Minutes of the
Upper Mississippi River Restoration Program
Coordinating Committee

August 12, 2020
Quarterly Meeting

Virtual Meeting

Thatch Shepard of the Army Corps of Engineers called the meeting to order at 8:00 a.m. on August 12, 2020. UMRR Coordinating Committee representatives present on the virtual meeting were Sabrina Chandler (USFWS), Mark Gaikowski (USGS), Randy Schultz (IA DNR), Dave Glover (IL DNR), Megan Moore (MN DNR), Matt Vitello (MO DoC), Jim Fischer (WI DNR), Verlon Barnes (NRCS), and Ken Westlake (USEPA). A complete list of attendees follows these minutes.

Minutes of the May 20, 2020 Meeting

Jim Fischer moved and Matt Vitello seconded a motion to approve the draft minutes of the May 20, 2020 UMRR Coordinating Committee meeting as written. The motion carried unanimously.

Regional Management and Partnership Collaboration

Marshall Plumley applauded the partnership for continuing to operate effectively while COVID-19 has presented unique challenges. The partnership continues to have important conversations on programmatic issues and LTRM continues to be implemented despite constraints to travel and sampling.

FY 2020 Budget Outlook

Plumley said UMRR has obligated over $23 million of its $33.17 million FY 2020 funds to-date. In response to a question from Andrew Stephenson, Plumley said Pool 12 Overwintering received a lower bid than expected, resulting in a savings of $93,000. Significant upcoming expenditures include McGregor Lake HREP in St. Paul District and Piasa and Eagles Nest HREP in St. Louis District. Unobligated funds at the end of the fiscal year can be used to implement parts of the FY 2021 LTRM scope. Plumley said he is confident that UMRR will continue its record of fully obligating funds.

The President's FY 2021 budget and House FY 2021 appropriations bill include $33.17 million for UMRR, but the Senate recommendation and final appropriation are not yet known. The District is planning for UMRR in FY 2021 at a $33.17 million funding scenario, with internal allocations anticipated to be as follows:

- Regional Administration and Program Efforts – $1,250,000
- Regional Science and Monitoring – $10,400,000
  - 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 – $275,000

- Habitat Restoration – $21,520,000
  - Rock Island District – $7,020,000
  - St. Louis District – $7,125,000
  - St. Paul District – $7,275,000
  - Model certification – $100,000

In response to a question from Jennie Sauer, Plumley said the Corps is prepared to allocate any unobligated FY 2020 funds to advance work prioritized in the FY 2021 LTRM scope of work.

UMRR Ten-Year Plan

Plumley overviewed changes to UMRR's 10-year outlook, highlighted in red, since the May 20, 2020 UMRR Coordinating Committee quarterly meeting. Projects with accelerated schedules include Conway Lake, Piasa and Eagles Nest, Oakwood Bottoms, and Yorkinut Slough. For a variety of reasons including delays from high water, projects with schedules that were pushed back include Reno Bottoms, Huron Island Stage III, Ted Shanks, and West Alton Island. West Alton Island feasibility will start in FY 21 to accommodate further refinement of plans and specs and construction. Rip Rap Landing was removed from the chart due to challenges with real estate and NRCS easements, but a rescoped version of the project that excludes those lands may be reintroduced at a later date. A placeholder for a future project was also added. In response to a question from Stephenson, Brian Markert said there is not a current need to replace Rip Rap Landing on the schedule, but that MVS is working with Illinois DNR to field a project as early as FY 22.

Plumley said that, in its WRDA 2020 measure, the House is proposing an increase to UMRR's annual appropriation for HREPs from $22.75 million to $40 million and for LTRM from $10.42 million to $15 million. In response to a question from Kirsten Wallace, Plumley said the first opportunity to budget for a change to the authorization amount would occur in FY 23 with potential work plan opportunities in FY 22. Short-term plans under increased appropriations include accelerating the existing work through larger, consolidated HREP contracts, advancing efforts under LTRM, and accelerating the next HREP selection process.

Statements of UMRS Significance

Plumley reported that, on August 7, 2020, the UMRR Coordinating Committee received a request to review revised statements of significance. The statements are organized into categories the partnership has classified as important, including natural resources, culture, recreation, navigation, partnership, and economy. The document also identifies a set of concerns for the river and threats to areas of significance that may be important for articulating in the 2022 Report to Congress. Recent revisions include additional description of the various threats to the river ecosystem (e.g., climate change, water quality, altered hydrology, ecological connectivity, and aquatic invasive species) and how UMRR may help to better understand and alleviate those pressures through LTRM, HREPs, and the integration of both program elements. A call will be convened in September or October to discuss the statements in their final draft form along with the accompanying UMRR storyline and soundbites document. Stephenson said the document reflects the partnership well and expressed appreciation for the input from all partners, with special thanks to Jennie Sauer, Jeff Houser, Karen Hagerty, and Marshall Plumley for drafting sections.

