Minutes of the Upper Mississippi River Restoration Program Coordinating Committee

February 7, 2018

Quarterly Meeting

Stoney Creek Hotel Moline, Illinois

Brian Chewning of the U.S. Army Corps of Engineers called the meeting to order at 8:06 a.m. on February 7, 2018. Other UMRR Coordinating Committee representatives present were Sabrina Chandler (USFWS) via phone, Mark Gaikowski (USGS), Dan Stephenson (IL DNR), Randy Schultz (IA DNR), Megan Moore (MN DNR), Matt Vitello (MO DoC), Jim Fischer (WI DNR), Shannon Allen (NRCS), and Ken Westlake (USEPA) via phone. A complete list of attendees follows these minutes.

Minutes of the November 8, 2017 Meeting

Jim Fischer moved and Randy Schultz seconded a motion to approve the draft minutes of the November 8, 2017 UMRR Coordinating Committee meeting as written. The motion carried unanimously.

Regional Management and Partnership Collaboration

Program Manager

Andy Barnes announced that Marshall Plumley will serve as UMRR's new program manager, officially starting on March 4, 2018. Barnes said Plumley brings substantial experience working on Corps' aquatic ecosystem programs nation-wide, including Puget Sound, Chesapeake Bay, Louisiana's coast, and the Illinois River. His experience is wide-ranging, including planning, program management, basin integrator, and regional technical specialist. Most recently, Plumley served as Section Chief for the Regional Planning and Environmental Division North.

Barnes reflected on Marv Hubbell's successful tenure as UMRR Program Manager. Hubbell has been an important visionary and motivating leader and has positioned UMRR well to do incredible habitat restoration and science while also competing for funding within the Corps.

Hubbell will officially retire in June 2018. In the interim, Hubbell will assist Plumley as he assumes the program manager responsibilities.

Hubbell reflected on the tremendous value of UMRR's partnership, noting the value of each partner's unique strengths that they contribute to the program. The UMRR Coordinating Committee applauded Hubbell for his many contributions to UMRR and thanked him for his dedication to partnership and the resource.

Fiscal Report

Hubbell reported that Congress passed a second FY 2018 continuing resolution authority (CRA) on December 22, 2017 following the expiration of the first CRA on December 8, 2017. The second CRA expires on February 9, 2018. It is not yet known how Congress will act. [Note: Subsequent to the meeting, Congress enacted a third CRA expiring on March 23, 2018. The House and Senate

Appropriations Committees each approved \$33.17 million for UMRR in their respective FY 2018 energy and water appropriations measures.]

District staff are authorized to execute the program at \$33.17 million until full-year appropriations measure is enacted. At that funding level, UMRR's FY 2018 internal program allocations would be as follows:

- Regional Administration and Programmatic Efforts \$1,110,000
- Regional Science and Monitoring \$9,325,000
 - o Long term resource monitoring \$4,725,000
 - Regional science in support of restoration \$3,175,000
 - \$1.025 million for data analysis
 - \$2.15 million for special research initiatives
 - Regional science staff support \$150,000
 - o Habitat project evaluations \$975,000
 - Habitat Needs Assessment II \$300,000
- Habitat Restoration \$22,735,000
 - o Regional project sequencing \$100,000
 - o MVP \$10,922,000
 - o MVR \$5,747,000
 - o MVS \$5,966,500

[Note: The FY 2018 District HREP allocations above reflect repayment after transferring work among Districts in FY 2017.]

In response to a question from Megan Moore, Hubbell said the public outreach line item above is meant for external communication strategies. Hubbell acknowledged that the Corps struggles with implementing the funding. He referred to Sam Heilig's presentation later in the meeting.

FY 2019 Budget

Hubbell reported that District staff anticipate receiving a pass back on its draft FY 2019 spending plans in mid-February as is typical ever year. Hubbell anticipated that President Donald Trump will publish his FY 2019 budget in mid-February. [Note: Subsequent to the meeting, the President's FY 2019 was released on February 12, 2018 and includes \$33.17 million for UMRR.]

