifying measures and alternatives. Projects in design include Clarence Cannon, Swan Lake, Yorkinut Slough, Harlow Island, and Crains Island. A contract was awarded for Crains Island Stage 2 with favorable bids that allowed the Stage 3 package to be advanced. MVS

has four projects in construction, Clarence Cannon, Piasa and Eagles Nest, Harlow Island, and Crains Island HREPs. Contractors are responding to high water at Clarence Cannon and Crains Island Stage 2.

## **Long Term Resource Monitoring and Science**

### *USACE LTRM Report*

Davi Michl reported that LTRM FY 2024 budget allocation is \$7 million (\$5.5 million for base monitoring and \$1.5 million for analysis under base) with an additional \$6.85 million available for “science in support of restoration and management.” LTRM has allocated over \$6.6 million for science in support of restoration and management to fund macroinvertebrate sampling, two years of chloride monitoring, three additional years of resilience work, and one year of landscape pattern analysis. Funding will also support an expansion of the topobathy pilot studies to Lower Pool 13, advancing the next priorities identified through LTRM implementation planning, and includes approximately \$2 million in funding for eight science proposals.

Michl said that large-scale systemic topobathy acquisition in Pools 24, 25, 26 and the Open River is being closely coordinated with the Navigation and Ecosystem Sustainability Program (NESP), which may contribute \$10 million toward acquisition. Plumley applauded the strategic thinking to ensure the data acquired will be of appropriate resolution to expand the utility of the data.

### *FY 2024 2nd Quarter Report*

Jeff Houser reported that accomplishments of the second quarter of FY 2024 include publication of the following manuscripts:

- *Network Connectivity Contributes to native small-bodied fish assemblages in the Upper Mississippi River System*
- *Influence of Sediment Oxygen Demand on Winter Hypoxia in Ice-Covered Backwater Lakes of the Upper Mississippi River*
- *Flowering Rush Mapping, Treatment, and Treatment Effectiveness monitoring on the Upper Mississippi River National Wildlife and Fish Refuge.*

### *Land Cover Land Use*

Houser reported that Land Cover Land Use (LCU) updates are anticipated to be completed in FY 2026. Completed areas include Pools 1 – 4, 7 – 13, 26, St. Croix, Alton, La Grange, and Open River South. Pools 6 and 22 are in review. Efforts in FY 2024 will focus on Pools 5, 5a, 24, and 25. Efforts in FY 2025 will focus on Pools 14, 18 – 21, and Peoria. The area from Lockport to Starved Rock will be completed in FY 2026. Updates on the progress and available products are available at the following links:

- Aerial Imagery: <https://www.sciencebase.gov/catalog/item/60e865c3d34e2a7685d7aede>
- LCU Mapping: <https://www.sciencebase.gov/catalog/item/6102cbf7d34ef8d7055e7971>

### *LTRM Implementation planning*

Houser reported on the partnership process to identify and prioritize information and management needs and develop a portfolio of actions to address those needs. The partnership identified opportunities to use additional funds from increased authorization to implement larger and potentially long-term projects and activities to

address information needs if funding is sustained at a higher level. In FY 2023, LTRM funded the initiation of two information needs:

- Understanding geomorphic change within the UMRS
- Assessing gradients from Pool 14 to Pool 25.

Houser said the initial hiring attempt for someone to address the geomorphic trends was not successful, but the position will be reposted. If funding levels continue, two additional information needs are anticipated to receive funds in FY 2024:

- Lower trophic levels: abundance, distribution and status of phytoplankton and zooplankton in the UMRS. This project will help to establish baseline conditions in the UMRS and investigate relationships between plankton and environmental conditions.
- Floodplain vegetation change across the UMRS. This project will help develop a quantitative understanding of how the vegetation of the entire UMRS has changed since historical conditions (pre-lock and dam) as well as over the past 30 to 40 years.

In response to a question from Andrew Stephenson regarding marking turtles bycaught to gain insights on other population dynamics, Jim Fischer said that additional questions on methods are being worked through this year before implementation. There is no consensus yet on tagging methods and additional funding would be provided to field stations to accomplish the work. In response to a question from Plumley, Houser said the list of information needs on his slide may not be in priority order.