2015-2025 Strategic and Operational Plan Review

Plumley said the review of the 2015-2025 UMRR Strategic and Operational Plan helped inform the many efforts undertaken over the last few months. A survey regarding the strategic plan will be distributed to UMRR partners in the near future. The survey will seek input regarding progress achieved since 2015, priorities for the next five years, and the issue areas to include in the 2022 Report to Congress. Stephenson said reviewing the strategic plan has been valuable to gain the perspective from the past on what we set out to do, what we've accomplished, and what to prioritize for next 5 years that can be discussed in next Report to Congress.

UMRR Joint Charter Review

Plumley referred to the 2013 UMRR joint charter of consultative bodies on pages B-4 to B-19 of the meeting agenda packet. A meeting was held May 6, 2020 to review and revise the HREP selection process guidance documents. Additional discussion was needed around the role of the Science Support Team (SST). On an August 3, 2020 call, the UMRR Program Planning Team (PPT) evaluated the river team's use of the SST. Plumley said science expertise was utilized by river teams, but that the SST was not convened as an entity. The PPT agreed to eliminate the formality of the SST and, in light of program integration, continue with a more informal inclusion of HNA experts in the project selection discussions. The revised HREP selection process guidance documents will be incorporated into the UMRR joint charter of consultative bodies to replace the former HREP planning and sequencing framework included in 2013 charter.

Given that charter amendments will require renewed formal adoption, Plumley said it makes sense to review the charter's terms for the UMRR Coordinating Committee and A-Team. The A-Team was asked to review its respective roles and responsibilities outlined in the charter at its July 30, 2020 virtual meeting. Plumley said his understanding was that A-Team members felt comfortable with the role and operations of the A-Team and were not recommending any changes to the Charter language at this time. Karen Hagerty said A-Team members requested additional time to complete the review and will discuss the issue at its October 2020 virtual meeting. Jim Fischer requested that the charter's A-Team provisions be evaluated to ensure that the A-Team's function reflects the partnership's contemporary view of UMRR as an integrated program among the HREP and LTRM elements. For example, the A-Team could help advance efforts to integrate science and restoration.

Stephenson recommended that guided questions help facilitate the A-Team's conversations around more substantial questions. Stephenson acknowledged that recent partnership conversations have focused around being intentional in our efforts toward program integration. This discussion could be taken up by the A-Team, a new programmatic integration team, or an *ad hoc* team. Hagerty said A-Team members may also serve on the District River Teams. She said reviewing how each group functions is warranted as they all may be different from the language in the Charter. Fischer suggested reviewing how the role of the SST may fit into a discussion about a more contemporary version of the A-Team. Plumley agreed.

HREP Selection Process Guidance Documents

Based on feedback from the May 6, 2020 meeting, Plumley pointed to pages B-20 to B-28 of the agenda meeting packet for revised goals, roles, and responsibilities of the HREP selection process, including a visual diagram. The schedule was generalized to be applicable for future iterations. A diagram showing the District River Teams structures was added. Stephenson said the process is now estimated to take approximately eight to nine months. It is recommended that the process occur in the fall to winter season to avoid the field sampling season, while maintaining a "lean forward" schedule. The last schedule included developing the process that was akin to building a plane while trying to fly it.

Hagerty said that, originally the idea for the SST had broad support, but that the process ultimately operated in an integrated way informally without that team.

Plumley said the documents could be accepted with changes. Sabrina Chandler agreed and said the documents are very helpful. Chandler suggested that a) the project sponsor roles be included in the roles and responsibilities section and b) "and continue to coordinate throughout" be included in the bullet that addresses project sponsors on the process diagram. The intent being to ensure that sufficient coordination occurs with the project sponsor throughout the process, especially if the project is proposed by an organization other than the required sponsor. Plumley agreed, and said the additional language in the process diagram would be helpful for future new staff. Chandler added that organizations other than USFWS will sponsor projects if additional funding is available and the PPA issue can be resolved. In response to a comment from Tim Yager, Plumley said the template letter to non-traditional sponsors articulates the roles and responsibilities of project sponsors.

