

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

**October 30, 2019  
Quarterly Meeting**

**Hampton Inn and Suites  
St. Paul, Minnesota**

Sabrina Chandler of the U.S. Fish and Wildlife Service called the meeting to order at 8:05 a.m. on October 30, 2019. UMRR Coordinating Committee representatives present were Dennis Hamilton (USACE) on behalf of Brian Chewning, Jeff Houser (USGS) on behalf of Mark Gaikowski, Dave Bierman (IA DNR) via phone on behalf of Randy Schultz, Dave Glover (IL DNR) via phone, Megan Moore (MN DNR), Matt Vitello (MO DoC), Jim Fischer (WI DNR), Verlon Barnes (NRCS) via phone, and Ken Westlake (EPA) via phone. A complete list of attendees follows these minutes.

**Minutes of the August 21, 2019 Meeting**

Jim Fischer noted that, on page A-2, the dates of the UMRR LTRM Science Meeting are January 14-16, 2020. Megan Moore moved and Jim Fischer seconded a motion to approve the draft minutes of the August 21, 2019 UMRR Coordinating Committee meeting as amended. The motion carried unanimously.

**Regional Management and Partnership Collaboration**

*FY 2019 Fiscal Update*

Marshall Plumley said he and Karen Hagerty visited the UMRR LTRM Illinois River Biological Field station in Havana, IL and plan to visit the Great Rivers (Alton, IL) and Big Rivers and Wetlands (Cape Girardeau, MO) Field Stations December 17-18, 2019. [Note: This was cancelled due to the weather.] Plumley said he attended the recent September 19, 2019 RRCT, October 1, 2019 combined FWIC/OSIT, and October 17, 2019 A-Team meetings in-person and engaged with other river teams via conference call. Plumley also noted that he and Hagerty attended the October 23-24, 2019 Upper Mississippi River Conference and set up an information booth on the UMRR program.

Plumley said he attended an October 10, 2019 meeting hosted by Senator Dick Durbin (D-IL) to field questions regarding how the proposed Quincy Bay habitat project fits within the UMRR HREP selection process. Plumley said he had explained the program's deliberate process to identify suitable habitat restoration projects over a large geographic scope and said that representatives from Quincy Bay Area Restoration and Enhancement Association and other NGOs have been involved in the conversations.

Plumley reported that UMRR achieved an execution rate of 99 percent in FY 19, obligating \$32.89 million. This excludes FY 18 carryover. A construction contract for Bass Ponds was unable to be awarded, but contingency planning allowed funds to be shifted between districts and across program elements. Funds allocated to Bass Ponds were reallocated to the LTRM element and \$1.5 million was transferred from MVR to MVS for Clarence Cannon. Plumley said the program's ability to obligate dollars in a difficult year with a government shutdown and prolonged flooding was noticed by decision

makers. He applauded the partners' flexibility and willingness to engage quickly to ensure the program's success and obligation of funds.

Plumley outlined major accomplishments in FY 19 including:

- Twenty-three HREPs in planning, design, or construction, awarding two construction contracts
- Hosting the May 6-8, 2019 UMRR HREP Planning and Design Workshop that helped support integration of program elements
- Initiation of four new science in support of restoration projects
- Updates to the 2010 land use/land cover dataset
- Development of the Lower Illinois River communications pilot project
- Illinois Waterway consolidated closure monitoring efforts
- Continued LTRM monitoring
- Numerous congressional and public engagements

Plumley said he received tremendous feedback on the HREP workshop and acknowledged that the number of projects in planning, design, and construction is large relative to five years ago. Plumley applauded partners for compiling the scope of work for the Illinois Waterway consolidated closure monitoring efficiently as it showed the program's ability to mobilize quickly to take advantage of important matters.

#### *FY 2020 Budget Outlook*

Plumley reported that, on September 26, 2019, Congress passed a continuing resolution authority (CRA) for FY 20 that expires on November 21, 2019. District staff are authorized to execute the program at \$33.17 million. The House Appropriations Committee and the Senate Energy and Water Appropriations Subcommittee both approved \$33.17 million for the UMRR program in their respective FY 20 energy and water appropriations measures.

