

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

**February 28, 2024  
Quarterly Meeting**

**(Virtual)**

Thatch Shepard (on behalf of Brian Chewning) of the U.S. Army Corps of Engineers called the meeting to order at 8:01 a.m. on February 28, 2024. UMRR Coordinating Committee members in attendance were Sabrina Chandler (USFWS), Chad Craycraft (IL DNR), Kirk Hansen (IA DNR), Vanessa Perry (MN DNR), Matt Vitello (MO DOC), Wade Strickland (WI DNR), Jeff Houser (USGS), and Rich Vaughn (NRCS). A complete list of attendees follows these minutes.

Shepard noted that the Corps plans to transition its appointment to the UMRR Coordinating Committee from Brian Chewning to Kelly Keefe who serves as USACE MVD Chief of Planning. Keefe has experience with the Everglades and other ecosystem-related programs. Andrew Stephenson expressed appreciation for Brian Chewning's dedication and contributions to the program during his tenure.

**Minutes of the October 25, 2023 Meeting**

Chad Craycraft moved, and Vanessa Perry seconded a motion to approve the draft minutes of the October 25, 2023 UMRR Coordinating Committee meeting as written. The motion carried unanimously.

**Program Overview**

*FY 2024 Fiscal Update*

On January 18, 2024, Congress enacted a continuing resolution extending current funding levels of the federal government until March 1, 2024. Marshall Plumley reported that the program has obligated \$6,934,159 at the end of the first quarter. This is slightly less than usual because funds for LTRM base monitoring were not initially available for obligation in the first continuing resolution that expired November 17, 2023. The funds were made available for obligation in the second continuing resolution that expired January 19, 2024. As of February 1, 2024, obligations are at \$9,504,461. This includes one contract awarded in the St. Louis District and the said funds allocated to USGS for LTRM. Obligations made by February 2024, including a fully funded LTRM, are approximately \$12 million. Plumley said UMRR is executing as expected even with the constraints of the continuing resolutions.

Plumley explained that a few adjustments to projects are adjusting the implementation schedule for FY 2024. MVR, the construction contract award for Steamboat Island Stage 2 has been delayed due to adding verification requirements on bids. MVS has added plans to advance other habitat restoration projects given favorable bids received on its planned construction portfolio.

### *FY 2024 Fiscal Update*

The current FY 2024 continuing resolution is scheduled to expire on March 1, 2024. Given that the FY 2024 President's budget and House and Senate Appropriations Committees have all allocated \$55 million for UMRR, the Corps anticipates that funding level to be enacted.

Plumley reported that the FY 2025 President's budget is expected to be released on March 11, 2024. UMRR's annual authorized appropriation is \$90 million. FY 2025 is the first fiscal year for which the Administration can budget for UMRR at that new authorized appropriation.

### *Support Letter for UMRR*

Plumley reported that, on January 31, 2024, Senators from Tammy Baldwin, Tammy Duckworth, Richard Durbin, Tina Smith, and Amy Klobuchar sent a joint letter to ASA(CW) Michael Connor and the Office of Management and Budget (OMB) requesting \$55 million for UMRR in FY 2025. Plumley said the active interest from Congress is very helpful in underscoring the value of making federal investments through UMRR.

### *UMRR Ten-Year Plan*

Plumley reported on the following adjustments to habitat project schedules: Pool 10, Reno Bottoms, Green Island, Pool 12 Forestry, and West Alton. The Corps has added flood damage repair work at the Swan Lake habitat project to the 10-year plan. The Corps also anticipates completing feasibility planning for Meredosia Island habitat project next fiscal year and initiating planning on the Lower Pool 11 habitat project later this fiscal year.

### *HREP Selection*

Plumley reported that UMRR will need approved fact sheets in FY 2025 to implement in FY 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 one specific to the Illinois River.

In May 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.

### *Strategic Planning*

Plumley reported that the UMRR Coordinating Committee met on November 27 and December 11, 2023 to develop the strategic planning process overview document (as provided on pages B-7 to B-12 of the agenda

packet. Chrissa Waite of the USACE Collaboration and Public Participation Center of Expertise is providing facilitation support services. Her biography is included on page B-13 of the agenda packet.

The strategic planning leadership team met on February 20, 2024 to craft the purpose, people, and process to develop the next strategic plan. No changes were made to previously approved content as the team talked only about sequence changes. Plumley noted that the strategic planning leadership team comprises Jim Fischer, Andrew Stephenson, Vanessa Perry, and Molly Sobotka. Davi Michl and Jeff Houser also took part in the leadership team meeting.

