

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

**August 15, 2018
Quarterly Meeting**

**Upper Midwest Environmental Science Center
La Crosse, Wisconsin**

Brian Chewning of the U.S. Army Corps of Engineers called the meeting to order at 8:05 on August 15, 2018. Other UMRR Coordinating Committee representatives present were Sabrina Chandler (USFWS), Mark Gaikowski (USGS), Rob Maher (IL DNR) on behalf of Mike McClelland via phone, Randy Schultz (IA DNR), Megan Moore (MN DNR), Matt Vitello (MO DoC), Jim Fischer (WI DNR), and Ken Westlake (USEPA) via phone. A complete list of attendees follows these minutes.

Minutes of the May 16, 2018 Meeting

Karen Hagerty requested that, on page A-3, 1) the word “external” be removed when preceding “communications team” and 2) “FY 2018 funds for external communications” in the last paragraph be replaced with “FY 2018 funds for public outreach.” Randy Schultz moved and Matt Vitello seconded a motion to approve the draft minutes of the May 16, 2018 UMRR Coordinating Committee meeting as amended. The motion carried unanimously.

Discussion with the Mississippi River Commission

Marshall Plumley provided an overview of the ecological stressors to the Upper Mississippi River System and how UMRR works through its federal-state partnership to restore natural fish and wildlife habitat and gain knowledge of the river’s ecological status and trends. When Congress authorized UMRR, it recognized the tremendous value of the Upper Mississippi as a nationally significant ecosystem and navigation system as well as the necessity of a strong federal-state partnership in managing the river given that it transcends multiple state and federal agency jurisdictions. Congress clearly established UMRR as an interagency partnership, with the overall program management housed within the Corps but with specific management responsibilities for the five Upper Mississippi states, USGS, and USFWS. The program also enjoys support from local communities, conservation organizations, and navigation industry. Over thirty years later, the program partnership is effective and efficient and has resulted in successful on-the-ground habitat restoration projects that have substantially improved the ecosystem as well as vastly improved knowledge of the river ecosystem. The program’s vision, as stated in the 2015-2025 UMRR Strategic Plan, is for “a healthier and more resilient Upper Mississippi River ecosystem that sustains the river’s multiple uses.”

Plumley provided specific examples of UMRR’s ability to improve habitat conditions for fish and wildlife as well as overall ecosystem health and resilience. He discussed the partnership network that monitors the fundamental ecological characteristics of the Upper Mississippi in six key trend reaches. UMRR’s extensive analysis of the monitoring data has improved knowledge of the river system and substantially informed its management. While significant strides have been achieved, there remains extensive needs for ecosystem restoration and learning. Ongoing work includes:

- Selecting a new generation of habitat projects that will address habitat needs and manage the ecosystem’s resilience (whether maintaining healthy states or transitioning degrading states to healthy states),
- Improving the design and construction of habitat projects by learning from past implementation, and
- Completing a comprehensive assessment of the river’s ecological health using the long term resource monitoring network.

In response to a question from MG Richard Kaiser, Plumley explained that OMRR&R obligations vary by habitat project – e.g., projects with larger water control structures require more intensive OMRR&R than projects with mostly nonstructural elements. Sabrina Chandler said USFWS sponsors about 70 percent of UMRR’s habitat projects and spends an average of \$280,000 annually in its cumulative OMRR&R obligations. Brian Chewning mentioned the Corps’ effort to design more self-sustaining habitat projects that lessen the OMRR&R obligations. Plumley added that UMRR makes a conscious effort to learn from previous projects, including ways to reduce OMRR&R costs. These lessons learned are captured in a comprehensive UMRR HREP Design Handbook. MG Kaiser requested that the Handbook be sent to Tulane University, which has recently initiated an ecosystem restoration program. Chandler clarified that OMRR&R is paid by the project sponsors and is not funded through UMRR.

In response to an observation by MG Kaiser regarding Pool 8 Islands HREP at Stoddard, Chandler and Judy DesHarnais explained that the river continues to naturally fill in the island complex as designed. Chandler said the UMRS USFWS Refuges spans 260 river miles and draw 3 million visitors every year. Jim Fischer acknowledged that Pool 8 is highly recreated. The Pool 8 Islands are a popular angling destination and attract people from all over Wisconsin. Larger angling tournaments began about 10 years ago following the HREP construction but are now regular tournament spots. Mark Gaikowski echoed Fischer’s observations. Plumley added that the public is often very vocal and participatory in UMRR’s public meetings regarding habitat projects, serving as anecdotal evidence of support for the program.