Fischer suggested adding an additional step to inform the public and potential non-federal sponsors of the opportunity to participate as a cost-share sponsor into the process diagram. In response to comments from Fischer and Thatch Shepard, Plumley said mechanisms exist at the river teams for potential project sponsors to propose ideas and river teams could be asked to set aside time at one meeting each year to discuss ideas with project sponsors. Stephenson agreed and said potential sponsors should be clearly informed that they only need to provide a problem statement that UMRR could address rather than have a completed fact sheet.

In response to a question from Plumley, Megan Moore suggested editing the documents before the UMRR Coordinating Committee considers endorsing them. Stephenson said the constructive feedback and suggestions will improve the documents and suggested requesting UMRR Coordinating Committee endorsement via email after documents are revised or seeking endorsement in conjunction with the next Charter review meeting. Plumley and Moore agreed. Plumley reiterated that revisions will include roles and responsibilities of project sponsors and informing the public and potential non-federal sponsors of upcoming selection processes. In response to a question from Stephenson to the river team chairs, Steve Winter and Sara Schmuecker said they did not have any concerns about adding an annual opportunity for potential sponsors to raise project ideas.

In response to a question from Fischer, Stephenson said the Program Management Team includes the UMRR program manager and the District HREP Managers who consider the Program Planning Team and UMRR Coordinating Committee' recommended project prioritization along with administrative factors for executing program funds in determining project sequencing. Plumley said the current charter includes language describing the program management team that can be incorporated into the guidance documents. Fischer said it will also be important to consider how adaptive management of existing projects will fit into ongoing implementation, though he did not recommend including language on it at this point.

2022 Report to Congress

Plumley said that, on June 3, 2020, the UMRR Coordinating Committee held a virtual meeting to discuss development of the 2022 UMRR Report to Congress. Discussion topics included lessons learned from past reports to Congress, content to include, personnel involved in drafting the report, and a draft schedule for completion. Questions raised included how to discuss NESP, integration of HREP and LTRM sections, and possible implementation issues. An *ad hoc* scoping team will develop a scope and schedule for developing the report as well as ideas for content and organization. Members include:

Jeff Houser	Karen Hagerty	Brian Markert
Matt Vitello	Marshall Plumley	Andrew Stephenson
Sabrina Chandler	Jill Bathke	Kirsten Wallace

Plumley said he introduced a draft schedule that targets November 2022 as the delivery date. Next steps involve review of the schedule by the scoping team and the various reviewing entities (e.g., states, MVD, USACE HQ, ASA). The remainder of 2020 will consist of planning, identifying report contributors, and developing content. Thatch Shepard said allowing additional time for review is a good idea as most reviewers will be familiar with UMRR, but not with the day-to-day operations. Plumley said the RTC will take content from the HNA-II and indicators reports, statements of UMRS significance, 2015-2025 strategic plan review, and third edition of the LTRM Status and Trends Report. Stephenson suggested including a narrative on how the recently selected HREPs will address HNA-II indicators. Plumley agreed and said the indicators are important for discussing the desired future condition. Hagerty said the status and trends indicators could be pulled in to that discussion as well.

Communications Team and Lower Illinois Pilot Project

Rachel Perrine said she and Jill Bathke are co-leading the UMRR communications team, which is scheduled to convene a virtual meeting on August 27, 2020. The team will review existing documents and determine next steps. Public affairs representatives from UMRR's implementing partners are asked to participate. Fischer said the communications specialist from the Wisconsin DNR's Office of Great Waters, Susan Tesarik, is planning to participate. Fischer said that he will forward the invitation to the Wisconsin DNR Office of Communications. Perrine said monthly virtual meetings will be scheduled to keep momentum. Stephenson said the strategic plan review highlighted the need for a concerted communications effort and that regular meetings of the Communications Team will support goal three of the strategic plan. He reiterated the importance of engaging agency communications staff in the next call as it will provide background on previous communication efforts including the communication and engagement plan and the Lower Illinois River Pilot communication project as well as determine future actions for the team.