### *Implementation Issues*

Plumley said that UMRR and partners have communicated to Congress and Corps leadership about concerns related to project partnership agreements (PPA). Changes in policy and law have resulted in changes to the previous process of executing an MOA for habitat projects located on federal lands managed by a state. The Corps (Headquarters, MVD, and Districts) internally agreed that a legislative fix is not needed and found that the Corps may to update its MOAs for O&M of UMRR habitat projects on these lands with states or, in certain cases, with other partners capable and willing to take on responsibilities.

A new model PPA is being drafted by Corps Headquarters. Bryan Hopkins noted that NESP can implement projects at 100 percent federal funding, but that there are places (e.g. Pool 19) where an NGO may be needed to consolidate real estate. Hopkins asked if there is a similar model that can be pursued under UMRR or if this is unique to NESP. Plumley said these are 100 percent federally-funded habitat projects managed by a state. Plumley said UMRR does not have any authorization language related to the ordinary high-water mark (OHWM). UMRR's MOAs would allow NGOs to participate.

### *UMRR Workshop*

Plumley reported that UMRR will hold a workshop on May 7-9, 2024 in Bettendorf, Iowa. The last UMRR habitat-related workshop was held in 2019. Attendance is anticipated at 140 individuals from UMRR's partner governmental and nongovernmental entities. There will be a focus on programmatic matters, small group discussions on HREP planning and design, and conversations to advance LTRM/HREP integration. Plumley said important topics not included on the agenda will be pursued in other discussions.

### *Comprehensive Benefits*

Plumley provided an overview of the ASA(CW)'s January 5, 2021, memo regarding Comprehensive Documentation of Benefits in Decision Documents. In UMRR, an ecosystem and science program, the benefits of projects are usually measured in habitat units and acres. The Corps recognizes that other benefits are accomplished with restoration projects. New steps when analyzing alternatives will include additional benefits categories.

The Memo directs the program to include a plan that maximizes net total benefits across all categories in the final array. For example, in the 2022 Report to Congress, economists considered jobs and economic development to quantify returns on investment in the program. The Quincy Bay HREP considers regional economic development and environmental justice values. Plumley wants to start tracking this information programmatically. Anshu Singh expressed appreciation for this approach and said it would help with economic development and legislative support.

In response to a question about the carbon sequestration potential of projects, Plumley said a new tool lets the Corps roughly evaluate this both for construction and resulting habitat improvements of projects. The Corps held an internal webinar last month to roll out the tool. Davi Michl shared that the Net Emissions Analysis Tool (NEAT) was developed by the USACE Air Quality and GHG Emissions Analysis Sub-Community of Practice (AQ/GHG Sub-CoP) to transition output data from publicly available air pollutant and GHG emissions models and integrate them all to compute net effects relevant to USACE civil works and regulatory projects. For more info, search "NEAT model" here: <https://publibrary.planusace.us/#/home>. Jeff Houser added that there is a science proposal to investigate the potential effects of restoration projects on ecosystem carbon cycling and retention.

Plumley said social effects have been included on feasibility reports, which may help partners communicate project impacts. Wade Strickland applauded the Corps' move in this direction because it relates to Environmental Justice and community engagement at the front end to get buy-in from communities. Vanessa Perry said she is keen to see other community social benefits, not only economic. She suggested making sure social and biological science staff work together. Plumley agreed and said it will be important to discuss further as the program develops the next strategic plan. This information is not currently in the HREP database to query, but Plumley would like to see that made available. Andrew Stephenson suggested another discussion with the Coordinating Committee on comprehensive benefits. Plumley agreed and proposed engaging Corps social scientists to present at a future quarterly meeting. Perry encouraged discussion of this topic in the strategic planning process. Plumley agreed and noted it will also be discussed at the upcoming UMRR workshop. Thatch Shepard added that Kelly Keefe is well versed in this work, so she will be a good addition to the team.

#### *National Historic Preservation Act (NHPA) Section 106 Coordination*

Plumley reported that the Corps has a draft agreement with states to clarify review procedures, improve consistency, consultation, and accountability to comply with NHPA Section 106. USACE can potentially execute this agreement as soon as May 2024. This will offer UMRR additional flexibility to defer steps until after the feasibility report. The preferred outcome is to have one agreement for both UMRR and NESP. Tribes asked to have 'invited signatory' status. Districts will carry out the agreement stipulations. Plumley said the previous approach with project-specific agreements was time intensive. This agreement will serve as an umbrella for all projects. The Corps will continue to do the compliance work necessary but will have a broader timeframe in which to do consultation with Tribes. This change is expected to improve efficiency and reduce burden on some partners.