Quarterly Budget Reports

Hubbell explained that District staff are working to simplify the Corps' UMRR budget report documents typically supplied to partners in the Coordinating Committee's quarterly meeting packets. He distributed a handout of the simplified budget report with current financial information. According to Hubbell, it provides a clearer way of showing UMRR's financial information and will allow for better tracking spending on specific activities over time. The Corps will begin including the newly reformatted budget reports on a regular basis again starting in May 2018.

Hubbell extended his appreciation to Heather Schroeder, Kayleigh Thomas, and other Corps staff for their work in reformatting the budget reports.

Hubbell's UMRR Program Management Tenure

Hubbell reflected on UMRR's growth and milestones throughout his involvement as program manager as follows:

- Two UMRR long term resource monitoring status and trends reports
- New approaches for evaluating UMRR's ecological resilience and habitat needs
- Improvements to the habitat project planning process and evaluation
- Robust funding with consistent high execution achievements
- All four UMRR reports to Congress (RTCs)

[Note: Hubbell served as Illinois' UMRR Coordinating Committee representative during the 1998 UMRR RTC development, the UMRR-LTRM Manager for the 2004 RTC, and the UMRR Program Manager for the 2010 and 2016 RTCs.]

• UMRR Charter for its coordinating groups

Hubbell thanked partners for their involvement in UMRR and friendship over the years. Hubbell said he has tremendous confidence that Plumley will successfully lead UMRR through its next phase.

External Communications

Sam Heilig explained that she has been tasked with developing a more detailed external communications plan. This was in response to the UMRR Coordinating Committee's request on a November 27, 2017 conference call to develop a more detailed scope for implementing Goal 3 of the UMRR 2015-2025 Strategic Plan. The objective is to build from UMRR's recent branding development, using the logo and tag line to create communications strategies. Heilig said a draft plan is circulating within the Rock Island District for initial review. It currently revolves around the three tag line components: leading, innovating, and partnering.

Heilig explained that UMRR's draft communications plan utilizes the partnership's network, rotating leadership responsibilities among the implementing partner agencies. Questions remain regarding target audience and what should be communicated and why. Heilig plans to convene the UMRR external communications team to consider these questions and obtain feedback on the draft plan, and then Corps staff will begin developing content. The Corps anticipates employing a greater social media campaign around UMRR.

In response to a comment by Heilig, Mickelsen clarified that UMRBA, USGS, and other partners organized and contributed resources to UMRR's 30th anniversary event. At that time, the Corps was restricted in its ability to "celebrate" UMRR and bring attention to the program. Mickelsen expressed agreement that the plan needs to involve all partners but used the 30th anniversary as an example to underscore that the communications plan needs to withstand any political pressures, financial constraints, or other considerations within any one agency.

Megan Moore asked whether the communications plan utilized the 2016 UMRR Outreach Plan completed by Gulf South Research Corporation. Hubbell referred to Heilig regarding how it was used for the draft communications plan, but noted that the 2016 UMRR RTC utilized several of UMRR's key messages identified in the Outreach Plan. It has already been well received among Corps leadership. Heilig explained that the Outreach Plan focused on marketing and branding. The Communications Plan will expand into how to reach target audiences with specific messages.

Jim Fischer noted that the 2015-2025 UMRR Strategic Plan focused not only on public outreach but also communicating and engaging with programs and leaders that relate to UMRR – e.g., NRCS's Regional Conservation Partnership Program, states' CWA monitoring on the UMR.

Hubbell acknowledged that the Corps has allocated District overhead resources to developing UMRR's communications strategies. Broad messages and outreach goals are the initial focus and more focused, targeted outreach will follow.

Randy Schultz recognized that specific program- and project-related messages may not always surface as a high priority within a statewide or federal agency communications platform. Schultz asked how to ensure that UMRR's messages are given high priority and are ultimately implemented. Heilig said the UMRR communications plan will request that partner agencies identify a point of contact to develop content and then distribute that material to agencies for their use. Heilig said the plan will encourage partners to develop content ahead of time to facilitate use of social media.