External Communications and Outreach

Communication and outreach activities in the third quarter of FY 20 include the following:

- Jim Fischer said that, on August 1, 2020, the National Wildlife Magazine published an article titled *Mississippi River Rising*, which highlights UMRR projects and includes many interviews from Wisconsin DNR staff. Fischer said the magazine averages 400,000 print readers each issue and more than one million unique online visitors annually.
- Jeff Janvrin said he discussed HREPs in a presentation to the annual conference of the Wisconsin Association of Agriculture Educators.
- Tim Yager said sand placement at McGregor Lake has drawn a lot of interest from recreational users and that area law enforcement has been conducting outreach to users regarding unstable sand and safety issues.
- Marian Muste said he participated on a call with the Corps regarding research opportunities involving artificial islands and dredge materials. Plumley said it was a good discussion about what UMRR is doing, the capabilities of LCMERS, and to establish a relationship.
- Plumley said Kat McCain participated in a virtual outreach activity on June 23, 2020 for the Mighty Mississippi River exhibit as part of the Missouri History Museum's river conservation series. She discussed UMRR's role in the recovery of ecosystems that have been degraded, damaged, or destroyed.
- Mark Gaikowski said USGS reached out to the Ho Chunk Nation and Prairie Island Indian Community to discuss land cover/use decadal data collection to discuss any concerns of image

collection over their lands. A Partners-In-Action meeting scheduled for August 17, 2020 will highlight land cover/use and UMRR.

- Gaikowski said the LTRM WQ lab and broader program were highlighted during a recent internal USGS program discussion with the USGS Contaminants Biology Program.

UMRR Showcase Presentations

Forest Canopy Gaps: Understanding UMRS Forest Health

Andrew Strassman provided an overview of a forest gap study funded by LTRM. Forest gaps are critical for preserving forest structure and habitat and are a natural process that occur across spatial and temporal scales and allows forest succession. Small gaps close through infill from surrounding trees while larger gaps require new tree regeneration. Factors that may affect regeneration include invasive species, increased herbivory, as well as changing climate and hydroperiod. Mature and interior bottomland forest offers critical habitat for several species. Project goals include determining if gaps that are not closing are different from gaps that are closing, assessing the ability to detect gap closures remotely, and identifying metrics that can be recomputed as better data becomes available.

Strassman said code was written to analyze existing UMRR data including land cover/use, flood inundation data, and LiDAR for canopy holes the size of one large tree or bigger. Forest canopy gap layers were created to show where gaps occur and each gap was populated with 17 unique attributes. Field work was conducted on a very limited sample of UMRS forest gaps for long term monitoring. Results showed the UMR's forested landscape are at least 9.4 percent gap, but many more gaps were detected below the 0.065-acre threshold. A comparison to previous research suggests that UMR bottomland forest have vastly more gaps than an old growth mesic forest. Small gaps account for the majority of total gap area. Comparison of gaps to tree size-inundation classes may elucidate how inundation duration affects gap formation and regeneration. The project determined that there are patterns of gap distribution in the UMR that can be detected remotely, but additional research is needed to determine their significance. Future steps include monitoring a subset of gaps over time to see if they are closing or expanding and automating the monitoring of all UMRS gaps as new data becomes available.

In response to a question from Hagerty, Strassman said there is little to no published data on gaps other than Yao Yin's published work on the UMRS. Houser said the results presented by Strassman are the product of a 2018 science proposal. In response to a question from Lauren Salvato, Strassman said gaps form in a natural system and allow trees to regenerate, but there is concern that hydrology changes to the system and invasive species (e.g., reed canary grass) are affecting regeneration. Jodi Creswell said, and Jennie Sauer, agreed that it would be great to see a similar presentation made available to a broader audience including distribution to the UMRCC, UMRR, and UMRBA partnerships. Strassman said the final project report should be completed by December 2020 and additional presentation requests would be welcome.

In response to a question from Stephenson, Strassman said the 2020 forestry science proposal was revisiting sites from Yao Yin's study, but did not know potential site locations relate to gaps on the landscape. He added that gaps are well below the size for detection in the LCU imagery, but that this report is helping to identify aspects not available through LCU data. Megan McGuire said Reno Bottoms is planning to use this data to identify gaps. In response to a question from McGuire, Strassman said regeneration can be detected on a five to ten year time frame, but that survival may be impacted by inundation.