#### *A-Team Report*

Matt O'Hara reported that the A-Team met on April 16, 2024, in La Crosse, with principal investigators to discuss thirteen science proposals identified during the January Science Meeting. A-Team members submitted proposal rankings by April 23, 2024. On April 25, 2024, the A-Team convened virtually to discuss rankings and unanimously approved a final project rankings list. On May 2, 2024, Matt O'Hara, A-Team Chair, met with the UMRR LTRM Management Team, to discuss final funding recommendations for science proposals. They agreed to fund eight proposals (seven fully and one partially) based on available funding. The decision included delaying full funding for one project to support another high-priority project. Projects that were not funded in FY 2024 can be considered for funding in FY 2025. O'Hara recommended endorsement of the eight science proposals (see below) to the UMRR Coordinating Committee.

#### *UMRR Science Proposals*

Houser reported that the UMRR science meeting was held at UMESC on January 16-18, 2024. The meeting included plenary sessions on current modeling work and ecological responses to restoration actions as well as six working groups, which have become more interdisciplinary over time. The working groups developed 13 proposals for consideration totaling approximately \$4 million. Houser provided overviews of the goals for each recommended proposal. Matt Vitello said he regarded the science proposals as the most comprehensive and highest quality set of science proposals he has reviewed to date. Vitello added that it reflects the caliber of staff and the partnership to carry momentum across multiple years of science meetings. Houser agreed and said he conveyed that sentiment to the proposal authors. Michl attributed the quality of the proposals to the continued integration of HREP and LTRM. Sabrina Chandler agreed.

Chad Craycraft moved and Matt Vitello seconded a motion to endorse funding the eight recommended Science Proposals at \$1,990,400 in FY 2024 as listed below. The motion carried unanimously.



Proposal	PI(s)	Cost
Understanding, quantifying and forecasting associations among hydrogeomorphology, water chemistry, and the distribution and abundance of biota in the upper Mississippi river under climate change	Kaemingk, Hampton, De Jager, Chick, De Boer	\$247,403
Generating future hydrology and water temperature projections for the UMRS using hybrid deep learning (Funding for FY 2024 only)	Delaney, Trumper, Sawyer	\$221,510
Submersed plant responses to physical forces of wind, waves, velocity, and shear stress	D. Larson, Hanson	\$267,822
In-depth characterization of phytoplankton communities and toxicity across connectivity gradients along 450 miles of the Upper Mississippi River System	Loken, Kreiling, Jankowski, J. Larson	\$236,310
Hindcasting and forecasting abiotic drivers of the UMRS fish populations and advancing management and research tools for non-game fishes	Ickes, J. Lamer	\$258,126
Using sUAS to monitor and survey regeneration and recruitment in areas of forest canopy loss	Strassman, Guyon	\$307,035
Understanding the role of surface-subsurface hydrology and soil characteristics on floodplain vegetation in the UMRS through space and time	Windmuller-Campione, Guyon, Arenas, Van Appledorn	\$386,194
Strategic approach to identify HREP features that promote dense and diverse mussel assemblages	Bouska, Newton	\$66,000

## Showcase Presentations

### *Beaver Island HREP*

Steve Gustafson presented on the Beaver Island HREP located in Pool 14. Beaver Island is one of the largest islands on the Upper Mississippi River. Project Goals are to restore and protect off-channel aquatic and wetland habitat and restore floodplain forest habitat. Project features include backwater dredging, water control structure and fish structures, topographic diversity and timber stand improvement, as well as island stabilization and rock substrate to support mussels. Gustafson said the project came in under budget and a ribbon cutting is anticipated for late-summer 2024. In response to a question from Kirk Hansen, Plumley said projects do often end up under initial estimates indicating the program is effectively managing project scope creep and inflation. Sabrina Chandler recalled a site visit last year by ASA (CW) Connor and Col. Curry and expressed appreciation for the hard work from all agencies involved in the project as well as enthusiasm for the upcoming ribbon cutting. Kara Mitvalsky commended the excellent hydraulic modeling and engineering work resulting in a berm that withstood the 2019 flooding and protected adjacent forest. Mitvalsky also noted the importance of having flexibility in project area edges and avoiding using all rock and straight lines. Hansen said the project double-handled dredge material to allow it to be placed where and when needed. He added that research crews sampling along the stabilized banklines have found bluegill and catfish among the species already occupying the area. Mitvalsky explained the project came in under budget due to contractor ingenuity including sinking barges to temporarily store dredge material for later placement. Mitvalsky noted many complications during the project's construction including extended cold weather and flooding in 2019, a derecho in 2020, and working in close proximity to an urban area during hunting and fishing seasons.