MG Kaiser reflected on Plumley’s explanation of how prolonged inundation over the growing season has degraded the ecological conditions on the Upper Mississippi and suggested that the UMRR Coordinating Committee provide him with a more formal request to resolve the impediments to implementing water level management. Kirsten Wallace confirmed that the UMRBA will respond with such a letter detailing a request and relevant authorities.

In response to a question from Jim Reeder, Plumley confirmed that UMRR has received its full authorization of \$33.17 million in FY 2018 for the third consecutive year. Chewning explained that a primary reason for continued funding at this level is a result of UMRR executing the program at 95 percent or above. Plumley said UMRR will execute 97 percent of its FY 2018 allocation. He added that the ability to execute at high rates is due to spending flexibility among the three Corps Districts and the commitment of various project sponsors.

In response to a question from Shepard Smith, Chandler explained that most UMRR habitat restoration is focused in the lower half of the pools corresponding with the most habitat loss resulting from inundation due to the construction of the 9-foot navigation channel. She clarified that restoration work is still needed in the degraded areas in the upper portions of the pools. In most areas, seeding and planting is done to jump start vegetation response. Regeneration of the existing seedbank does occur when facilitated. Jennie Sauer added that neotropical birds will utilize restored habitat areas resulting in high reproduction within those areas. Tim Yager mentioned that federal ownership of the northern half of the UMRS has been very important for allowing construction of habitat projects. DesHarnais and Wallace explained that UMRR is facing challenges with the lack of available cost-share sponsors due to legal issues associated with the Corps’ project partnership agreements.

In response to a question from Sam Angel, Sauer and Gaikowski explained that water quality sampling occurs throughout the winter (including sediment transects) although vegetation sampling ends in August and fish sampling ends in October. Telemetry provides continuous monitoring of fish throughout the entire year. In winter, LTRM staff process monitoring samples, analyze data, and set up research projects.

Regional Management and Partnership Collaboration

Marshall Plumley explained that District staff have recently developed a database that will aid in reporting and analyzing UMRR's expenditures over its lifetime. Outputs from the database will be provided for budget reports at future quarterly meetings. The impetus for the database were requests from ASA(CW) Jo-Ellen Darcy for the development and tracking of budget-based performance metrics.

FY 2018 Fiscal Update

Plumley reported that UMRR has currently obligated \$26.3 million of its \$33.17 million FY 2018 allocation and is on track for executing at 97 percent. Plumley reported that the Corps recently obligated a \$5.2 million construction contract for Conway Lake and a \$10.3 million construction contract for Beaver Island. The program's internal allocations are as follows:

- Regional Administration and Programmatic Efforts – \$1,110,000
- Regional Science and Monitoring – \$9,325,000
 - Long term resource monitoring – \$4,725,000
 - Regional science in support of restoration – \$3,175,000
 - Regional science support staff – \$150,000
 - Habitat project evaluation – \$975,000
 - Habitat Needs Assessment II – \$300,000
- Habitat Restoration – \$22,735,000
 - MVP – \$4,922,000
 - MVR – \$11,747,000
 - MVS – \$5,966,000
 - Model certification – \$100,000

[Note: The District habitat restoration funds are not reflective of the historical split based on river mileage, and instead are reflective of the project priorities as identified in the budget process.]

In response to a question from MG Richard Kaiser, Plumley explained that UMRR historically enjoyed substantial flexibility in spending. Over the last four years, Corps Headquarters has directed that MVD approve any change requests in order to ensure accountability through the vertical team.

MG Kaiser urged that UMRR be prepared to answer the question of “when will you be done,” noting that that question has been asked of the MR&T project. Mark Gaikowski, Jeff Houser, and Karen Hagerty articulated that the river ecosystem receives enormous negative pressure from watershed and in-river influences. There will remain a need for large-scale ecosystem restoration and knowledge-building until the Upper Mississippi is a healthy, well-functioning riverine floodplain that can withstand that sustained degrading pressure. The 2016 UMRR Report to Congress explains that the Upper Mississippi ecosystem

is degrading at a rate of one to three percent annually. Sabrina Chandler observed that many areas of the Upper Mississippi ecosystem have yet to be addressed. MG Kaiser advised that a concise, compelling argument be available to make before Congress regarding the need for continued investment in UMRR. Plumley challenged the UMRR Coordinating Committee to develop a statement that articulates a vision for the desired future condition of the UMRS. Judy DesHarnais recalled that NESP had developed more thorough plans for ecosystem restoration with the goal of achieving desired future conditions. The plans likely remain relevant. Hon. Norma Jean Mattei observed that the answer could vary depending on audience.