Plumley said that, at the \$33.17 million planning scenario, UMRR's FY 20 internal allocations are as follows:

- Regional Administration and Program Efforts – \$1,250,000
- Regional Science and Monitoring – \$10,500,000
  - Long term resource monitoring – \$5,000,000
  - Regional science in support of restoration – \$3,800,000
  - Regional science staff support – \$200,000
  - Habitat project evaluations – \$1,125,000
  - HNA II/regional project sequencing – \$375,000
- Habitat Restoration – \$21,420,000
  - Rock Island District – \$7,280,000
  - St. Louis District – \$6,940,000
  - St. Paul District – \$7,100,000
  - Model certification – \$100,000

### *FY 2020 UMRR Plan of Work*

Plumley said that St. Paul District hopes to award construction contracts for Bass Ponds and McGregor Lake in the second and third quarters of FY 2020, respectively. The St. Louis District anticipates initializing Crains Island this year. Plumley said the Rock Island District received favorable bids on Beaver Island and applied the savings to award \$4 million for construction on the first part of Keithsburg Division. He added that Illinois DNR requested the entire Keithsburg project be designed before issuing state dam permits for the project. Plumley said funding in the district will focus on design primarily and Rock Island District may not award a major construction contract this year. Plumley said changes resulting from the permitting process will result in changes to the real estate requirements for the project. Coordination between USACE and the USFWS is ongoing.

Plumley outlined other UMRR initiatives for FY 20 including developing statements of significance, defining a desired future condition for the UMRS, drafting the third UMRR LTRM status and trends report, conducting a progress review of the 2015-2025 UMRR Strategic Plan, and planning the development of the 2022 Report to Congress. Plumley suggested that the metrics and goals outlined within the Strategic Plan be used to measure progress and help inform development of the 2022 Report to Congress.

### *UMRR Ten-Year Plan*

Plumley provided a 10-year outlook for UMRR through FY 30 that incorporates currently scheduled HREPs, monitoring, adaptive management, and science activities, based on recent funding trends. He said this information is helpful in understanding where the program is projected to be in any given year and where projects identified as part of the ongoing HREP selection process may fit in to FY 21-25. Plumley noted that feasibility for a number of HREPs is projected to be completed in FY 23-24, highlighting the importance of the HREP selection process for maintaining the program's momentum. Plumley said the 23 projects in planning, design, and construction represent 65,160 potential acres to be restored in the next 11 years.

Dennis Hamilton said it was important to have a variety of projects in feasibility. In response to a question from Verlon Barnes, Plumley said most project design is completed by Corps staff and sponsors, but architectural and engineering firms have been contracted with in the past.

Gretchen Benjamin expressed appreciation for the 10-year plan but cautioned that some may interpret this as projecting an end date to the program. Plumley agreed and said the document includes placeholders for projects under Rock Island District. Additional projects will be added to the 10-year plan following completion of the HREP selection process. In response to a statement from Benjamin regarding the current 106,000 acres restored through the program, Plumley said acres cannot be considered restored until a project is closed out. Tim Yager cautioned that sedimentation and extended periods of high water may result in acres not performing well and that the number of restored acres will decline as projects age if there is not adequate monitoring and maintenance.

Benjamin suggested, and Megan Moore agreed, that additional funds be allocated to support a full-time position to advance UMRR's communication strategy and conduct public outreach. Plumley said Angie Freyermuth, who supports the program's communication efforts, is on temporary detail with USACE Headquarters. Hamilton said the position would be backfilled in the coming months. In response to a statement from Moore, Plumley said other options for supporting communication strategy implementation could be explored.

### *Statements of UMRS Significance*

Plumley said the UMRR Coordinating Committee is scheduled to convene a November 14, 2019 conference call regarding development of statements of significance. [Note: Following the meeting, the call was rescheduled for November 26, 2019.] On the call, committee members will share their perspectives of UMRS significance. Plumley requested that partners provide a one-page document with reflections on UMRS significance before the call and noted that example statements were provided in the August 21, 2019 UMRR Coordinating Committee quarterly meeting packet.