Forest Model Development

Megan McGuire reported on the development of a forest model to quantify the habitat benefits of forest management for cost-benefit analyses. Current models in use (e.g., gray squirrel or chickadee models) are not sensitive to partners' resources of concern and do not consider factors that may be influenced through forest management. The new forest model, generated through a collaborative, rapid model development workshop held June 9-10, 2020, will be geographically specific to all three districts in the UMR. The conceptual model developed during the workshop calls for a stand level model that would consider forest management actions such as invasive species management, canopy management, planting, and regeneration. It would also evaluate measures and activities used to restore patches of forest and how actions are affecting that patch. Landscape-level forest characteristics, such as age diversity, diverse types of forests, connectivity, and substantial forest interiors, should be incorporated. The model should not be specific to any wildlife species, but look at forest as a plant community and consider the quality of the plant community itself. The model should allow for more flexibility of use for various ages and types of forest and consider how forests change drastically in use and habitat at years 0, 50, and 100. The variables selected for the model include canopy cover, desired forest types (based on forester expertise), invasive cover, regeneration, and structural diversity. Next steps include model testing, documentation, and review with a goal for certification by the end of October 2020 for use in evaluating Reno Bottoms and Green Island HREPs.

Jeff Janvrin provide a partner agency perspective on the model development and future application. Janvrin said the workshop format was well organized and that the model will be very valuable to quantify quality existing forest and desired forest types with common metrics for the UMR. This is a seamless model to be able to calculate benefits across a range of forest types that will replace models that use surrogate species. He hopes the model can help evaluate desired future conditions as well as future without project condition. State wildlife action plans could be included as additional documentation to inform discussion of what species would benefit from various communities. Past conversations on model development have stressed how time intensive and expensive they are to generate, but this method may present an efficient means to update existing models or develop new models. Janvrin said that, because of their recurrence in multiple documents, future HREP models should be developed around a variety of aquatic habitat types as well as the following species or use a community approach:

- American Bittern
- Bald Eagle
- Divers
- Grasshopper Sparrow
- Prothonotary Warbler
- Sturgeon
- Yellow-billed Cuckoo
- Red Shouldered Hawk
- Dabblers
- Pectoral Sandpiper
- Freshwater Mussels

Plumley expressed appreciation to the workshop participants and said he also regularly heard the challenges of time and money for model development. This method shows the capabilities of the partnership working together to help achieve UMRR's goals with the considerable lineup of upcoming and ongoing forestry work. In response to a question from Hagerty, McGuire said Nate De Jager and Molly Van Appledorn were consulted on how inundation affects potential and desired forest type. Janvrin said Andy Meyer, the St. Paul District Forester, provided valuable graphics of where different community types fall within inundation that served as the basis for defining what inundation class species.

USGS Midcontinent Climate Adaptation Science Center

Olivia LeDee provided an overview of the mission and structure of the climate adaptation science centers (CASCs) and discussed opportunities for partners and projects with the launching of the Midwest CASC. She said climate issues facing the Midwest include projected warmer winter temps and loss of extreme minimum temps. Impacts include such things as eastern larch beetle causing tamarack die-off and increases in extreme precipitation events. Climate adaptation includes strategic action, anticipatory or reactionary, to address the current or expected effects of climate change. These actions may moderate harm or take advantage of beneficial changes (e.g., crop expansion). The CASC network mission is to deliver science to help fish, wildlife, water, land, and people adapt to a changing climate. Goals of the CASC network include:

- Responding to high priority management challenges
- Fostering substantive, sustained engagement between scientists and managers.
- Providing science to support sound resource management and adaptation.
- Advancing the understanding of the impacts of climate change on fish, wildlife, water, and land

USGS is planning to restructure its CASC regions. The proposed Midwest region will include the five UMR states plus Indiana, Michigan, and Ohio. The CASC structure is similar across all regions and includes a host university and satellite institutions with PIs to work on issues within their expertise. Funds support research fellows, management staff, and federal partners.

Jeff Zeigeweid said that in FY 20, $4 million was designated to focus on issues in the Midwest. Research priorities included fish and wildlife, coastal management, coupling freshwater and terra systems, and invasive species. The FY 20 research solicitation resulted in 95 statements of interest that requested over $38 million. From those statements, 19 proposals were generated requesting over $8 million. Ultimately, 12 proposals were funded with $3.3 million. Proposal projects should generate quantifiable ecosystem relationships that are likely to change with changing climates and pair with future climate scenario planning. Future opportunities with the Midwest CASC include a call for proposals in spring 2021, workshops and trainings after a host institution is identified, and technical assistance to help with climate information integration.

Jennie Sauer expressed appreciation to LeDee and Zeigeweid for their presentation and said it built on the briefing provided by John Delaney and Kristen Bouska's at the UMRR Coordinating Committee's May 20, 2020 meeting. Sauer observed that there is a lot of shared interests between the CASC and UMRR. Jim Fischer agreed and said UMRR is unique in its opportunity to restore habitat and learn from restoration, and continues to improve the integration of science and restoration efforts. He said UMRR has seen the effects of climate change in numerous ways to the river, habitat, and projects, and he hopes for continued interconnection with climate work in the future, perhaps in the 2022 science planning.