Plumley explained that the House and Senate passed FY 2019 energy and water spending measures including \$33.17 million for UMRR on June 8, 2018 and June 25, 2018, respectively. This funding level matches the President's FY 2019 budget. At the \$33.17 million planning scenario, UMRR's FY 2019 internal allocations would be as follows:

- Regional Administration and Programmatic Efforts – \$1,100,000
- Regional Science and Monitoring – \$10,295,000
 - Long term resource monitoring – \$4,920,000
 - Regional science in support of restoration – \$3,750,000
 - Regional science support staff – \$200,000
 - Habitat project evaluation – \$975,000
 - Habitat Needs Assessment II/Project sequencing – \$450,000
- Habitat Restoration – \$21,775,000
 - MVP – \$7,670,000
 - MVR – \$7,695,000
 - MVS – \$6,310,000
 - Model certification – \$100,000

[Note: The Corps transferred funds among the UMRS Districts in FY 2018 in order to get critical work accomplished and to maximize the amount of funds obligated. The FY 2019 allocations to the three Districts reflect rebalancing of those internal transfers.]

Keithsburg Island HREP

Julie Millhollin described the tentatively selected plan to 1) restore and protect off-channel aquatic and wetland habitat and 2) restore floodplain forest habitat at Keithsburg Division. The 1,400-acre site located in Pool 18 is managed by the USFWS and is a complex of interconnected backwaters, wetlands, and floodplain habitat. Millhollin explained that the project's water level management plan is dependent upon USFWS acquiring flowage easements on 23.7 acres of the adjacent privately-owned lands.

Habitat conditions at Keithsburg Island are degrading as a result of altered hydrology, lack of topographic diversity, and invasive plants. Frequent inundation inhibits forest regeneration and causes tree mortality, and large flood events result in heavy sediment accumulation. Without intervention, Keithsburg Island would eventually transition from forest to grassland, severely impacting neotropical and other migratory birds, Indiana bats, and other floodplain species.

The Keithsburg Island goals are to a) restore and protect off-channel aquatic and wetland habitat and b) restore floodplain forest habitat. The HREP is estimated to cost slightly over \$25 million. The Rock Island District anticipates finalizing design work in FY 2019 and initiating construction in FY 2020.

Sabrina Chandler reported that USFWS is currently in negotiations with the landowners regarding the flowage easement. The payment mechanism is undetermined.

Randy Schultz said Iowa DNR is sampling fish in Pool 12 to establish a pre-project baseline. Chandler said Iowa and Illinois are strong partners in this project and the local community is very engaged and supportive. About 70 people attended the Keithsburg Island HREP initial public meeting. Chandler explained that this is a unique project within a small community and the local support has been tremendous.

Long Term Resource Monitoring and Science

FY 2018 Third Quarter Report

Jeff Houser reported that accomplishments of the third quarter of FY 2018 include the publication of four manuscripts:

- Discontinuities and functional resilience of large river fish assemblages
- Aquatic vegetation responses to island construction in a large floodplain river
- Multi-trophic response to invasive silver carp in a large floodplain river
- Ecological characteristics of floodplain forest reference sites in the Upper Mississippi River System

USACE Report

Karen Hagerty reviewed the FY 2018 and FY 2019 LTRM budgets as listed below. The FY 2019 work plan will be updated to account for FY 2018 carry-over funds from the field stations as well as salary savings as a result of Yao Yin's retirement.

	FY 18 Work Plan	FY 19 Work Plan
• Total funds:	\$7.900 million	\$8.670 million
• Base monitoring:	\$4.725 million	\$4.920 million
• Science in support of restoration:	\$1.025 million	\$1.250 million
• Additional science-related work:	\$2.150 million	\$2.500 million

A-Team Report

Matt Vitello reported that the A-Team met on August 2, 2018 via a web-based conference call. The A-Team discussed the draft HNA II report and concluded that it was not prepared to recommend its endorsement to the UMRR Coordinating Committee given a few outstanding issues and remaining discrepancies. Vitello reported that the A-Team is requesting that the HNA II tri-chairs finalize the draft report for a subsequent review. At its August 2 meeting, the A-Team also received updates on UMRR from Marshall Plumley and LTRM from Jeff Houser as well as technical presentations from Levi Solomon and Sara Tripp.

Vitello said the next A-Team meeting is scheduled for October 2-3, 2018 in conjunction with the UMRCC's WQ Tech Section meeting.