In response to a question from Jim Fischer, Plumley clarified that the statements would address UMRS significance, not UMRR significance. Fischer suggested partnering with the UMRBA Board to develop statements of UMRS significance. In response to another question from Fischer, Plumley described the development of these statements as a first step in a structured approach to defining a desired future condition for the UMRS. Hagerty added that the statements could be helpful for the next report to Congress and for communication purposes. Kirsten Wallace said UMRBA's Board would likely be interested in partnering on the effort. She added that messages should be tailored to specific audiences. Andrew Stephenson said the table of river teams' desired future condition in the *HNA-II Linking Science to Management Perspectives* may be a helpful reference.

### *UMRR Lower Illinois River Communication Pilot Project*

Stephenson said the Lower Illinois River communications pilot *ad hoc* team is currently reviewing a draft communications plan framework, including a problem statement, goal, objectives, and key messages. He described how the effort relates to Goal 3 of the 2015-2025 UMRR Strategic Plan: "engage and collaborate with other organizations and individuals to help accomplish the UMRR vision." In addition, the pilot team added an objective to integrate restoration and conservation practices on main stem with incoming tributaries. Stephenson said team members are providing their input regarding UMRR's strengths, weaknesses, opportunities, and threats as related to this effort as well as key target audiences and partners who may help UMRR connect with these audiences. Stephenson said the team agreed to identify key messages describing what UMRR can offer and supporting messages that would be compelling for each target audience. The two key messages identified are: 1) HNA-II can help establish need for prioritization of restoration in the Lower Illinois River and 2) monitoring data can help show impact of restoration activities. Stephenson said the team is working to identify relevant LTRM data in La Grange, Peoria, and Alton pools and existing initiatives in the watershed.

Fischer expressed appreciation for the communication pilot *ad hoc* team's work and said he believes this effort will help to achieve the strategic and operational plan as envisioned. In response to a question from Fischer, Plumley said funding is allocated to outreach and there is flexibility in how those funds are utilized. Hamilton suggested focusing on engaging local communities to establish buy-in and potentially involve cost-share partners. Stephenson agreed and said the team is working to identify overlapping goals between the communication pilot project and existing projects in the watershed. Angela Deen suggested using listening sessions as an engagement strategy in the watershed.

### *External Communications*

UMRR partners reported on the following communication and outreach activities since the August 21, 2019 UMRR Coordinating Committee meeting:

- Megan Moore reported that, on October 3, 2019, Minnesota state legislators held a hearing on the river near Winona. She presented on climate change using LTRM data and provided handouts on LTRM.

- Brian Markert said the Corps' St. Louis District's Operations Division held a career event for high school seniors on October 16, 2019 at Mel Price Lock and Dam. Brandon Schneiders (fisheries) and Jasen Brown (engineering) fielded questions.
- Jennie Sauer said representatives from the USGS ecosystem mission area visited UMESC in early September 2019 and were briefed on LTRM components.
- Jim Fischer said a photojournalist toured the river with Deanne Drake (WI DNR) in late September 2019. Fischer noted that the photojournalist also attended a tour in 2018 and was impressed with the program, but felt it was little known nationally. The photojournalist expressed interest in featuring the Mississippi River in National Wildlife Magazine in March 2020. Fischer said the magazine circulates approximately 350,000 hard copies and has 2 million online subscribers.
- Sabrina Chandler said the annual meeting of the Mississippi River Parkway Commission was in La Crosse on September 17-19, 2019. Refuge staff helped organize a canoe trip on Lake Onalaska for attendees and local elected officials. Chandler said she met with the Lee County Conservation Board in Fort Madison, IA about Pool 19 lands that could be incorporated into an existing HREP. Chandler fielded questions from Senators Joni Ernst and Chuck Grassley and provided a briefing on UMRR. Chandler said Tim Yager accompanied four Chinese National Geographic reporters on a tour of the river and discussed UMRR.
- Jennie Sauer said she, Col. Steve Sattinger, and Mark Wiltermuth attended MRCTI's annual meeting on September 17-19, 2019. Sauer distributed UMRR business cards at the meeting. She added that MRCTI's 2020 annual meeting will be in Bemidji, MN.