#### **SWOT Analysis**

Chrissa Waite led the UMRR Coordinating Committee through an abbreviated SWOT analysis exercise to identify the strengths, weaknesses, opportunities, and threats for UMRR. She asked for input on ongoing activities to understand what is working well, what could improve, and how UMRR relates to other organizations.

Regarding strengths, Waite asked participants to consider what UMRR does that no-one else is doing. Vanessa Perry noted the way the program brings partners together with an intentional blending of science and restoration. Chat comments mentioned large scale, systemic, scientific work in a well-functioning partnership.

Waite asked participants to consider UMRR's available resources. Participants identified people, technical expertise, and consistent funding through congressional appropriation because of effective program implementation. Long-term monitoring stations provide extensive infrastructure and expertise. The program has access to state and federal programs and leaders as well as NGO expertise.

Waite then asked participants to identify weaknesses or vulnerabilities of UMRR. Marshall Plumley noted the challenge of accomplishing the work in a human-resource constrained environment. It is a great partnership comprised of people who have other responsibilities. Kirsten Wallace noted the complexity of communicating substantial but very technical knowledge and work across the partnership. PPAs and O&M in perpetuity pose onerous challenges to states and NGOs. Data sharing across agencies can be a challenge due to varying technical restrictions. Responding to emerging issues takes time and it can be challenging to respond to new problems. Funding constraints have impacted the program in the past. In the past, the program has struggled with communication between the two program elements. There are other authorizations or decisions impacting the system that can in turn impact UMRR, such as state permitting. The influence of actions in the watershed can affect the river while UMRR authority is bluff to bluff.

Waite asked participants to consider conditions and circumstances external to UMRR that may present opportunities. Participants identified climate change, flood resilience planning, including levee setbacks and wetland enhancement, and restoration or management initiatives in the uplands or watershed. Participants also noted Environmental Justice, community engagement, and policy changes that may present new opportunities for UMRR. Plumley said a Congressional authorization to look at the entire Mississippi River through a joint program office would be an opportunity to increase coordination across programs and agencies. Jeff Houser noted that increased media attention and outward communication efforts have boosted public awareness. These efforts include the publication of the Status and Trends Report with a partner coordinated press release, articles about the river by the Mississippi Ag and Water Desk that have resulted in regional and national media interest.

In response to a comment, Waite asked if there is any concern about overlap with NESP. Plumley said the programs are authorized to work in the same geographic area, but that NESP has ecosystem and navigation projects. The partnership is trying to communicate what is unique about NESP and UMRR and what each can accomplish. Matt Vitello noted a long-term concern about a shared program footprint and available areas to do projects. NESP has flexibility but over ten or more years, project availability will be reduced. Wallace added that appropriation requests for both programs is receiving more scrutiny. Wade Strickland said there is a strong partnership on UMRR and that he is hoping for a similar arrangement on NESP, but acknowledged the programs have different authorizing language.

Waite asked if there is anything to consider as a threat to UMRR's work. Participants identified that the partnership has discussed the capability of the program and of partners to support increased ecosystem restoration activities. For example, most 100 percent federal cost projects occur on USFWS lands, and the Service takes on significant O&M responsibility. Thatch Shepard added that projects have increased in size and cost. Shepard added that there is currently minimal oversight by Headquarters, but increased costs and project sizes could be bring greater attention. Perry agreed the program is receiving more attention, and suggested increased focus on establishing relevance to our communities, partners, and congressional supporters.

Waite asked what obstacles could prevent UMRR from doing its work. Participant responses included project costs increasing at an alarming rate, Continuing Resolutions, and PPAs. Plumley explained that UMRR has the budget authority to carry over funds carry over in the event of continuing resolutions. Over the last decade, UMRR has executed over 97 percent of its funding. Plumley noted, a change to this consistency would create challenges.

Waite expressed appreciation for all the comments shared during the exercise. Plumley said the strategic planning leadership team discussed reordering some activities for the strategic planning process. He outlined that Phase 1 will address the understanding of strategic issues, Phase 2 will develop strategic goals and objectives, Phase 3 will address strategies and actions, and Phase 4 includes a public review process. Perry

thanked all who took part, notably public participants and those representing NGOs. Plumley added that any further thoughts should be shared with him or Waite.