### *Origins of small-bodied fish in the UMRS*

Shaley Valentine presented research to determine the origins of small-bodied fish in the UMRS. Tributaries are important physical features, nodes of connectivity, and habitat in the UMRS and differ in temperature, substrates, chemistry and other characteristics. Trace elements such as Strontium and Calcium can be measured in otoliths that record environmental history of water bodies. Results show that about twenty-five percent of all fish originated from tributary or other river reaches. Small-bodied fishes originated from outside the mainstem river and differences in percentages coming from tributaries are affected by water chemistry, physical complexity, and life history needs. Valentine recommended continued localized management actions in the UMRS to ensure diverse habitat patches are present and systemic management approaches to ensure network connectivity exists. Houser expressed appreciation to Valentine for presenting and noted the importance of relationships with academic institutions, which can access and analyze long term data collected by field stations. In response to a question from Andrew Stephenson, Valentine said that combining vital rates, genetics, and population structure research will help better understand the importance of tributaries during different life stages. In response to a question from Brian Stenquist, Valentine said many small-bodied fish are short-lived and may only reflect management changes over the previous five-to-ten years. Valentine added there is room for improvement in mainstem river management for fishes, but that management decisions must be balanced with other river uses.

### **Lower Mississippi River Comprehensive Study**

Marshall Plumley said he was asked to sit on the Lower Mississippi River Comprehensive Study to share UMRR experience and learnings. Plumley noted there is overlap in the UMRR and LMR comprehensive study areas from Cairo to Cape Girardeau and that information from recent public engagements could be informative for UMRR. Cherie Price provided an overview of the Lower Mississippi River Comprehensive Management Study (LMRCMS), authorized in WRDA 2020, Section 213. The purpose of the Study is to identify recommendations of actions to be undertaken under existing authorities or after congressional authorization for the comprehensive management of the basin for multiple purposes. The Study area includes portions of seven states and six USACE districts. A series of scoping meetings with federal and state agencies, Tribal Nations, NGOs, academics, and the public identified 137 problems, 146 opportunities, and over 400 potential measures to consider in developing alternatives. Price presented a summary of the results pertaining to flood risk management, navigation, ecosystem restoration, and recreation from the public scoping meeting in Cape Girardeau, MO and Cairo, IL as follows:

#### Flood Risk Management

- Expand MR&T footprint to include local levees such as Len Small and include other communities
- Concerns with interior drainage in communities including needing additional pump stations
- Operations of existing floodwalls and pump stations
- Local infrastructure resiliency post flooding
- Birds Point New Madrid – impacts of opening
- Ecosystem Measures can potentially reduce Flood Risk Management features

#### Navigation, Ecosystem Restoration and Recreation

- Continue to alleviate impacts to navigation due to extreme low water events

- Habitat Degradation due to Operations and Maintenance of existing structures
- Improve River recreation at Cape Girardeau riverfront and between Cairo and Cape Girardeau
- Improve recreation associated with levee/floodwall footprints

Price reported other abbreviated example measures by mission area from the other public meetings as follows:

#### Flood Risk Management

- “Turn the knobs” to optimize water and sediment systemwide.
- Change the operational trigger for Morganza Floodway.

#### Navigation

- 12’ Channel systemwide
- Lock in river geometries (including stabilizing cutoffs) to sustain navigation.
- Stabilize the Hickman Hardpoint to facilitate navigation.

#### Ecosystem Restoration

- Reconnect the river to the floodplain where possible.
- Restore and improve gravel bars for ecosystem restoration purposes.
- Vegetate new and existing levee setbacks with native rivercane as a primary species.

#### Water Supply

- Divert water to abandoned meanders and oxbow lakes to recharge groundwater levels for ecosystem restoration and water supply.
- Construct groundwater wells to restore baseflow to streams.

#### Recreation

- Add public river access for recreation, emergency ops, and river monitoring.

Price added that a potential tiered study recommendation, under a new authority, could be to implement a long term data collection and habitat mapping and classification of the lower river. Price said that the next steps are to develop a public scoping report and conduct additional public engagement as well as screen measures and develop a list of alternatives. A Chief’s Report is anticipated to be delivered in December 2027. The study will produce a 1D system-wide hydraulic model to test different operational scenarios along the river and a sediment transport model to evaluate operational scenarios and determine long term geomorphic changes in the channel bed. Additional information can be found on the LMR Comprehensive Study’s website linked here: <https://www.mvn.usace.army.mil/About/LMRComp/>.