## **UMRR Showcase Presentation**

### *2019 Flood Damages*

Plumley said the Corps is considering possible funding mechanisms for repairing damages on completed habitat projects resulting from the 2019 flood. HREP District Managers explained the challenges of this year's high water on HREPs.

Tom Novak said two islands at Harpers Slough, W2 and M2, experienced 2000 feet and 400 feet of erosion, respectively, due to breaches and consecutive years of record flows in 2018 and 2019. In response to a question from Chandler, Novak said the project ran overschedule and vegetation could not establish before high water events. Novak added that additional habitat was affected by material from eroding islands filling in deep areas. Novak said they are putting together a damage report and proposing repairs. In response to a question from Moore, Plumley said repair funds would likely come from end of year dollars. Plumley pointed to the 2004 Report to Congress that articulates a process for addressing repairs. In response to a question from Chris Erickson, Novak said the estimated cost to repair was \$2 million.

Plumley reported high water in Rock Island District impacted tree survival at Pool 12 Overwintering, which will require replanting and possible modification to tree elevations. Plumley said flooding caused erosion at Princeton Wildlife Management Area in Pool 14 and Huron Island Stage II, and led to scouring at Beaver Island, removing sediment necessary to construct topographic diversity sites. He said a contract modification at the end of FY 19 was used to accomplish the topographic diversity. Plumley said the levee at Lake Odessa was overtopped in May 2019. Repairs began but water rose again and an estimated \$1 million of rockwork is needed.

Brian Markert said Batchtown HREP remains underwater and a water control structure, riverside piping in the ground, and a portable pump station may be damaged from sustained bed load. He said they would need to look upstream to see if changes in the river will affect project features in the future.

Markert said that refuge and site managers have mentioned damage to other sites and effects to functionality of project features. Markert added that prolonged high water also damaged trees at Ted Shanks, causing a one-year delay of the project's close out. Markert said this conversation should also be occurring at higher levels within the Corps to find a solution.

Matt Vitello suggested that the issues regarding adaptive management for damages are described in the next UMRR report to Congress or seeking a solution through WRDA. Hamilton agreed and said projects are built considering the lowest-life cycle cost and will sustain damage from major natural disasters as overbuilding to a 400-year flood with zero damage would be cost prohibitive. He added that it was a sign that they are not over engineering, but also a sign to consider design implications should river levels stay high. Plumley said it was a good time to have conversations around how to fund repairs and noted the program has the first ecosystem projects ever built by the Corps, which were not built to withstand the large flood events and discharge rates seen today. Chandler said the burden on sponsors under PPAs to fund repairs from major natural disasters may lead to organizations being unable to sponsor projects in the future. She added that discussions in St. Louis District have focused on self-sustaining project features that may cost more per habitat unit, but require less O&M and may see reduced damage from events. Hamilton acknowledged that O&M costs are sometimes underestimated.

Wallace said UMRBA is currently advocating to Congress that it resolve indemnification conflict, and reaching out to other Corps projects and programs across the country to do the same. Wallace suggested initiating conversations around the implementation issues that the Committee would like to address in the next report to Congress to be prepared to address them in WRDA if the opportunity arose. Markert said revisions to O&M agreements should be considered when the river or project site changes or requires different management. Angela Love said the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) includes O&M in funding request and evaluates O&M costs for five to 10 years to determine if additional funds are needed. In response to a question from Ken Westlake, Angela Deen said Jon Hendrickson and Scott Baker gave a presentation in November 2019 focused on project design and lessons learned under the new norm of high water. Benjamin said islands in Pools 6, 8, and 10 could be studied for how they have withstood floods. She observed that, over the program's history, 56 projects have been built and seven have been damaged.