Habitat Restoration

Angela Deen said MVP's planning priorities include Reno Bottoms and Lower Pool 10. Reno Bottoms is planning to incorporate the forest model after it is approved. Alternatives are being evaluated for Lower Pool 10, and TSP selection is anticipated in fall 2020. The district's design priority is McGregor Lake. Four bids were received on August 11 with a low bid of $17.5 million. A contract award is anticipated for mid-September. Construction at Conway Lake is approximately 45 percent complete. Bass Ponds is anticipated to begin construction in October 2020. Given the urban proximity of the project, signage will be posted to explain the project and construction activities. Placement of 70,000 cubic yards of dredge material at McGregor Lake was coordinated with USACE operations staff. This partnership resulted in $1 million of savings to the HREP. A plans and specs package is being

completed to address repairs on three islands and backwater areas at Harpers Slough. In response to a question from Stephenson, Deen said the Star Tribune had an article on Bass Ponds recently and signage is being coordinated with the Refuge. Chandler said they receive regular questions about plans and activities for the area, but that interaction with the public is limited because the main visitor center is closed, and thanked Deen for continuing the work on signage and information sharing.

Marshall Plumley said MVR's planning priorities include Steamboat Island, Lower Pool 13, Green Island, and Pool 12 Forestry. The final package for Steamboat Island is anticipated to be sent to MVD for approval by the end of August. A virtual mini-charette was held June 22-24 for Lower Pool 13. Identification of alternatives has begun for Green Island and the Pool 12 Forestry PDT is being established. Design work for Keithsburg Division Stage II is anticipated to be completed in September 2020. Construction on Huron Island Stage II is awaiting completion of surveys, while Stage III is delayed due to COVID-19-related travel restrictions. Dredging is underway at Beaver Island. The Quincy Bay fact sheet was submitted to Mississippi Valley Division (MVD) for approval. Stephenson said Lower Pool 13 and Reno Bottoms have often been provided as examples of LTRM and HREP integration at the PDT level and suggested revisiting what makes them unique. Deen agreed and said they are capturing lessons for Reno Bottoms and said USGS is more involved in this project than previous ones. Plumley agreed and said sharing that information with other teams will be important.

Brian Markert reported that MVS anticipates submitting the feasibility report for Oakwood Bottoms to MVD in fall 2020. Feasibility continues for Yorkinut Slough with a virtual site visit scheduled for August 13, 2020. Planning for West Alton Islands is anticipated to kick off in early FY 21. A design contract for Piasa and Eagles Nest is anticipated to be awarded in September 2020. Plans and specs are being finalized for Harlow Island for a future outyear award. Wet conditions have disrupted work at Crains Island. Exterior berm setback and pump stations are being constructed at Clarence Cannon. Reforestation and warranty work continue at Ted Shanks. Precast box culverts were being used at Clarence Cannon and are beneficial because they reduce the amount of time contractors have to be in the field. Three fact sheets were sent to MVD for approval. Missouri Department of Conservation recently provided letters of support for other fact sheets that will be submitted for approval soon.

Long Term Resource Monitoring and Science

FY 2020 3rd Quarter Report

Jeff Houser said accomplishments of the third quarter of FY 20 include publication of the following manuscripts:

— Environmental factors controlling phytoplankton dynamics in a large floodplain river with emphasis on cyanobacteria.

— Exploring silica stoichiometry on a large floodplain riverscape.

The University of Wisconsin – La Crosse received funding from the National Academy of Sciences for the 2020 Summer Research Experience for Undergraduates program. UWL faculty wrote grants with support and guidance from UMESC staff. Four projects selected for funding focused on water quality, phytoplankton, and floodplain forest data. The four projects were:

— Classification of Upper Mississippi River Floodplain Forests

— Characterizing Water Quality Responses to High Discharge Events using High-frequency Sensor Data

— Spatial and Temporal Patterns in River Phytoplankton and Cyanobacteria Communities

— Using Time-series Analysis of Water Quality Sensor Data to Understand Shared Seasonality

Recordings of the final 15 minute presentations are available at https://uwlax.webex.com/uwlax/ldr.php?RCID=cb8d7f34e0f04e53bec2ca877d239872.