In response to a question from Kirk Hansen, Price said that the area of overlap in authorities was provided by Congress. In response to a question from Brian Stenquist, Price said a virtual orientation session was used to introduce the public to the upcoming regional meetings that were held face to face. The format included an introduction and 30 minutes for questions with a court reporter keeping notes. Charettes followed a similar process and were held in Memphis, Vicksburg, and New Orleans. In response to a question from Plumley regarding environmental justice, Price said they considered public scoping meeting locations carefully. In

response to a question from Andrew Stephenson, Price said land acquisition may be necessary for an actionable feature. Plumley offered to share additional information on UMRR's long term resource monitoring as well as any projects identified downstream of Cape Girardeau through the ongoing HREP selection process. In response to a question from Vanessa Perry, Price said future climate scenarios are being considered over a 50-year timeframe and some assumptions are necessary. Price added that the 1D model in development will incorporate sea level rise impacts and that ERDC is considering if and how trends in sediment movement over the last 100 years may inform future sediment transport models.

### **Other Business**

Marshall Plumley noted that the MVR Change of Command ceremony is scheduled for May 23, 2024.

Upcoming quarterly meetings are as follows:

August 2024 – Minneapolis-St. Paul Metro

- UMRBA quarterly meeting – August 6
- UMRR Coordinating Committee quarterly meeting – August 7

November 2024 – St. Louis

- UMRBA quarterly meeting – November 19
- UMRR Coordinating Committee quarterly meeting – November 20

February 2025 – Virtual

- UMRBA quarterly meeting – February 25
- UMRR Coordinating Committee quarterly meeting – February 26

With no further business, Matt Vitello moved and Sabrina Chandler seconded a motion to adjourn the meeting. The motion carried unanimously. The meeting was adjourned at 3:09 p.m.

## UMRR Coordinating Committee Attendance List

May 22, 2024

### UMRR Coordinating Committee Members

Kelly Keefe	U.S. Army Corps of Engineers, MVD
Sabrina Chandler	U.S. Fish and Wildlife Service, Refuges
Jeff Houser	U.S. Geological Survey, UMESC
Chad Craycraft	Illinois Department of Natural Resources
Kirk Hansen	Iowa Department of Natural Resources
Vanessa Perry	Minnesota Department of Natural Resources
Matt Vitello	Missouri Department of Conservation
Wade Strickland	Wisconsin Department of Natural Resources

### Others in Attendance:

Chrissa Waite	U.S. Army Corps of Engineers, SAC
Jim Cole	U.S. Army Corps of Engineers, MVD
Samantha Thompson	U.S. Army Corps of Engineers, MVD
Kelly Keefe	U.S. Army Corps of Engineers, MVD
Angela Deen	U.S. Army Corps of Engineers, MVP
Trevor Cyphers	U.S. Army Corps of Engineers, MVP
Alison Anderson	U.S. Army Corps of Engineers, MVP
Lane Richter	U.S. Army Corps of Engineers, MVP
Davi Michl	U.S. Army Corps of Engineers, MVR
Julie Milhollin	U.S. Army Corps of Engineers, MVR
Kyle Bales	U.S. Army Corps of Engineers, MVR
Leo Keller	U.S. Army Corps of Engineers, MVR
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Jessie Dunton	U.S. Army Corps of Engineers, MVR
Michael Dougherty	U.S. Army Corps of Engineers, MVR
Kara Mitvalsky	U.S. Army Corps of Engineers, MVR
Ryan Swearingin	U.S. Army Corps of Engineers, MVS
Brian Markert	U.S. Army Corps of Engineers, MVS
Jasen Brown	U.S. Army Corps of Engineers, MVS
Greg Kohler	U.S. Army Corps of Engineers, MVS
Cherie Price	U.S. Army Corps of Engineers, NOLA
Matt Mangan	U.S. Fish and Wildlife Service, IIFO
John Winter	U.S. Fish and Wildlife Service, IIFO
Lauren Larson	U.S. Fish and Wildlife Service, IIFO
Sara Schmuecker	U.S. Fish and Wildlife Service, IIFO
JC Nelson	U.S. Geological Survey
Jennifer Dieck	U.S. Geological Survey, UMESC
Jim Fischer	U.S. Geological Survey, UMESC
Christopher Churchill	U.S. Geological Survey, UMESC
Nathan De Jager	U.S. Geological Survey, UMESC
John Seitz	Illinois Department of Natural Resources

Matt O'Hara  
Shaley Valentine  
Sammi Boyd  
Brent Newman  
Anshu Singh  
Kim Schneider  
Steve Sattinger  
Mark Hoague  
Bryan Hopkins  
Kirsten Wallace  
Andrew Stephenson  
Mark Ellis  
Brian Stenquist

Illinois Department of Natural Resources  
Illinois Natural History Survey  
Wisconsin Department of Natural Resources  
Audubon Society  
Corn Belt Ports  
Our Mississippi  
Tetra Tech  
Tetra Tech  
The Nature Conservancy  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association