Communications and Outreach

Angie Freyermuth and Sam Heilig provided an overview of a draft UMRR Communications and Outreach Plan. They said UMRR's goals and objectives for communications and outreach are to:

- Improve public awareness of UMRR accomplishments and garner increased public support for how ecosystem restoration brings value to the nation
- Enhance communication to Congress about program accomplishments and program progress toward restoring the Upper Mississippi River
- Improve UMRR partnership coordination and collaboration to ensure all aspects of the program are being shared amongst the UMRR [Coordinating Committee] and internal Corps project delivery teams.

Freyermuth explained that the draft communications and outreach plan as provided as a handout reflects input from the UMRR Communications Team. The most recent version of the draft plan will be sent to the UMRR Coordinating Committee for its review in mid-August. [Note: Subsequent to the meeting, the plan was distributed to the UMRR Coordinating Committee on August 25.] Committee members will be asked to submit their feedback by September 21. The goal is to finalize the plan by the end of FY 2018.

Freyermuth said the UMRR Communications Team's FY 2018 focus will be on the following activities:

- Developing a strategy for synchronizing partners' communications (e.g., key messages, documents)
- Establishing a social media campaign
- Building and refining the Team's roles and efforts
- Hosting monthly UMRR webinars to share communications practices and information
- Identifying best practices for communications to decision makers

Actions in FY 2019 will include developing outreach materials, engaging at five or more venues, installing educational signage, revamping UMRR's website, and creating a media kit. Longer term strategic goals include creating a restoration trail, an archive system for files and photos, and a partner portal.

In response to a question from Jim Fischer about how to effectively communicate with decision makers, Freyermuth explained that the UMRR Communications Team will develop materials and talking points for aiding partners in telling a story about UMRR and its value. Heilig said in-person engagements are also very important – e.g., the August 14, 2018 UMRBA/MRC Pool 8 Boat Tour. Marty Adkins referenced Iowa State University research, which found that the presentation of information affects how it is absorbed by people. The research concluded that storytelling and a compelling narrative is important and connects a different part of the brain than just facts and figures.

Heilig discussed several factors that make effective social media campaigns, including timing and use of visualizations and tags. She explained how a partnership-based social media network for UMRR might be implemented. Kirsten Wallace asked how the St. Louis and St. Paul Districts will integrate into this proposed social media campaign. According to Heilig, UMRR-related social media could be readily followed via a hashtag (e.g., #umrr) or potentially through an RSS feed. Wallace mentioned UMRR's science-related news as well as stories from the USFWS and states and asked how those efforts would be integrated into social media. Heilig suggested that the UMRR Communications Team clarify news-related items and create storylines that would be relevant and compelling to followers.

In response to a suggestion from Adkins to connect with the public through the telling of personal stories, Heilig and Freyermuth said they can gather interviews with landowners and various engaged public. Heilig added that it is the job of communications experts to tell an effective story.

Karen Hagerty mentioned that Iowa public television recently published a great story about a UMRR restored area on the UMRS but did not mention the program. Hagerty recognized this as an important lost opportunity.

Wallace and Sabrina Chandler expressed appreciation to Freyermuth and Heilig for developing the draft communications and outreach plan. Communications has been very important to the UMRR Coordinating Committee for many years.

Judy DesHarnais observed that acronyms, including #umrr as a hashtag, will not be meaningful to individuals unfamiliar with the program.

Outreach Activities

Fischer reported that the Wisconsin DNR Office of Great Waters hosted the DNR Secretary's Office on July 30, 2018 to August 2, 2018 in La Crosse and provided a tour of Pool 8 and UMESC. In addition to UMRR, discussion topics also included channel management and water quality. Fischer thanked UMESC staff for providing a tour of UMESC and St. Paul District staff for the tour of L&D 7.

Tim Yager reported that the Institute for Journalism and Natural Resources offered a paid internship in June 2018 for 18 freelance journalists from around the country to explore the UMRS. USFWS hosted the journalists on June 20, 2018 on boat tour of Pool 8. The journalists discussed a wide-range of river issues, including agriculture, navigation, science, and habitat rehabilitation. They were particularly interested in the regional federal-state interagency partnership and expressed interest in a follow-up discussion. Jeff Houser added that Deanne Drake, Kraig Hoff, and Andy Bartels provided an excellent overview of UMRR's long term resource monitoring and associated partnership network. Houser said the journalists seemed very impressed.