Gretchen Benjamin noted her support for developing a communications plan that focuses on the tagline themes. Benjamin asked how UMRR's long term resource monitoring would be integrated into the communications plan. She said UMRR's science work was central to engaging with other large aquatic ecosystem internationally. Heilig explained that social media could describe a product or finding in a fairly straightforward, understandable way and then include a link to the publication or report where an interested stakeholder could find more detailed information.

In response to a question from Hubbell, Heilig said District staff will prepare a draft communications plan for the UMRR Communications Team to consider this spring and then will begin developing content.

HREP Showcase: Steamboat Island

Julie Millhollin explained that many years of silt deposition in Steamboat Island has significantly degraded backwater fisheries habitat. High water tables and increases in flood frequency have degraded forest health and erosion of islands has increased wind and wave fetch. The goals for UMRR's habitat restoration of Steamboat Island are to:

- Maintain, enhance, and restore quality habitat for native and desirable plant, animal, and fish species
- Maintain, enhance, restore, and emulate natural river processes, structures, and functions for a resilient and sustainable ecosystem

Millhollin described how the specific project features will advance the project objectives, depicting the project's construction plans on an image of Steamboat Island. The Rock Island District is anticipating completing the tentatively selected project for Steamboat Island by February 2019.

Nicole Manasco explained that District staff were able to work with another Corps program to secure green LiDAR, which provides spatial information on the river's shallow muddy bottoms (about 1 meter to 1.5 meters deep). District staff employed groundtruthing immediately following the LiDAR acquisition to validate the results. Manasco offered that the results of green LiDAR be presented at a future UMRR Coordinating Committee meeting.

Jim Fischer asked whether green LiDAR might be used on other future HREPs. Marv Hubbell said partners need to determine the value of green LiDAR and cost in comparison with other data collection techniques. Fischer suggested considering how green LiDAR might be used to update topobathy information.

In response to a question from Andy Barnes, Millhollin said she anticipates that the final plan for Steamboat Island will be completed in 2020 with construction starting in 2021.

Long Term Resource Monitoring and Science

FY 2018 1st Quarter Report

Jeff Houser reported that the manuscript was published, "Can data from disparate long-term fish monitoring programs be used to increase our understanding of regional and continental trends in large river assemblages?"

UMESC published a story map for UMRR's long term resource monitoring that is available on its website. The story map combines text, images, and video to summarize information in a compelling and understandable way. The story map can be used for a variety of purposes (e.g., outreach, virtual tours, delivering information) and can be found here:

https://usgs.maps.arcgis.com/apps/MapSeries/index.html?appid=261453998dc844099bdb48d203deb736.

2018 Science Meeting

Jeff Houser provided a summary of the January 16-18, 2018 UMRR LTRM Science Meeting, which was meant to facilitate collaborative dialogue among UMRR scientists and restoration practitioners about future goals and priorities for the program's research and analysis. There were ninety attendees from federal agencies, state agencies, UMRBA, NGRREC, and universities, with a mixture of experiences and backgrounds. The meetings purposes were to build from previous research and restoration work, exchange information among restoration and scientist professionals, and consider time and financial resources in order to determine proposals for collaborative and relevant research and analysis projects.

Houser explained that participants organized into six working groups to explore the themes listed below. There was extensive preparation, planning, and review by partners leading up to the meeting to develop these areas and create working groups, including via a November 21, 2017 webinar. While the meeting's primary objective was to determine FY 2018 research priorities, the meeting also resulted in longer term ideas for future work and strengthened UMRR's partnership network of restoration practitioners and scientists. Houser detailed the outcomes of six working groups, as listed below. More detailed information on the work groups was provided on pages C-12 to C-25 of the agenda packet.