### *Communications and Outreach Team*

Marshall Plumley shared an outline of 2024 activities. He said the Communications and Outreach Team (COT) is providing ongoing support for the 2022 Report to Congress (RTC) release. COT members are sharing lessons learned from their own agencies and are working to put together a strategy for the RTC release in 2024. The COT has reviewed a draft brochure and story map for the RTC, which are being developed to help present its content. Other activities include a photo contest to engage with the public and partners and to collect materials for social media and other outreach campaigns. USACE Staff are inventorying interpretive centers and information kiosks that need updated materials on UMRR.

Future meetings of the COT will include discussions of Environmental Justice and the UMRR project selection process. In response to a question about partners experience, Wade Strickland said Wisconsin DNR Office of Great Waters holds an annual photo contest that results in a calendar. Strickland cautioned that as the photo contest has grown in popularity, it has taken more time to handle the entries. Andrew Stephenson clarified that for its first photo contest, the COT is leaning toward an internal, program-wide effort rather than a broader public effort. One reason the program is holding a photo contest is to collect images for use in UMRR outreach and communication materials. Strickland emphasized that it must be clear to entrants that submitting images is an authorization to use the photo for a wide range of purposes.

### *External Communications*

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

- Sabrina Chandler briefed Regional Director Will Meeks, who started in November 2023, on UMRR projects and he signed his first MOA for the Lower Pool 13 HREP. Meeks is strongly interested in the program and has shared updates with USFWS Headquarters.
- Chandler said the USFWS will celebrate the 100<sup>th</sup> anniversary of the UMR National Wildlife & Fish Refuge on June 7, 2024. Last week, Refuge staff, Wisconsin DNR, and Izaak Walton League staff and national president attended a meeting with a public talk with local river lore historian Steve Marking, in character as Will Dilg, to discuss what the program has meant to the river. This meeting also resulted in the La Crosse Chapter of the Izaak Walton League enrolling approximately 50 new members.
- Chandler said she continues to engage with the Congressional delegation to share information about UMRR, including LTRM. Pool 13 continues to be a spotlight and being able to use LTRM data to address questions in that pool has been extremely valuable.
- Kirsten Wallace said UMRBA has advocated for many priorities related to UMRR to be included in the next Water Resource Development Act (WRDA), including financial agreements to support states' participation in UMRR and increasing the annual authorized appropriation for LTRM.
- Vanessa Perry said Minnesota DNR has published its new Invasive Carp Action Plan, which was presented yesterday at the UMRBA quarterly meeting. The document can be found at <https://www.dnr.state.mn.us/invasive-carp/index.html>.

- Mark Gaikowski said USGS Regional Director Lacey will attend the Great Lakes Days and the Mississippi River Cities and Towns Initiative (MRCTI) annual Capitol meeting next week. This includes the partnership dinner between Great Lakes Cities and MRCTI. Director Lacey will have an opportunity to meet ASA(CW) Connor and BG Peeples at the event.

## **Showcase Presentations**

### *Piasa & Eagles Nest Islands HREP*

Ryan Swearingin provided an overview and update on Piasa and Eagles Nest Islands HREP, located near Alton, IL above Mel Price Lock & Dam at River Miles 207-211. This project has received considerable support from partners, stakeholders, local government, and the public. It is a rich recreational area with waterskiing, fishing, and hunting. Illinois DNR is the project sponsor and manager of the area. The islands, covering 1381 acres, are federal land and the project is federally funded. Before the locks and dams were built, the two islands were a mosaic. After dam construction, the side channel started silting in and the small islands vanished. Historical maps were influential in the process to initiate a project here and recreate an island mosaic like what existed previously. Pictures from before the current project show a very shallow chute. The opening to the backwaters in Piasa Island had closed. Problems identified were loss of depth and flow in Piasa Chute, a loss of backwater habitat, and loss of a diverse island mosaic. Project objectives include increasing side channel habitat, depth, and flow; increasing connected backwater habitat with diverse depth for fisheries; and restoring the diverse island mosaic. USACE used an extensive Adaptive Hydraulics Model to make sure the project would not impact navigation and it would end up with a self-sustaining side channel. The Corps developed a computing system at Engineer Research and Development Center (ERDC) to analyze flow processes. The Tentatively Selected Plan (TSP) had a 200-foot-wide braided channel, a reconnected backwater opening, a notched rock structure to connect the two main islands and would use dredged material to create small islands. Upon completion, the project will attain 430 Average Annual Habitat Units (AAHU).