*Annual prevalence of submersed macrophytes is correlated to prior year's summer water levels*

Eric Lund provided a summary of research exploring environmental effects on macrophyte prevalence in Pool 4 by season. Lund said SAV in Pool 4 has increased both below and above Lake Pepin, but that the initial SAV increase started two years earlier in Lower Pool 4 (2005) than Upper Pool 4 (2007). Lund noted that Pool 4 backwaters experienced high variability with regard to water quality, water levels, and annual submersed macrophyte occurrence. Lund explained that the study metric he used varied from traditional metrics by using the relative percent change in percent frequency observed, emphasizing changes in SAV frequency between years.

The research concluded that annual change in SAV occurrence is influenced by specific hydrological conditions during current and or prior summers. Lund said SAV occurrence increases under low discharge during summer of a given year and prior year and that SAV occurrence declines under high discharge during summer of the year prior to data collection. Lund said ongoing and future work include exploring finer temporal scales, multivariate relationships, and expanding to other trend pools as well as considering composition of SAV communities, requiring development of new and improved methods for monitoring SAV.

In response to a question from Jeff Houser, Lund said he could consider how flow differs from year to year rather than just discharge and that further definition of SAV communities is needed.

## **Habitat Restoration**

### *District Reports*

Tom Novak reported that feasibility studies for Lower Pool 10 and Reno Bottoms HREPs are ongoing in MVP. He said a task order was issued to Short Elliott Hendrickson Inc. to design McGregor Lake by April 2020, because the District does not have available resources in-house. Novak noted that building up experience among Architecture and Engineering firms for these projects may be useful in the future. Novak said construction contracts for Bass Ponds and McGregor Lake are anticipated in the second and third quarters of FY 20, respectively. MVP is working with channel maintenance to determine if dredge material from McMillan Island dredge cuts can be placed at McGregor Lake, which would result in a cost savings of approximately \$3 million. Conway Lake will begin construction in FY 20. He added that repairs to address island erosion at Harper's Slough are proposed.

Marshall Plumley said MVR's planning priorities include Steamboat Island and Lower Pool 13, and the District anticipates initiating planning on Green Island, sponsored by Iowa DNR, this calendar year. Plumley said design work continues on all project features for Keithsburg Division to secure a permit. Plumley said high water continued to delay progress on Pool 12 Overwintering, Huron Island Stages II and III, and Keithsburg Division Stage I. Plumley reported that contactors are resuming work at Beaver Island after being pulled off the project to address emergency dredging needs earlier this year.

Brian Markert reported that MVS is completing alternatives for Oakwood Bottoms and will be meeting with MVD in November 2019 to discuss results. This is the first project with the U.S. Forest Service and they are working to identify timelines for decision-making and input. Markert said the feasibility report is being drafted for Yorkinut Slough, and planning efforts on Hamburg Island have been delayed due to other demands in the district including flood impacts and other HREPs as well as limited planning staff and resources. A design contract for Crains Island is anticipated for the second quarter of FY 20. Markert said MVS is working with the Piasa and Eagles Nest Islands sponsor to complete the design phase prior to moving to construction. The District is looking to award a construction contract for Crains Island in FY 20. Markert said construction continues at Clarence Cannon on water control structures including measures to address damage from flooding and repairs at Ted Shanks are nearly complete. Markert expressed appreciation to Chandler and Refuge staff for allowing the contractor to address water control structures and said new large water control structures will be operable by a single person.

### *HREP Selection Process*

Plumley said that Kevin Stauffer had expressed concern over the timeline in August, but that the FWWG has identified four projects to develop into fact sheets and are on schedule to make recommendations to the UMRR Coordinating Committee at the May 20, 2020 quarterly meeting.

Bre Popkin said the FWIC developed eight fact sheets and will use a criteria matrix based on HNA-II indicators and paired comparison process to rank projects. FWIC voting members are scheduled to meet on November 5, 2019 to review rankings and finalize recommendations to submit to the RRCT on November 12, 2019.

Kat McCain said the RRAT identified 12 fact sheets for consideration and will also use a matrix with the 12 HNA-II indicators to help prioritize projects. The RRAT-Exec envisions tiered recommendations with three to five Tier 1 projects being submitted to the PPT and UMRR Coordinating Committee.