Themes:

- 1. Understanding changes in hydrogeomorphology and their implications for the future condition of the UMRS
- 2. Understanding relationships between hydrogeomorphic conditions and the distribution and abundance of biota
- 3. Understanding the physical, chemical, and biological processes behind the observed spatial and temporal patterns in LTRM data

Outcomes of working groups:

<u>Group 1</u>: Geomorphic change in the UMRS

[Led by Jim Rogala (USGS) and Jon Hendrickson (USACE)]

- Form a working group and convene a workshop to develop a hydrogeomorphologybased conceptual model, hierarchical classification system, and a prototype GIS database framework
- Measure and better understand geomorphic rates of change
- Develop a better understanding of changes in connectivity using existing flow data

- Group 2: Interactions among water quality, aquatic vegetation, and wildlife
 [Led by Deanne Drake (Wisconsin DNR), Eric Lund (Minnesota DNR), and Stephen
 Winter (USFWS)]
 - Research internal and external drivers of water clarity on the UMRS
 - Assess whether fluctuations in water levels and clarity affect distribution of SAV in the UMRS
- <u>Group 3</u>: Native freshwater mussels in the UMRS Identification of associations among critical biological processes and hydrogeomorphology

[Led by Teresa Newton (USGS)]

- Research which hydrogeomorphic features are predictive of mussel distribution, abundance, diversity, and recruitment
- Group 4: Understanding relationships among floodplain hydrogeomorphic patterns, vegetation and soil processes, and nutrient cycling

[Led by Nate De Jager (USGS)]

- Assess forest canopy gap dynamics
- Research dendrochronology to understand historical forest growth, stand development, and gap dynamics
- Research how to reforest canopy gaps that are occupied by invasive species
- <u>Group 5</u>: Woody debris in the UMRS: Quantity, distribution, and role in the hydrogeomorphic and ecology

[Led by KathiJo Jankowski (USGS) and Molly Van Appledorn (USGS)]

- Create a geospatial dataset of wood distribution
- Develop a wood budget of two to three contrasting pools
- Research geophysical drivers on the current wood distribution, changes in wood load along gradients of discharge, and the relative role of woody debris in structuring habitat
- Inform river management by identifying where wood is lacking and where it might be absent in the future and where wood placement will most effectively create habitat
- <u>Group 6</u>: Understanding critical biological rates for select fishes on the UMRS and how they vary across hydrogeomorphic, climatic, and biological gradients

[Led by Kristen Bouska (USGS), Andy Bartels (Wisconsin DNR), and Quinton Phelps (West Virginia University)]

— Research vital rates, microchemistry, and genetics

Houser thanked the work group leaders and said their involvement was essential to the science meeting's success. Karen Hagerty expressed appreciation to Houser and Jennie Sauer for their efforts in organizing the meeting, noting that it was a tremendous success in focusing future research and building important relationships among partners. Megan Moore echoed Hagerty's comments, reflecting on the overall success of the meeting format, preparation, and facilitation. Jim Fischer reflected on UMRR's history and said he views the meeting as a significant milestone for the program. According to Fischer, the meeting is a reflection of UMRR's early visionary work to establish a monitoring

program that can address critical science and restoration information needs. Fischer also expressed appreciation to Marv Hubbell for his visionary leadership that brought the program to this point.

Houser outlined the anticipated schedule for selecting and funding FY 18 research proposals, as follows:

March 16: Full proposals due to UMRR management team for review
 March 30: Proposals distributed to A-Team for review and evaluation

• Early to mid April: A-Team and UMRR federal partners review and rank proposals

• April 25: A-Team considers proposal rankings

• May 16: UMRR Coordinating Committee considers recommended FY 2018 research

proposals for endorsement

USACE LTRM Report

Karen Hagerty reported that UMRR's FY 2018 LTRM allocation includes \$5.75 million for base monitoring and \$2.15 million for other science-related efforts. Actual costs for base monitoring are estimated at \$5.6 million in FY 2018, allowing for \$149,330 to fund aerial camera testing and FY 2017 work plan needs as well as other science-related efforts.

A-Team Report

Matt Vitello said the A-Team is scheduled to meet on April 25, 2018 to discuss the research proposals as discussed earlier. Vitello expressed appreciation to Houser and Sauer for their efforts in hosting the science meeting.