Marty Adkins observed that the private sector is becoming far more engaged in water quality issues, particularly in Iowa. Adkins referenced Iowa's agriculture conservation infrastructure initiative and 4R Plus campaign as examples. NRCS recently entered into a 10-entity MOU with the goal of engaging agriculture real estate in watershed conservation projects.

Mark Gaikowski said UMESC hosted NOAA, NWS, and USGS in June 2018 to discuss flood risk management, including integrating ecological aspects using UMRR LTRM data. UMESC also hosted USGS Associate Director of the Office of Budget, Planning, and Integration this summer. The visit included a tour of Pool 8. Additionally, a Chinese state-led delegation visited UMESC in early August 2018 to learn about UMRR's habitat restoration projects. The delegation is planning another trip in mid September 2018.

Plumley reported that, in mid July 2018, he visited USFWS staff and the Minnesota and Wisconsin UMRR field stations. The USFWS meeting included a site visit to the Root River restoration project. Chandler expressed appreciation to Plumley for visiting with Service staff.

Chandler reported that USFWS Refuge staff hosted Senator Ron Johnson, providing a tour of the Bryce Prairie and La Crosse District Visitor Center as well as Lake Onalaska. Staff highlighted UMRR restoration projects.

Wallace observed that many of these activities would be very relevant for communicating to the public.

Water Quality Trends in Winter Conditions

KathiJo Jankowski discussed trends in winter conditions (i.e., ice and snow cover) on the UMRS and globally as well as the water quality and habitat conditions beneath the ice in varying aquatic areas. Globally, ice breakup days are becoming earlier over time with a greater change starting in 1850 and temperatures are rising steadily with a greater increase starting in 1980.

Jankowski discussed initial research to examine whether ice conditions are changing on the UMRS, matching global trends, and whether ice and snow cover affect habitat conditions. While there is limited information on winter conditions, important ecological processes (e.g., primary and secondary productivity) and habitat occur over winter months. Additionally, nutrient cycling during winter affects nutrient availability in spring and summer. Initial research analyzed relationships between ice and snow cover on dissolved oxygen, chlorophyll, nitrogen, phosphorus, and temperature.

Jankowski explained that the initial research indicates that a) relationships do exist between snow cover over ice and conditions in backwaters and b) effects in different backwater types are variable given connectivity, depth, vegetation, and other factors. Ice cover, vegetation, and depth are shown to be the fundamental drivers in differences in backwater habitat conditions during winter as well as connectivity to the main channel.

Megan Moore noted that Deanne Drake has two years of monitoring data in Pool 8 showing that invasive curly-leaf pondweed (*Potamogeton crispus*) thrives in winter and Rob Burdis has winter monitoring data surrounding Peterson Lake HREP. Local reports on snow conditions over time could also augment LTRM data. In response to a question from Karen Hagerty, Jankowski said there is no information on whether or how groundwater inputs may affect winter habitat conditions under snow and ice. Jim Fischer said it would be interesting to research whether depth of ice and proportion frozen to the river bottom impacts fisheries and their food sources. Sabrina Chandler said understanding the relation to HAB occurrence would be helpful, citing frequent HAB events at Trempealeau National Wildlife Refuge. In response to a question from MAJ Patrick Sullivan, Jankowski said there has not yet been a multi-regression analysis to better depict the variability among backwaters.

Noting the MSP airport's relationship with the Refuge, Kirsten Wallace suggested working with the airport on displays to showcase the UMRR project. Chandler said that connection has already been made. In response to a question from Jim Fischer, Chandler said she provided UMRR folders to the Refuge Manager.

Habitat Restoration

District Reports

St. Paul District

Tom Novak reported that Bass Ponds will be the planning priority for the St. Paul District and will likely be sequenced before Lower Pool 10 and Reno Bottoms. Harpers Slough is nearing completion with an anticipated dedication this fall. The District is preparing to issue a construction contract award for Conway Lake in FY 18 and for McGregor Lake Islands in FY 19. Cumulatively, these four projects will encompass the District's construction schedule for about eight years pending funding availability. MVP is also advancing project evaluations on several completed projects. Novak observed that this time for reflection and learning will help in the transition to new staff and many UMRR project planners are beginning to retire.

Sabrina Chandler explained that Bass Ponds is located on the Minnesota Valley Fish and Wildlife Refuge, which is designed as an urban wildlife refuge. USFWS is prioritizing its refuge outreach efforts in these urban areas to reach audiences that do not typically frequent the refuge system. The Minnesota Valley Refuge received an additional \$1 million to engage with the Twin Cities metro area community. The Refuge has two major visitor centers, which each have tremendous staff that have substantial interactions with the public.