Plumley said the teams are on schedule and the PPT will have a call in January 2020 to chart out a strategy for review and approval of projects at the UMRR Coordinating Committee's February or May

2020 quarterly meeting. In response to a question from Chandler, Plumley said the PPT will have a call in January 2020 to chart out a strategy for review and approval of projects at the UMRR Coordinating Committee's February or May 2020 quarterly meeting.

In response to a question from Fischer, Popkin said non-ecological criteria in the ranking matrix include self-sustaining features to reduce O&M and synergy with other projects or HREPs in close proximity. McCain said the RRAT could provide separate rankings for ecological and non-ecological criteria. Hamilton asked if projects would be compared across Districts. Plumley said river teams will provide district-level recommendations to the Coordinating Committee, which would determine sequencing. Col. Sattinger said Districts should be prepared to execute UMRR under an increased annual appropriation authorization. Chandler expressed concern that having more than three to four projects per river team would result in fact sheets not being implemented and becoming outdated. In response to a comment from Karen Hagerty, Plumley said the river teams should prepare fact sheets for all proposed projects to be sent to MVD for consideration. Sauer said that conversations about potential future increases in funding should also include discussions of the LTRM element.

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

### *FY 2019 4<sup>th</sup> Quarter Report*

Jeff Houser said accomplishments of the first quarter of FY 20 include publication of the completion report, "Time Lag Investigation of Physical Conditions and Submersed Macrophyte Prevalence in Upper Navigation Pool 4, Upper Mississippi River."

Houser reported the UMRS systemic spatial data viewer has been updated. The online viewer hosts a variety of spatial data including historic and present land cover data from 1890s to 2010/11, level two and three aquatic areas, HREPs and pool boundaries, and UMRS floodplain inundation attributes. The updated viewer can be accessed at [https://umesc.usgs.gov/management/dss/umrs\\_land\\_cover\\_viewer.html](https://umesc.usgs.gov/management/dss/umrs_land_cover_viewer.html)

Houser said the LTRM spatial data query tool has been updated with LTRM water quality, vegetation, and fish data through 2018. The tool also contains land cover and bathymetric data. Houser said the Pool 13 PDT has used the tool to view sites with turbidity exceeding 20 NTU. The tool can be found at [https://umesc.usgs.gov/ltrmp/spatial\\_data\\_query\\_tool.html](https://umesc.usgs.gov/ltrmp/spatial_data_query_tool.html).

Houser reported that LTRM SAV surface maps have been updated through 2018. Houser said the annual maps are generated by interpolation between LTRM aquatic vegetation SRS sites.

Houser said the UMRR resilience research framework has been reviewed by the Resilience Working Group and the A-Team and will be available online at <https://umesc.usgs.gov/ltrmp/ateam.html>. He said the framework outlines research that would continue to improve understanding of ecological resilience of UMRS and inform management of the system for health and resilience.

Houser reported historic aerial photos of the UMRS from 1975, 1989, 1994, and 2000 have been scanned and will be available through ScienceBase. He said individual photos will be posted, and next steps include georeferencing and orthorectification to generate pool-wide mosaics.

### *Status and Trends 3<sup>rd</sup> Edition*

Houser said the chapters and indicators included in the draft outline of the third status and trends report are being revised to reflect feedback from the A-Team. Writing and analysis will be completed during FY 20 and a summary of the report will be included in the 2022 report to Congress.

## *2020 UMRR Science Meeting*

Houser said the UMRR science meeting is scheduled for January 14-16, 2020 in La Crosse. The format will be similar to the 2018 science meeting, and focus on assessing current information needs for the understanding, management, and restoration of the UMRS and developing proposals for research using 2020 funds. Houser said working groups at the meeting will consider what the river will look like in 50-100 years, the distribution and abundance of habitat and biota as well as the restoration and management implications. He said the river is not static, but is still responding to lock and dam construction. He highlighted a number of factors contributing to changes in the river including a changing hydrograph and long-term hydrologic changes as well as ongoing changes to biological components such as declines in common carp, variability of vegetation through time, proliferation of Asian carp, and the spread of reed canary grass and Japanese hops. Houser said that climate models project increased precipitation and runoff for the region as well. Houser said the three draft themes for the 2020 Science Meeting are similar to those from 2018-2019 and include:

- Theme 1) Understanding ongoing and future changes in the hydrology and geomorphology of the UMRS. What are the implications for the future distribution and abundance of aquatic areas?
- Theme 2) Understanding associations between geomorphology, hydrology and the distribution and abundance of biota in the river and on the floodplain. What are the implications for the biota and habitat of the future UMRS?
- Theme 3) Understanding the physical, chemical and biological interactions, the processes behind the long-term temporal and spatial patterns in UMRS riverine biota, and the implications for the biota and habitat of the future UMRS.

Houser said a conference call will be held November 6, 2019 to discuss the science meeting focal areas. [Note: Following the meeting, the call was rescheduled to November 14, 2019.] Working group topics, leaders, and initial members will be identified following the webinar and working groups will hold initial calls in December 2019 to prepare for the science meeting.

Gretchen Benjamin explained that regional conversations around water level management have discussed establishing thresholds for water level management (WLM) actions and asked how that could fit into the 2020 UMRR science meeting. Moore suggested the floodplain forest working group could discuss the issue as floodplain forests may benefit from WLM. Houser said Molly Van Appledorn and Nate DeJager may look into water level dynamics and survival of floodplain forests. In response to a question from Lauren Salvato, Houser said regional foresters from the Corps will attend the science meeting. Jim Fischer expressed appreciation for Houser's leadership and said it was important to focus on the changing river and biota and represented an excellent use of the data collected through the program.

## *USACE LTRM Report*

Karen Hagerty said UMRR's FY 20 LTRM allocation under full funding includes \$6.3 million (\$5.0 million for base monitoring and \$1.3 million for analysis). An additional \$2.5 million is available for science in support of restoration and management for a total of \$8.8 million in FY 20, as compared to \$8.67 million in FY 19. Hagerty said science in support of restoration and management funds will cover monitoring during the Illinois Waterway closure, development of wind fetch products, moving LTRM spatial data to web mapping services, continuing ecohydrology work, and reintroducing chloride monitoring for three years (2020-2023) to allow comparisons to historic data and establish change over time. Hagerty said \$1.768 million will be used to fund proposals from the 2020 science meeting.

In response to a question from Fischer, Sauer said chloride monitoring would occur on fixed sites and winter SRS sites. Wallace referenced Kathi Jo Jankowski's presentation to the UMRBA Water Quality

Task Force said chloride represents a great communications opportunity. Hagerty agreed and said communication with the water quality task could provide many opportunities. In response to a question from Lund, Hagerty and Sauer explained that ecohydrology included Van Appledorn's work on floodplain inundation mapping.

#### *A-Team Report*

Nick Schlessler reported that the A-Team met in-person in Dubuque on October 17, 2019. The meeting agenda included a UMRR update from Hagerty on behalf of Marshall Plumley, planning for the 2020 science meeting, and discussion of the third UMRR LTRM Status and Trends report. Schlessler said the A-Team conducted a point by point review of the planned 2020 Science Meeting focal areas to ensure critical areas of research are identified and represented. The A-Team also reviewed and discussed the merits of various indicators for the draft chapter outlines of the third UMRR LTRM Status and Trends report, ultimately recommending a number of changes. Schlessler said proposed changes included adding a dredge material indicator to evaluate changes in dredge material over time, incorporating seasonality for appropriate indicators, evaluating indicators for overwintering habitat, duckweed and filamentous algae, recreational and commercial fish, forage fish, and flow normalized representation of water quality indicators. The A-Team unanimously approved the amended list of indicators. Houser expressed appreciation for the many comments he received. Schlessler said the A-Team would next meet in conjunction with the January 14-16, 2020 UMRR science meeting.

#### **Other Business**

Sabrina Chandler announced that DOI will be switching to Office 365 in the coming months.