Habitat Restoration

District Reports

St. Louis District

Brian Markert said the St. Louis District's primary project sponsors are USFWS, Missouri DoC, and Illinois DNR. USFS recently became a partner on an open river project this year. The District is also engaging in ongoing discussions with The Nature Conservancy regarding its potential interest in sponsoring habitat projects such as Spunky Bottoms as well as a local land trust in the Alton area.

Markert reported that MVS anticipates submitting a final draft feasibility report for Crains Island to MVD in mid to late February for approval in order for the project to be construction-ready in FY 2019. The District's other planning efforts involve Piasa and Eagles Nest Islands, Harlow Open River Islands, and Oakwood Bottoms. MVS also continues to explore different alternatives to Rip Rap Landing to avoid complications associated with existing NRCS lands located on about two-fifths of the existing project area.

Markert reported that a construction bid is currently open for the Clarence Cannon pump station construction. He showed pictures of the pump stations to explain the project's features as well as reforestation efforts at Ted Shanks. The District recently completed mussel surveying at Batchtown and is finalizing the O&M manual for Ted Shanks before closing out the project.

In response to a question from Jennie Sauer, Markert explained that habitat restoration in the open river typically involves reconnecting floodplain areas that were previously levee-protected agricultural areas.

The project utilize the river's energy - e.g., hard mast trees will be planted after flood events have occurred and sediment deposited.

St. Paul District

Tom Novak said all projects located in the St. Paul District occur on USFWS lands because of the inability for non-federal partners to execute the Corps' project partnership agreements. Novak reported that MVP finalized construction of Harpers Slough and is planning a dedication ceremony and tree planting event for this spring. MVP is also advancing plans for McGregor Lake. The District has not yet issued an award for Conway Lake given issues with the awards received. It anticipates finalizing an award this spring. District partners have selected Bass Lake Ponds (on the Minnesota River), Lower Pool 10, and Reno Bottoms to advance as its next UMRR habitat projects. Novak expressed appreciation to Hubbell for his steady, calm leadership throughout challenging and rewarding times.

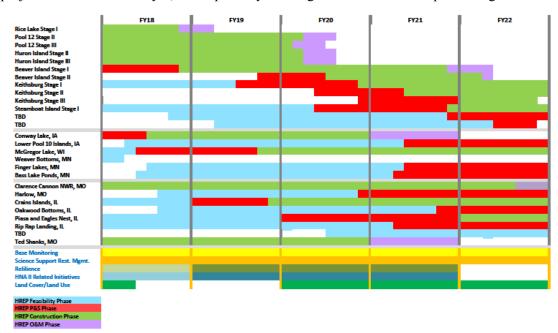
Rock Island District

Mary Hubbell reported that the Rock Island District awarded a construction contract in early February to repair one large pump stations at Rice Lake. MVR is actively planning on Keithsburg and Steamboat Islands. The District accelerated the planning of Beaver Island and will move the project into construction in FY 2018, given reallocated FY 2017 money from the St. Paul District. That funding will be repaid in FY 2018. Hubbell explained that MVR is working through the river teams to identify one to three projects to initiate planning within the next several months.

Hubbell said MVR has refocused its project evaluation efforts to better understand the effectiveness of dredge cuts over time.

HREP Implementation Schedule

Hubbell outlined the following implementation schedule through FY 2022 that assumes a steady appropriation of \$20 million to \$33.17 million annually. The Corps has withdrawn several of habitat projects since the February 7, 2018 quarterly meeting for various reasons preventing them from advancing.



Habitat Needs Assessment

<u>Information Summary Report – Existing State of the System</u>

Nate De Jager reported that a formal USGS review is underway for the publication of a manuscript regarding the HNA II's inventory of habitats and ecosystem conditions on the UMRS. A select number of partners are also reviewing the manuscript. All agency partners have had the opportunity to provide input on the manuscript through the HNA II Steering Committee. Its content is the foundational information by which restoration practitioners will make inferences about habitat needs on the UMRS – i.e., that the river teams will use when identifying habitat projects. De Jager explained that UMESC staff will seek USGS's approval for publication after reconciling comments received from partners.