St. Louis District

Jasen Brown said the St. Louis District's planning priorities include Rip Rap Landing, Piasa and Eagles Nest Islands, and Harlow Open River Islands. Following MVD's review of Harlow Islands HREP plans, MVS will host the first public meeting for the project. The District also anticipates initiating planning on Oakwood Bottoms and Yorkinut Slough in FY 2019. Design work has started on the Clarence Cannon levee setback. Brown reported that MVS recently completed mussel sampling at Batchtown HREP and plans to have draft PERs for Pharrs Island, Clarksville, and Dresser Island to sponsors by the end of calendar year 2018. Brown provided an overview of the Clarence Cannon HREP major construction features, including the exterior and interior water control structures, pump station, and levee setback.

Chandler explained that the Clarence Cannon HREP water control structures are a significant investment but will be able to withstand the river's extensive forces. Chandler acknowledged, and expressed appreciation for, the \$1 million Ducks Unlimited grant to advance the habitat project.

In response to a question from Jim Fischer, Brown explained that the levee setback and interior levee will lessen the number of subunits (from 8 or 9 subunits to four subunits) mimicking a more natural hydrograph. Chandler added that existing challenges with seepage and rainfall during the growing season are preventing vegetation growth. The pumps are critical for managing and restoring the plant community. Andy Barnes said construction on Clarence Cannon HREP will likely be initiated in FY 2019. In response to a question from Mike Klinger, Brown explained that the site will provide additional flood storage while not affecting the amount of water conveyed through the site. Chandler added that the project design was modified in response to concerns expressed from the Elsberry Levee District.

Rock Island District

Julie Millhollin explained that the Rock Island District is continuing planning on Keithsburg Division and Steamboat Island. MVD recently approved the fact sheet for Lower Pool 13, which includes a pool-scale drawdown component. It is anticipated that construction will be completed on Rick Lake Stage I in September 2018, Pool 12 Overwintering in October 2019, and Huron Island Stages II and III in 2019. Millhollin reported that a construction contract for Beaver Island was awarded for Beaver Island on July 31, 2018. The District is employing performance evaluations on Rice Lake, Lake Odessa, and Fox Island.

Habitat Needs Assessment II (HNA II)

Kat McCain explained that, while the UMRR Coordinating Committee members agree on a vision for "a healthier and more resilient UMRS ecosystem...", there remains some differing opinions among implementing partners regarding management objectives and priority species or resources of concern, baseline references (historic-, current-, or future-based), and the priority locations (or pools) for habitat restoration. It is very difficult to work through these issues. While the HNA II attempted to reach some consensus, the management analyses were focused regionally rather than systemically. McCain said the HNA II assessment focuses on indicators of ecological health and resilience and clusters (or groups of similar pools).

McCain said she worked with the river teams, Nate De Jager, and Sara Schmuecker to facilitate a rapid assessment for each indicator in each pool cluster to determine whether the condition is desired, adequate, or inadequate and needs management intervention. In addition, the river teams were given a paired comparison evaluation to determine priorities among the indicators for each cluster of pools.

McCain reported that a July 18, 2018 draft “HNA II – Linking Science to Management Perspective” report was distributed to the UMRR Coordinating Committee on July 25, 2018 with a slightly revised version provided on August 8. She explained the major changes to the document from the June 15, 2018 version to the most recent versions. Among other things, this includes the addition of a summary of the three river teams’ scores for each indicator per reach, removal of spider diagrams and segmented worm diagrams, addition of the paired comparison indicator survey results, and the addition of bulleted statements regarding desired future conditions across pool clusters. McCain said she believes the HNA II documents will provide river restoration practitioners with the tools to develop more specific goals for habitat projects regarding individual or a combination of indicators.

In response to a question from Jim Fischer, McCain explained that aquatic function classes 1 and 2 were integrated into a single category in the paired comparison analysis for simplification. None of the river team members objected.

In response to a question by McCain, the UMRR Coordinating Committee requested a revised draft version for it to review within the next month, following which a final draft be provided to the HNA II Steering Committee and A-Team for review of any major issues only.

McCain said that, pending the Committee’s approval within the next month, she will present a final version with graphic design to the UMRR Coordinating Committee for consideration of approval at its October 31, 2018 meeting. A major question to be resolved is the depiction of habitat indicator rankings given discrepancies among agencies in the Upper Impounded Reach.