Stage 1, completed in 2022, was all rock placement. Around 202,000 tons of rock were placed, costing \$7.2 million. Stage 2 includes hydraulic dredging and island filling and has begun. A construction contract for \$11 million was awarded in February 2023. The contractor will dredge 1.4 million CY of material from the braided channel between Piasa Island and the Illinois bank, to be placed directly into island sites. The contractor has so far placed around 500,000 cy in island sites using a 20” flexible pipe. High-visibility orange buoys are used to keep the pipe visible to river users.

The Corps held a naming contest for the new islands, reaching out to six local middle schools with 2,400 students. The winning middle schoolers were honored at a recreation festival. The names chosen are Canvasback Island in the main channel, and Powrie, Steamboat, and Moonlight Islands in the side channel. Recommended names were submitted to USGS, who is responsible for island names. Powrie is named after an influential woman who used to live on Piasa Island in the late 1800s. An interior least tern nest was found on the site. Its range has shrunk but now terns are appearing, and this nest was successful. The birds were delisted from the Endangered Species Act in 2021.

In response to a question, Swearingin explained that dredged material is not staged, it was pumped directly over the rock walls into the island containment rings. Monitoring for materials and nutrients is ongoing. Andrew Stephenson noted that beneficial use in MVS is uncommon and asked if this project will help the district reach its goal of 70 percent beneficial use of material, and when will it be factored into calculations. Swearingin was not sure how it will fold into calculations but noted that it is a substantial amount of material. Kirsten Wallace said Wisconsin DNR brought up the issue of using backwater material instead of main channel material in some habitat projects. Wallace suggested additional discussion on the topic in strategic planning.

## *Water Clarity in the UMR*

In January, Alicia Carhart and colleagues published a study that sought to clarify roles of external inputs and internal feedbacks driving ecosystem processes related to water clarity in the UMR. Diverse aquatic habitats have various degrees of connectivity and thus different drivers. Research questions included:

- How has water clarity (total suspended solids (TSS)) changed across longitudinal and latitudinal gradients?
- To what degree were there shared temporal dynamics in TSS between off-channel areas of the river?
- Which environmental factors control inter-annual variation in TSS in off-channel areas in the UMR, internal processes, external inputs, or both?

Researchers expected internal processes to be greater in the upstream area and external inputs greater downstream. The team evaluated 24 years of variables. Within each of six LTRM reaches, they chose off-channel areas with varied characteristics and two to ten areas for other variables. There was significant divergence of main and off-channel clarity over time. Intrinsic and extrinsic control of water clarity appeared to vary across the system. Connectivity, vegetation, and carp abundance were the main drivers of water clarity. However, covariates in the study showed limited impact, so other factors must be considered in the future. The study showed that rivers are influenced both by external and internal factors. Vegetation and fish communities affect clarity. TSS declines were due to a combination of processes. The findings are important for managing complex floodplain rivers, as managers can target underlying feedback mechanisms. For example, managers can prioritize aquatic vegetation or higher trophic levels. It is important to continue monitoring so future analyses can provide more data. Jeff Houser said this study is a great example of the amount of information that can be drawn from a long-term dataset. Data collected in many areas can be used to compare changes over time spatially. This study also demonstrates the extent of learning that can occur when we invest time and energy into sophisticated analysis.

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

### *FY 2024 1<sup>st</sup> Quarter Report*

Jeff Houser reported that accomplishments of the first quarter of FY 2024 include publication of the following manuscripts and book chapter:

- *Establishing fluvial silicon regimes and their stability across the Northern Hemisphere*
- The book *Resilience and Riverine Landscapes*, edited by Thoms and Fuller, features the chapter *Resilience-based challenges and opportunities for fish management in Anthropocene rivers* by Jason DeBoer, Kristen Bouska, Christian Wolter, and Martin Thoms. All major rivers are impacted by human activity. This chapter looks at how a resilient space approach can be applied to the ecosystem. The UMR/ILWW system was a part of the study. Takeaways include:
  - Finding novel conditions and uncertain trajectories in these rivers
  - Factors governing fish populations are broad scale and beyond a manager's control
  - A resilience-based approach emphasizes increasing the capacity to deal with change
  - Changes in uses and values of the river system call for a common vision among different sectors to develop effective management strategies.

Houser noted that these studies show how LTRM can be used in a global system.



## *UMRR Science Meeting*

Houser reported that the UMRR science meeting was held at UMESC on January 16-18, 2024. It was attended by around 100 people from 3 federal agencies, 7 state agencies, and universities. The primary goal was to identify collaborative, relevant projects that improve our ability to restore the UMRS and lay groundwork for science proposals for consideration of funding in FY 2024. Other benefits included improved connections among participants and the transfer of institutional knowledge.