<u>Management Response to Information – System Assessment</u>

Sara Schmuecker said a rapid assessment of each indicator will be employed through the individual river teams. The RRAT Exec performed the exercise on January 23, 2018 and the FWIC is scheduled to do so on February 20, 2018 and the FWWG on February 23, 2018. Given scoring of indicator rankings in various areas of the UMRS, the river teams will determine whether the area (per each indicator) is far from (red), near to (yellow), or at the desired condition (green). Ultimately, the goal will be to identify future needs and desired next steps.

Schmuecker said a "HNA II from Information to Management" report will be developed in March and April through the following steps:

- Summarize the river teams' rankings at pool and "cluster" scales
- Develop new graphics, including spider diagrams
- Provide narrative summaries of habitat needs to river teams for review
- Conduct a system assessment by comparing cluster-level evaluations

An update regarding the system assessment will be provided to the UMRR Coordinating Committee at its May 16, 2018 meeting. The HNA II Steering Committee and A-Team will be asked to review the draft HNA II report describing "information to management" in the early half of summer. A final draft report will be supplied to the UMRR Coordinating Committee for consideration of approval at its August 14, 2018 quarterly meeting. Pending the Committee's approval, the report would be finalized and published in early fall.

Hubbell thanked Schmuecker and De Jager for their efforts to advance this HNA II, including during the time that Kat McCain is on leave.

Water Level Management

Tim Yager explained that St. Paul District's River Resources Forum has a long-standing work group focused specifically on water level management – i.e., the Water Level Management Task Force (WLMTF). On behalf of the WLMTF, Yager pointed to the December 28, 2017 letter it sent to the UMRR Coordinating Committee provided on pages D-1 to D-2 of the agenda packet. The letter seeks the UMRR Coordinating Committee's support regarding funding for all or portions of a pool-wide water level reduction and to help clarify related policy questions.

Hubbell stated that UMRR's 2000 implementation guidance clarifies that the program can construct small- and large-scale projects, including pool-scale water level management. In response to a question

from Kara Mitvalsky, Roger Perk stated that a letter of intent to sponsor such a project would be needed from the respective states bordering the pool in which the drawdown would occur.

In response to a question from Tim Yager, Marv Hubbell said partners can propose a pool-scale drawdown project during the next habitat project selection process. Ultimately, partners would need to consider cost and priorities for other habitat projects. If a water level management project is deemed as a top priority, the District would submit a project fact sheet to MVD for approval and, subsequently, a feasibility study would be developed that would test certain policy questions. Hubbell articulated the merits of pool-scale water level management given the large footprint of potential improvements to habitat and ecological processes. There are several policy issues that would need to be addressed. For example, Corps Headquarters budgets for the construction of HREPs over a relatively short period of time. Corps policy encourages the turnover of completed projects to the sponsor as quickly as possible. However, pool level management would likely require construction and funding over al much longer timeframe. Sabrina Chandler asked if a one-time event could be funded with follow-on opportunities as funds are available.

In response to a question from Megan Moore, Gretchen Benjamin explained that the cost of a pool-scale drawdown over 50 years would be roughly equivalent to a typical habitat project. A high estimate for one dredging event is \$500,000. Thus, 10 dredging events over 50 years would amount to \$5 million. Tim Yager said the Pool 8 Water Level Management White Paper offers detailed information regarding costs that can be used as a reference. Yager also noted that the 9-foot navigation channel will continue to be dredged. He encouraged partners to think opportunistically to consider water level management following major dredging events within a pool. In response to a question from Hubbell, Yager said the White Paper also includes available areas for dredged material placement.

Referring to the WLMTF's letter, Moore suggested that the Coordinating Committee respond by explaining that UMRR could potentially implement such a pool-scale drawdown project should it be prioritized given other restoration opportunities. Regarding the second question of policy constraints, Moore said policies could be evaluated and tested through the context of a specific project. Moore noted that there is concern among partners in the St. Paul District that a 50-year funding commitment to water level management may undermine other restoration priorities in the future. A 10-15 year drawdown may be better received by partners.