[Subsequent to the meeting, the UMRR Coordinating Committee, Marshall Plumley, and Kat McCain developed the following schedule for finalizing the HNA II’s publication:

- August 22: The August 21 version is distributed to the UMRR Coordinating Committee for review
- September 7: The UMRR Coordinating Committee members submit comments to Kat McCain in the August 22 version
- September 17: Based on the UMRR Coordinating Committee comments received, the final draft version is distributed to the river teams, A-Team, and HNA II Steering Committee for any major comments only
- September 28: The river teams, A-Team, and HNA II Steering Committee submit any major comments to Kat McCain
- October 1-12: The final version undergoes editorial review and graphic design
- October 16: The final version with graphics incorporated is distributed to the UMRR Coordinating Committee for review and consideration of endorsement
- October 31: The UMRR Coordinating Committee considers endorsement of the final HNA II for publication]

Jim Fischer expressed appreciation to McCain, Schmuecker, and De Jager for their incredible work. The HNA II represents a fantastic step forward to data-informed decision making regarding habitat project selection and formulation. Fischer expressed reservations with averaging results of agency rankings without additional criteria, noting that relevant information or perspectives may be disregarded.

McCain explained that the St. Paul District Fish and Wildlife Work Group (FWWG) had the most disagreement among agencies. The discrepancies can be captured in the narrative. The intent was to tell a story of habitat needs on a systemic level. The UMRR Coordinating Committee discussed the importance to be consistent in the ways that the HNA II documentation indicates and talks about these discrepancies and acknowledged that there is more commonality among agencies than differences of perspective. De Jager said the HNA II management report discusses discrepancies in the appendices so that the discussions and varying perspectives will not be lost. As a solution, Chandler proposed that an asterisk be used to indicate a discrepancy and direct readers to the appendix. She acknowledged that partners will eventually need to reach consensus when determining the program's priorities for implementing restoration projects.

In response to a question from Jim Fischer regarding the HNA II's purpose, Wallace pointed out that Congress directed that UMRR develop a habitat needs assessment for its reports to Congress every six years. Additionally, Corps Headquarters has asked for the most recent version of the assessment to use in creating and assessing performance metrics. This includes defining when the need for UMRR will be done and how to get to that point. Marshall Plumley added the HNA II can be used as a tool for engaging candidate non-federal project sponsors about UMRR's restoration priorities and potential habitat projects.

Recalling the 2017 UMRR HNA/Ecosystem Resilience Workshop, Matt Vitello suggested that UMRR partners begin working through these larger discrepancies to reach consensus.

Chandler said the major conclusion from the HNA II is that the monitoring data clearly show that there are major differences between pool clusters and obvious areas that are significantly degraded. She said that a previous version included a statement to this effect that has been since removed and advocated for its reinsertion. De Jager suggested that language be added that explains the differences in habitat across cluster pools and discusses the areas that require maintenance of high quality habitat to prevent degradation and the areas that require restoration to shift habitat from degrading to healthy. Fischer expressed support for De Jager's suggestion.

The UMRR Coordinating Committee members expressed their sincere appreciation to all those who have worked on the HNA II, particularly for its ability to further quantify existing conditions of ecological health and resilience.

[Note: Subsequent to the meeting, the UMRR Coordinating Committee approved a revised version of the HNA II management document that also resolved the issues of ranking discrepancies.]

Project Selection Process and Approach

Marshall Plumley reported that the UMRR Coordinating Committee held a conference call with the District-based river team chairs on August 8, 2018 to discuss the HREP Sequencing Framework and potential modifications given the insights gained from previous applications, ecological resilience and HNA II indicators, and ability for nonprofit organizations to cost-share HREPs.

Plumley reviewed the goals of the UMRR HREP Sequencing Framework (listed below) and how the Framework is implemented within the UMRR's various coordinating groups and implementing agencies.

- Ensure that habitat projects address ecological needs at pool- and system-scales and integrate HNA results
- Enhance public understanding and trust
- Retain flexibility to ensure efficient and effective program execution and apply adaptive management principles

Plumley said participants on the August 8 conference call discussed how concepts of ecological health and resilience will be incorporated within the Framework, whether and how to integrate the HNA II indicators into project formulation and monitoring, and whether to retain or modify elements of the Framework – e.g., SET and level of guidance provided to the DETs. In addition, call participants discussed how to engage candidate non-federal project sponsors. Plumley acknowledged that the HREP selection process will need to include some definition of a desired future condition.

Plumley said he will continue working with the UMRR Coordinating Committee and river team chairs to evaluate the HREP Sequencing Framework and to plan for a late fall or early winter full partnership workshop to kick-off the process of selecting the next generation of habitat projects.