Houser described the organization of the meeting including 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 and their focus are as follows:

- Work group 1 – How will climate change affect river flows, water quality, and aquatic vegetation on the UMRS? This builds off two previous projects that developed a historical hydrology dataset and a possible set of future projections. Group 1 considered SAV response to wind, waves, velocity, and shear stress, and understanding associations among hydrogeomorphology, water chemistry, and biota. This included aquatic areas of HNA, map of areas of conditions, to better understand the conditions identified based on water chemistry and distribution.
- Work Group 2 – Water quality responses to aquatic vegetation, carbon cycling, nutrients, and sedimentation with vegetation types.
- Work Group 3 – Look at how ice extent and duration is changing over time. There is satellite imagery to look at the river from 2016 to 2024. Research will look at how the spatial and temporal patterns in temperature are changing and the implication of river characteristics.
- Work Group 4 – Identify the abiotic drivers of fish population dynamics in upper aquatic trophic levels of the UMRS and assess a variety of attributes.
- Work Group 5 – Analyze floodplain ecology to better understand subsurface hydrology effects on vegetation over time, including how forests have responded to canopy mortality after 2019 flooding.
- Work Group 6 – Follow on to plenary session to lay groundwork for future studies by looking at smaller scale projects in the next few years to address four topics:
  - Strategic approach to identify HREP features that promote dense and diverse mussel assemblages
  - Estimate the influence of HREPs on river carbon dynamics
  - Look at backwater fish assemblages to understand how HREP measures to benefit backwaters impact fish communities.
  - Evaluate ecological responses to side channel rehabilitations in the middle Mississippi River

Houser thanked all who attended, notably working group leaders, Jim Fischer and Davi Michl, the LTRM Analysis Team, Randy Hines, and Lisa Hein for organizing the event.

### *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 2023, LTRM funded the initiation of two information needs:

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

If funding levels continue, two additional informational needs are anticipated to receive funds in FY24:

- Lower trophic levels: abundance, distribution and status of phytoplankton and zooplankton in the UMRS
- Floodplain ecology: vegetation change across the UMRS.

In response to a question from Andrew Stephenson asked if there is talk upcoming about more protocols for handling and marking turtles in fish data collection. Houser said that the fisheries component records basic measurements for turtle bycatch including length and weight. Houser added that one information needs identified an opportunity to mark turtles bycaught to gain insights on other population dynamics. Jim Fischer noted that to implement turtle marking in the 2024 field season, more detailed methods are needed. Field station team leads will meet on Friday to discuss implementation further. In response to a question about HREP impacts on river carbon dynamics, Houser said that work groups have looked at dynamics in the river. Models look at greenhouse gas emissions of the construction process, not river dynamics.

### *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.” The program has fully funded base monitoring this month. A draft SOW for science in support of restoration and management was received on February 16, 2024. Systemic topobathy acquisition has awarded three pilot projects. Pools 4 and 8 were selected for study. Preliminary results are expected in April 2024. Hydrosurvey acquisitions in support of developing the next UMRS systemic topobathy layer are anticipated to happen in spring 2024. Final deliverables from the three pilot projects are due in August. The pilot study purpose is to determine the best techniques and reduce costs associated with hydrosurveys. The PDT is evaluating study areas for 2024 acquisition. A Pool 13 pilot to leverage benefits to UMRR may be pursued. The spring forecast is looking favorable, but water levels do need to be high enough to collect effectively.

The LTRM budget is mostly unchanged since October. State carry-in funds could change when final numbers are provided. Michl anticipates funding analysis under base in March 2024. A pilot radio wave monitoring system is being made by USACE Detroit district for the Lower Pool 13 HARP. A mussel survey task order, Objective 4 under IDIQ, falls under an umbrella contract. The project biologist has been coordinating with USGS and expects to send to Contracting in March 2024. Monitors have been tasked to enter HREP monitoring data in the Environmental Monitoring and Management Application (EMMA). This will help track tasks, budgets, and schedules with a web-based database application. The focus is to enter data for active projects first, then go back in time to build the database with historical projects.

## *A-Team Report*

Matt O'Hara said the A-team will hold its regular meeting in La Crosse on April 16, 2024, in conjunction with the Mississippi River Research Consortium (MRRC). The main goal is to rank project proposals. O'Hara will report on proposal rankings at the next quarterly meeting.