Hubbell reiterated that a project sponsor will still be required. Headquarters may not support the notion of keeping a project open for 50 years. However, there may be an option for performing water level management through the adaptive management process. Hubbell offered that NESP had evaluated pools for employing pool-scale water level management, suggesting that it could be used as a reference. Benjamin added that NESP had ultimately identified 12 pools to examine further. Jody Creswell said partners will have the opportunity examine its priority for water level management with respect to other restoration opportunities throughout the next HREP selection process. Hubbell reminded the Coordinating Committee that the selecting a new suite of projects will be initiated shortly.

Chandler observed that the WLMTF has great ideas and is looking to the UMRR Coordinating Committee for an indication of whether UMRR could be a venue for exploring opportunities further. Chandler said the Service is very interested in sponsoring a pool-scale water level management project whether through UMRR or another authority. Hubbell mentioned that nonprofit organizations may also serve as cost-share sponsors.

In response to a question from Kirsten Mickelsen, Moore moved and Jim Fischer seconded a motion to reply to the WLMTF with a letter. It would explain the UMRR Coordinating Committee's understanding of current policy and desire to explore opportunities for UMRR to implement a pool-wide water level management project should program partners select it as a high priority among other

restoration opportunities. The motion was approved unanimously. Moore added that the letter should note that UMRR could be a venue for pool-scale water level management but may not be the best Corps authority to utilize.

HREP Meeting

Hubbell reported that a UMRR HREP strategic planning meeting was held on November 29-30, 2017 in Dubuque. Partners discussed a wide range of issues that are affecting UMRR implementation, particularly as annual appropriations for the program have increased from roughly \$20 million to \$33.17 million. Hubbell encouraged the partnership to continue having open and honest discussion about their concerns and perspectives. He said partners' commitment to working through issues and conflict has been imperative of UMRR's success.

Mickelsen provided an overview of the meeting and discussed the primary conclusions. About 30 individuals attended the meeting, representing all the implementing agencies as well as The Nature Conservancy and Audubon. Mickelsen explained that partners the first day discussing the various ways they are challenged in executing habitat projects including project selection, planning, evaluation, and operations and maintenance. The second day was focused on finding solutions. Mickelsen listed the following agreed-upon next steps for resolving the challenges as well as the leads responsible for advancing the work:

- Vision statement for habitat restoration
 - [Led by Steve Clark, Steve Winter, Kirk Hansen, and Karen Hagerty]
 - Determine how to utilize the HNA II and ecological resilience findings to create goals, objectives, and indicators for success for individual projects
 - Summarize pool plans and use them to inform project goals
 - Enhance communications within the partnership about goals and objective
- Project selection process

[Led by Marshall Plumley]

- Define a timeline and process for selecting the next generation of projects
- Host a workshop regarding process, policies, and priorities
- Utilize pool plans, agency plans, and other relevant information to identify and prioritize potential habitat projects
- In an interim period (2018-2019), select habitat projects through the river teams
- Project formulation

[Led by Camie Knollenberg, Monique Savage, and Angela Dean]

- Facilitate a partnership review of UMRR's SMART process, including by hosting a webinar and identifying and responding to partners' questions
- More regularly facilitate partnership dialogue (above PDTs)
- Employ team building exercises
- Create a conflict resolution process
- Improve communications through note-taking and review of the notes

- Non-federal sponsorship
 [Led by Marshall Plumley, UMRBA, TNC, and Audubon]
 - Outreach to nonprofit organizations regarding their ability to sponsor UMRR habitat projects
 - Resolve policy impediments to implementing habitat projects
 - Enhance communications

Other Business

Mark Gaikowski announced that Yao Yin resigned in January 2018. UMESC is currently seeking to fill that position.