The UMRR Coordinating Committee discussed a potential communications strategy for the HREP selection process and concluded that outreach should be carefully scoped. Kirsten Wallace suggested that outreach is targeted to potential nonprofit organizations and local communities that can serve as project sponsors. Some groups have expressed confusion about when and how to get involved in the selection process. Sabrina Chandler cautioned that an outreach process to the general public should be implemented with clearly-defined objectives and input requests as well as well-understood draft materials and plans (e.g., fact sheets). Fischer agreed and said that the La Crosse local public is actively engaged and has already expressed interest in the future of UMRR's restoration actions.

Other Business

Future Meetings

The upcoming quarterly meetings are as follows:

- **October 2018 — Bloomington, Minnesota**
 - UMRBA quarterly meeting — October 30
 - **UMRR Coordinating Committee quarterly meeting — October 31**
- **February 2019 — Dubuque**
 - UMRBA quarterly meeting — February 26
 - **UMRR Coordinating Committee quarterly meeting — February 27**
- **May 2019 — St. Louis**
 - UMRBA quarterly meeting — May 21
 - **UMRR Coordinating Committee quarterly meeting — May 22**

With no further business, the meeting adjourned at 3:30 p.m.

**UMRR Coordinating Committee Attendance List
August 15, 2018**

UMRR Coordinating Committee Members

Brian Chewning	U.S. Army Corps of Engineers, MVD
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Mark Gaikowski	U.S. Geological Survey, UMESC
Rob Maher	Illinois Department of Natural Resources [On behalf of Mike McClelland, on the phone]
Randy Shultz	Iowa Department of Natural Resources
Megan Moore	Minnesota Department of Natural Resources
Matt Vitello	Missouri Department of Conservation
Jim Fischer	Wisconsin Department of Natural Resources
Ken Westlake	U.S. Environmental Protection Agency, Region 5 [On the phone]

Others In Attendance

MG Richard Kaiser	Mississippi River Commission/ U.S. Army Corps of Engineers, MVD
Hon. Jim Reeder	Mississippi River Commission
Hon. Sam Angel	Mississippi River Commission
Hon. Norma Jean Mattei	Mississippi River Commission
Hon. Shepard Smith	Mississippi River Commission
Charles Camillo	Mississippi River Commission
Tom Holden	U.S. Army Corps of Engineers, MVD
Thatch Shepard	U.S. Army Corps of Engineers, MVD
Ben Robinson	U.S. Army Corps of Engineers, MVD
Gab Harris	U.S. Army Corps of Engineers, MVD
MAJ Patrick Sullivan	U.S. Army Corps of Engineers, MVP
Julie DesHarnais	U.S. Army Corps of Engineers, MVP
Tom Novak	U.S. Army Corps of Engineers, MVP
Shahin Khazrajafari	U.S. Army Corps of Engineers, MVP
Andy Barnes	U.S. Army Corps of Engineers, MVR
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Angela Freyermuth	U.S. Army Corps of Engineers, MVR
Julie Millhollin	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Sam Heilig	U.S. Army Corps of Engineers, MVR
Dave Busse	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, MVS
Shane Simmons	U.S. Army Corps of Engineers, MVS
Jasen Brown	U.S. Army Corps of Engineers, MVS
Amanda Goltz	U.S. Army Corps of Engineers, MVS
Greg Kohler	U.S. Army Corps of Engineers, MVS
Kat McCain	U.S. Army Corps of Engineers, MVS
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuges
Sara Schmuecker	U.S. Fish and Wildlife Service, RIFO [On the phone]
Neal Jackson	U.S. Fish and Wildlife Service, UMRCC
Scott Morlock	U.S. Geological Survey, Midwest Region
Jeff Houser	U.S. Geological Survey, UMESC
Jennie Sauer	U.S. Geological Survey, UMESC
Nate De Jager	U.S. Geological Survey, UMESC
KathiJo Jankowski	U.S. Geological Survey, UMESC
Olivia Dorothy	American Rivers

Nancy Guyton
Bertha Mae Taylor
Mike Klingner
Tom Boland
Kirsten Wallace
Lauren Salvato
Mark Ellis
Josh Coloumbe

Neighbors of the Mississippi River
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Quincy Bay Area Restoration and Enhancement Association
Wood Group
Upper Mississippi River Basin Association
Upper Mississippi River Basin Association
Upper Mississippi River Basin Association
Upper Mississippi River Basin Association