### **Habitat Restoration**

Angela Deen said MVP has five active HREPs. PDTS are finalizing alternatives for Robinson Lake and Big Lake. Robinson Lake includes a unique sturgeon spawning reef feature using various cobble sizes. This is the first time a district has proposed such a feature. USACE Staff are addressing MVD comments on the Big Lake HREP to submit the final report this spring. MVP hired the same architectural engineer to design Reno Bottoms and Lower Pool 10. Borings for Reno Bottoms Stage 2 will determine if existing access roads can accommodate construction equipment. The 65 percent review is anticipated to occur in June. The Lower Pool 10 HREP will be advertised for construction in June. It is currently at the 95 percent review milestone. The PDT has bundled the islands into a base set of options. McGregor Lake is in the construction phase. The PDT is evaluating thin layer placement to look at how different materials settle, and findings will inform use and constructability of thin layer placement. Initial observations suggest sand settles near the pipe and fines settle further out. Extensive thin layer placement may need to be graded later. The Trempealeau Letter Report has been reviewed by partners. Deen expects to close out the report in the next few weeks. Reviewers recommended pursuing a new project at Trempealeau in the next selection process. MVP outreach included a science booth at a science fair for local high school students. Deen showed a drone video over McGregor Lake that was developed by the MVP GIS section and can be seen at <https://www.youtube.com/watch?v=m6NQXuMorLg>.

Julie Millhollin said MVR added Lower Pool 13 Phase 2 to the program schedule and began feasibility for Lower Pool 11. The Pool 12 Forestry PDT has identified a tentatively selected a plan and the report is in review. This is the first pool-wide project in MVR and the team is scheduling an open house for late-March. The Green Island PDT is finishing the policy and legal review on the TSP. The Lower Pool 13 Phase 1 report was approved in December and the project Finding of No Significant Impact (FONSI) was signed in January. Sabrina Chandler noted that USFWS has signed the MOA, and it is being routed to USACE now. Millhollin said the Lower Pool 13 Phase 2 District review on Chapters 1-3 was completed in December and an alternative formulation workshop was held on February 1, 2024. A Pool 18 forestry kickoff was held on November 30, 2023, during which POOCs and initial measures were set. The team is now drafting chapters 1-3 for District review. The Quincy Bay PDT held a public meeting on February 15, 2024, with over 350 people attending. Staff gave a project presentation and held a question-and-answer session. Public review is in progress until March 9, 2024. Design of Steamboat Island Stage 2 is complete and a construction contract has been advertised. Beaver Island is nearing construction completion. MVR projects in construction include Beaver Island, Steamboat Island Stage 1, Keithsburg Division Stages 1 and 2, and Huron Island Stage 3. The Steamboat Island Stage 1 contractor is on schedule to set riprap on the southeast island. The Keithsburg Stage 1 contractor is working on removing broken block mats for repair. The Stage 2 contractor is on site and waiting for fair weather to begin work. Huron Island Stage 3 will continue with plantings in June. Other activities include a multiple award task order contract (MATOC) at three sites including Steamboat Island, Lower Pool 13, and Spring Lake. PER site visits are scheduled for Big Timber, Rice Lake, Pleasant Creek, Princeton, and Lake Odessa. Lessons learned will be documented and shared. In response to a question, Millhollin said the Beaver Island ribbon cutting has not yet been scheduled but is anticipated to occur this summer.

Brian Markert said MVS received approval for the Yorkinut Slough feasibility report. The project will move into the design phase and a site visit with sponsors will be scheduled. Harlow Island Stage 2 design is

advancing, and design of Stage 1 was completed last year. Harlow Island is the next projected anticipated to move into construction. The sediment deflection berm is a main feature to enhance the river side of the levee and the wetlands within the site. Corps real estate is working through the acquisition process at Crains Island. Both Harlow Island and Crains Island locations are designed to enhance and build complex soils over time. Sediment is deflected upstream but the site is left open at lower end so water backs in and drops fines. This builds up better soils that can support other vegetation types. In planning, West Alton Islands is in final DQC and public review is complete. The two project sponsors, MDC and USFWS, have their own areas of management in the project. The Gilead Slough and Red's Landing projects in Pool 25 are adjacent in a big complex. There is some synergy with team members, but the Corps will produce two separate reports with IL DNR and USFWS. Site visits occurred in autumn of 2023. Markert said the Corps is aiming to have projects designed and ready for construction pending the anticipated increase in funding. Construction of the exterior berm setback at Clarence Cannon was completed. USFWS has assumed management over a large part of the project area and is using the facilities, but Stage 5 has remaining items to complete, including a task order on reforestation. Colonel Andy Pannier, a biologist, visited the site and has taken interest in the program. The Swan Lake Flood Damage Rehabilitation limited scope letter was approved last year and the PDT is developing design packages to address repairs and add resiliency. The Corps applied more lenient standards for ecosystem projects than flood protection projects leading to favorable construction bids. Other activities include developing potential new projects on the UMR and ILWW, interpretive signage for Piasa and Eagles Nest Islands HREP, and collecting additional shallow water data for bathymetry. Staff are scoping the Ted Shanks PER. The Corps is scoping an Indefinite Delivery Indefinite Quantity (IDIQ) construction contract for UMR. In response to a question regarding the sturgeon spawning reef, Markert said that MVS is working on substrate that is conducive to several species, tracking underwater substrate rock size, and flow orientation that attract different species. Angela Deen added that the Corps designed similar structures for centrarchids. Matt Vitello said the partnership has documented successful spawning below Dam 26 through the sustainable rivers program by altering discharge and that he would like to see this replicated at other locks and dams.