Houser said the LTRM water quality lab volunteered to participate in the USGS Standard Reference Sample Project that evaluates the performance of USGS, cooperator, and contract analytical laboratories analyses of chemical constituents of environmental samples. Results show that LTRM water quality labs are rated excellent for phosphorous, nitrite, and nitrate as N. Lab staff recently conducted extensive calibration of new equipment to show comparability with replaced equipment and ensure validity of testing.

Houser said that LTRM component PIs were required to respond to agency COVID-19 restrictions and determine sampling strategies under very different conditions than years past. COVID-19 restrictions prevented Wisconsin and Minnesota from conducting some fixed site water quality sampling and electrofishing. Minnesota was unable to hire interns for vegetation sampling, but completed sampling on time with other staff assisting. Wisconsin and Iowa delayed starting vegetation sampling by one week. Iowa suspended all LTRM sampling July 30 due to a field station staff member and, shortly thereafter, seasonal staff member, testing positive for COVID-19, but sampling is scheduled to resume mid-August.

Houser said no vegetation rake sampling on the Illinois River will occur in conjunction with the lock closures because of COVID-19-related travel restrictions. Aerial photos will be collected as part of the 2020 land cover/use flights and may provide some information. Fish sampling is ongoing and is utilizing the full LTRM SRS design. Fisheries teams will collect chlorophyll and turbidity for water quality at sites in Alton, Peoria, Starved Rock, and Marseilles pools during period two and three fish sampling. MVR staff are deploying two sondes at sites in Starved Rock pool for the duration of the closures to measure several parameters including turbidity and chlorophyll.

In response to a question from Stephenson, KathiJo Jankowski said chlorophyll-*a* may not have funding to continue, but that turbidity sampling will. Stephenson asked if the effects of the August 10, 2020 Derecho in Iowa will be captured in the LCU aerial imagery. Jennifer Dieck said pools 11, 12, 13 were flown on August 11, and Pools 14 and 15 were underway and provided a link to live tracking of the data collection (https://flightaware.com/live/flight/N708). Houser said the effects of the storm may be captured. Jim Fischer expressed appreciation to the LTRM water quality lab for their excellence and hard work and reflects well on the program. Karen Hagerty said an unbelievable number of trees were downed in the Quad Cities and that the storm may be worth noting in the photo records.

Status and Trends 3rd Edition

Houser said an internal draft of LTRM's third status and trends report is complete. A-Team members will be asked to review the report in September. [Note: The A-Team review has been postponed to mid-October.] A final draft is anticipated for December 2020 to help inform the 2022 Report to Congress.

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 under base). An additional $2.5 million is available for science in support of restoration and management. LTRM funds would be similarly allocated in FY 21 under full funding. If UMRR's authorization is increased, as proposed in House WRDA language, significant strategic planning would be needed for LTRM.

A-Team Report

Nick Schlesser said that the A-Team met via webinar on July 31, 2020. Topics discussed included impacts of COVID-19 on agency policies and work during the 2020 field/work season, the effectiveness of various LTRM gear for detecting Asian carp (particularly young of the year individuals) along the leading edge of the invasion, and the A-Team's science proposal ranking process. Suggested modifications to the ranking process included encouraging more representatives from each state to take part in the ranking process (both through recruitment of rankers and improving the data collection process) and improving the documentation and instructions provided with rating sheets to achieve uniform application of the ratings by each individual rater. Schlesser said he created a program to generate blank rating sheets and import completed sheets automatically to minimize transcription errors and the amount of time dedicated to compiling scores. Hagerty expressed appreciation to Schlesser for creating the new proposal ranking spreadsheet and said it greatly improved the ranking process.

The A-Team also reviewed the roles and responsibilities of the A-Team outlined in the 2013 UMRR Advisory Group Charter. A-Team members requested additional time to consider recommendations and the A-Team will review this topic again at their next meeting. Jeff Houser requested that individuals from each state be ready to review the upcoming Status and Trends document during September. All representatives indicated they should be able to accommodate that schedule. The A-Team's October meeting will be held via webinar.

Stephenson said there were additional comments earlier in the meeting regarding the A-Team's review of the Charter language and suggested holding a planning meeting before the next A-Team meeting to develop additional questions to guide that discussion. Schlesser agreed that additional questions would help guide the conversation.

Other Business

Andrew Stephenson reminded attendees to extend the invitation for the upcoming UMRR Communications Team call to their respective agency public affairs or communications staff and that an email request for endorsement of the revised HREP Selection Guidance Documents would be sent to Coordinating Committee members soon.