Andrew Stephenson recalled a discussion on identifying possible data repositories that could be used by all partners. Angela Deen and Dennis Hamilton said ProjectWise is currently used by the Corps, however, licenses are required. Karen Hagerty said completed reports could be served on the UMRR website. In response to a comment from Jeff Houser, Hamilton said ProjectWise allows for collaborative document creation. Jim Fischer said Wisconsin DNR requires new software to undergo a 1 to 2-year trial period before installing broadly. Eric Lund noted that Office 365 is cloud-based and two LTMR components rely on collecting data offline, through Access. In response to a question from Fischer, Lund said field teams do not need to be connected to internet for collection but may need to be in the future with cloud-based apps. Mark Ellis said many cloud-based apps allow for offline use and delayed uploads. Chandler agreed and said USFWS has a collector app through the cloud-based ArcGIS and uses delayed uploads for field work without internet. Kirsten Wallace suggested sending an email to Coordinating Committee members to establish usable software and to determine if ProjectWise is an option. Andy Barnes and Deen said they would provide cost estimates for ProjectWise licenses.

Chandler said she spoke to the Prairie Du Chien tourism council about fishing tournaments and UMRR. She said she also spoke with Allamakee County Development about Harpers Slough, Conway Lake, and Reno Bottoms.

Fischer said the photographer Randall Hyman will be visiting in the first week of November 2019 to photograph the fall migration and it may be an opportunity for Refuge staff to be involved.

Upcoming quarterly meetings are as follows:

- February 2020 – Moline
  - UMRBA quarterly meeting – February 25
  - **UMRR Coordinating Committee quarterly meeting – February 26**
- May 2020 – St. Louis
  - UMRBA quarterly meeting – May 19
  - **UMRR Coordinating Committee quarterly meeting – May 20**
- August 2020 – La Crosse
  - UMRBA quarterly meeting – August 11
  - **UMRR Coordinating Committee quarterly meeting – August 12**

With no further business, the meeting adjourned at 11:53 a.m.

**UMRR Coordinating Committee Attendance List  
October 30, 2019**

**UMRR Coordinating Committee Members**

Dennis Hamilton	U.S. Army Corps of Engineers, MVD [on behalf of Brian Chewning]
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Jeff Houser	U.S. Geological Survey, UMESC [on behalf of Mark Gaikowski]
Dave Glover	Illinois Department of Natural Resources [on the phone]
Dave Bierman	Iowa Department of Natural Resources [on behalf of Randy Schultz]
Megan Moore	Minnesota Department of Natural Resources
Matt Vitello	Missouri Department of Conservation
Jim Fischer	Wisconsin Department of Natural Resources
Verlon Barnes	Natural Resources Conservation Service [on the phone]
Ken Westlake	U.S. Environmental Protection Agency, Region 5 [on the phone]

**Others In Attendance**

Chris Erickson	U.S. Army Corps of Engineers, MVP
Tom Novak	U.S. Army Corps of Engineers, MVP
Angela Deen	U.S. Army Corps of Engineers, MVP
Michael Davis	U.S. Army Corps of Engineers, MVP
Dave Potter	U.S. Army Corps of Engineers, MVP
Col. Steve Sattinger	U.S. Army Corps of Engineers, MVR
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Andy Barnes	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Bre Popkin	U.S. Army Corps of Engineers, MVR [on the phone]
Brian Markert	U.S. Army Corps of Engineers, MVS
Kat McCain	U.S. Army Corps of Engineers, MVS [on the phone]
Brian Johnson	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]
Tyler Porter	U.S. Fish and Wildlife Service, RIFO [on the phone]
Jennie Sauer	U.S. Geological Survey, UMESC
Nick Schlessler	Minnesota Department of Natural Resources
Eric Lund	Minnesota Department of Natural Resources
Gretchen Benjamin	The Nature Conservancy
Kirsten Wallace	Upper Mississippi River Basin Association
Andrew Stephenson	Upper Mississippi River Basin Association
Mark Ellis	Upper Mississippi River Basin Association
Lauren Salvato	Upper Mississippi River Basin Association