### **Other Business**

Marshall Plumley noted that the MVR Change of Command ceremony is scheduled for May 23, 2024. Thatch Shepard expects MVD leadership to attend that week.

Upcoming quarterly meetings are as follows:

May 2024 – Quad Cities

- UMRBA quarterly meeting: May 21
- UMRB quarterly meeting: May 22

August 2024 – Minneapolis/Saint Paul Metro Area

- UMRBA quarterly meeting: August 6
- UMRB quarterly meeting: August 7

November 2024 – Saint Louis

- UMRBA quarterly meeting: November 19
- UMRB quarterly meeting: November 20

Bryan Hopkins expressed appreciation for the discussion on the importance of substrates for sturgeon to facilitate spawning, especially for species with extensive migration patterns. Noting other discussions exploring the idea of installing barriers to deter the spread of invasive species like carp, Hopkins highlighted a potential conflict between these two strategies and encouraged partners to address this perceived contradiction as a discussion topic prior to investing in projects that may work against each other.

With no further business, Wade Strickland moved and Vanessa Perry seconded a motion to adjourn the meeting. The motion carried unanimously. The meeting was adjourned at 2:55 p.m.

## UMRR Coordinating Committee Attendance List

February 28, 2024

### UMRR Coordinating Committee Members

Thatch Shepard (on behalf of Brian Chewning)	U.S. Army Corps of Engineers, MVD
Sabrina Chandler	U.S. Fish and Wildlife Service, Refuges
Jeff Houser	U.S. Geological Survey, UMESC
Richard Vaughn	U.S. Department of Agriculture, NRCS
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:

Karen Hagerty	U.S. Army Corps of Engineers (Retired)
Chrissa Waite	U.S. Army Corps of Engineers, Charleston District
LeeAnn Riggs	U.S. Army Corps of Engineers, MVD
Jim Lewis	U.S. Army Corps of Engineers, MVD
Samantha Thompson	U.S. Army Corps of Engineers, MVD
Nathan Wallerstedt	U.S. Army Corps of Engineers, MVP
Angela Deen	U.S. Army Corps of Engineers, MVP
Trevor Cyphers	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
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
Dane Boring	U.S. Environmental Protection Agency
John Winter	U.S. Fish and Wildlife Service, IIFO
Lauren Larson	U.S. Fish and Wildlife Service, IIFO
Charlie Deutsch	U.S. Fish and Wildlife Service, Refuges
Andy Casper	U.S. Geological Survey
Mark Gaikowski	U.S. Geological Survey
David Dupre	U.S. Geological Survey, CMWSC
Jennifer Dieck	U.S. Geological Survey, UMESC
Jim Fischer	U.S. Geological Survey, UMESC
Christopher Churchill	U.S. Geological Survey, UMESC
John Seitz	Illinois Department of Natural Resources
Matt O'Hara	Illinois Department of Natural Resources
Brian McCoy	Illinois Department of Transportation

Dave Bierman  
Alicia Carhart  
Sammi Boyd  
Lindsay Brice  
Anshu Singh  
Michael Anderson  
Bryan Hopkins  
Doug Blodgett  
Randy Smith  
Mark Ellis  
Lauren Salvato  
Brian Stenquist  
Kirsten Wallace  
Andrew Stephenson

Iowa Department of Natural Resources  
Wisconsin Department of Natural Resources  
Wisconsin Department of Natural Resources  
Audubon Society  
Corn Belt Ports  
Mississippi River Network  
The Nature Conservancy  
The Nature Conservancy  
The Nature Conservancy  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association  
Upper Mississippi River Basin Association