Upcoming quarterly meetings are as follows:

- **October 2020 – Remote**
  - UMRBA quarterly meeting – October 27
  - **UMRR Coordinating Committee quarterly meeting – October 28**
- **February 2021 – Remote**
  - UMRBA quarterly meeting – February 23
  - **UMRR Coordinating Committee quarterly meeting – February 24**
- **May 2021 – TBD**
  - UMRBA quarterly meeting – May 25
  - **UMRR Coordinating Committee quarterly meeting – May 26**

With no further business, the meeting adjourned at 12:16 p.m.

UMRR Coordinating Committee Virtual Attendance List
August 12, 2020

UMRR Coordinating Committee Members

Thatch Shepard	U.S. Army Corps of Engineers, MVD [on behalf of Brian Chewning]
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Mark Gaikowski	U.S. Geological Survey, UMESC
Dave Glover	Illinois Department of Natural Resources
Randy Schultz	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
Verlon Barnes	Natural Resources Conservation Service
Ken Westlake	U.S. Environmental Protection Agency, Region 5

Others In Attendance

Jim Cole	U.S. Army Corps of Engineers, MVD
Ben Robinson	U.S. Army Corps of Engineers, MVD
Leann Riggs	U.S. Army Corps of Engineers, MVD
Angela Deen	U.S. Army Corps of Engineers, MVP
Jill Bathke	U.S. Army Corps of Engineers, MVP
Megan McGuire	U.S. Army Corps of Engineers, MVP
Chris Erickson	U.S. Army Corps of Engineers, MVP
Terry Birkenstock	U.S. Army Corps of Engineers, MVP
Jonathan Sobiech	U.S. Army Corps of Engineers, MVP
Eric Hanson	U.S. Army Corps of Engineers, MVP
Aaron McFarlane	U.S. Army Corps of Engineers, MVP
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Andy Barnes	U.S. Army Corps of Engineers, MVR
Kim Thomas	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Jodi Creswell	U.S. Army Corps of Engineers, MVR
Rachel Perrine	U.S. Army Corps of Engineers, MVR
Davi Michl	U.S. Army Corps of Engineers, MVR
Jesse Ray	U.S. Army Corps of Engineers, MVR
Rachel Hawes	U.S. Army Corps of Engineers, MVR
Roger Perk	U.S. Army Corps of Engineers, MVR
Rebecca Costello	U.S. Army Corps of Engineers, MVR
Keri Diedrich	U.S. Army Corps of Engineers, MVR
Brian Markert	U.S. Army Corps of Engineers, MVS
Jasen Brown	U.S. Army Corps of Engineers, MVS
Katy Smith	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, MVS
Kraig McPeek	U.S. Fish and Wildlife Service, IIFO
Sara Schmuecker	U.S. Fish and Wildlife Service, IIFO
Matt Mangan	U.S. Fish and Wildlife Service, IIFO
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuges
Stephen Winter	U.S. Fish and Wildlife Service, UMR Refuges
Jeff Houser	U.S. Geological Survey, UMESC
Jennie Sauer	U.S. Geological Survey, UMESC
KathiJo Jankowski	U.S. Geological Survey, UMESC
Molly Van Appledorn	U.S. Geological Survey, UMESC

Jennifer Dieck	U.S. Geological Survey, UMESC
Kristen Bouska	U.S. Geological Survey, UMESC
John Delaney	U.S. Geological Survey, UMESC
Andrew Strassman	U.S. Geological Survey, UMESC
JC Nelson	U.S. Geological Survey, UMESC
Olivia LeDee	U.S. Geological Survey
Jeff Ziegeweid	U.S. Geological Survey
Jason Daniels	U.S. Environmental Protection Agency, Region 7
Joe Summerlin	U.S. Environmental Protection Agency, Region 7
Kirk Hansen	Iowa Department of Natural Resources
Nick Schlesser	Minnesota Department of Natural Resources
Katrina Kessler	Minnesota Pollution Control Agency
Bryan Hopkins	Missouri Department of Natural Resources
Jeff Janvrin	Wisconsin Department of Natural Resources
Jill Crafton	Izaak Walton League – Minnesota Division
Brent Hoerr	Upper Mississippi, Illinois, and Missouri Rivers Association
Maisah Khan	Mississippi River Network
Marian Muste	University of Iowa
Rick Stoff	Stoff Communications
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