Gaikowski reported that the Institute for Journalism and Natural Resources is planning a June 2018 paid fellowship opportunity for 15 to 20 journalists. USGS, UMRBA, and other river partners are working with the Institute's staff to assist in their planning effort. Gaikowski said this is a great opportunity to showcase UMRR's science and restoration work throughout the entire river system.

Mary Hubbell recognized Brad Walker for his many contributions to the Upper Mississippi, including UMRR. Walker plans to retire at the end of February 2018.

Hubbell said it has been an honor to work through UMRR's partners and each person individually. The UMRR Coordinating Committee applauded Hubbell for his tremendous contributions to the program. Brian Chewning underscored UMRR's execution rate of 92 percent and higher over his tenure. That is a remarkable achievement and has resulted in UMRR's increased appropriations.

Future Meetings

The upcoming quarterly meetings are as follows:

- May 2018 St. Louis, Missouri
 - UMRBA quarterly meeting May 15
 - UMRR Coordinating Committee quarterly meeting May 16
- August 2018 La Crosse, Wisconsin
 - UMRBA quarterly meeting August 14
 - UMRR Coordinating Committee quarterly meeting August 15
- October 2018 Bloomington, Minnesota
 - UMRBA quarterly meeting October 30
 - UMRR Coordinating Committee quarterly meeting October 31

With no further business, the meeting adjourned at 12:11 p.m.

UMRR Coordinating Committee Attendance List February 7, 2018

UMRR Coordinating Committee Members

Brian Chewning U.S. Army Corps of Engineers, MVD

Sabrina Chandler U.S. Fish and Wildlife Service, UMR Refuges [On the phone]

Mark Gaikowski
U.S. Geological Survey, UMESC

Dan Stephenson Illinois Department of Natural Resources
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
Shannon Allen Natural Resources Conservation Service

Ken Westlake U.S. Environmental Protection Agency, Region 5 [On the phone]

Others In Attendance

Terry Birkenstock U.S. Army Corps of Engineers, MVP Shahin Khazrajafari U.S. Army Corps of Engineers, MVP U.S. Army Corps of Engineers, MVP Tom Novak **Andy Barnes** U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR Rebecca Costello U.S. Army Corps of Engineers, MVR Jody Creswell Karen Hagerty U.S. Army Corps of Engineers, MVR Samantha Heilig U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR Kat Herzog U.S. Army Corps of Engineers, MVR Marvin Hubbell Nicole Manasco U.S. Army Corps of Engineers, MVR Julie Millhollin U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR Kara Mitvalsky

Darron Niles U.S. Army Corps of Engineers, MVR [On the phone]

Roger Perk U.S. Army Corps of Engineers, MVR Rachel Perrine U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVR Marshall Plumley Heather Schroeder U.S. Army Corps of Engineers, MVR U.S. Army Corps of Engineers, MVS Jasen Brown Brian Johnson U.S. Army Corps of Engineers, MVS U.S. Army Corps of Engineers, MVS Brian Markert U.S. Army Corps of Engineers, MVS Kip Runyon Monique Savage U.S. Army Corps of Engineers, MVS

Tim Yager U.S. Fish and Wildlife Service, UMR Refuges

Sara Schmuecker

Tyler Porter

U.S. Fish and Wildlife Service, RIFO
U.S. Fish and Wildlife Service, RIFO
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 [On the phone]

Mike McClelland
Mike Griffin
Iowa Department of Natural Resources
Chris Klenklen
Missouri Department of Agriculture

Bryan Hopkins Missouri Department of Natural Resources
Jordan Weeks Wisconsin Department of Natural Resources
Stephen Galarneau Wisconsin Department of Natural Resources

Tom Boland Amec Foster Wheeler Olivia Dorothy American Rivers

Alicia Lloyd Missouri Coalition for the Environment
Brad Walker Missouri Coalition for the Environment
Nancy Guyton Neighbors of the Mississippi River

Gretchen Benjamin The Nature Conservancy

Mark Ellis Upper Mississippi River Basin Association Kirsten Mickelsen Upper Mississippi River Basin Association