

**Minutes of the
Upper Mississippi River Restoration
Environmental Management Program
Coordinating Committee
(UMRR-EMP CC)**

**August 30, 2012
Quarterly Meeting**

**Radisson Hotel
La Crosse, Wisconsin**

Gary Meden of the U.S. Army Corps of Engineers called the meeting to order at 7:35 a.m. on August 30, 2012. Other UMRR-EMP CC representatives present were Kevin Foerster (USFWS), Mike Jawson (USGS), Dan Stephenson (IL DNR), Diane Ford (IA DNR), Tim Schlagenhaft (MN DNR), Janet Sternburg (MO DoC), and Jim Fischer (WI DNR). A complete list of attendees follows these minutes.

Minutes of the May 24, 2012 Meeting

Janet Sternburg moved and Diane Ford seconded a motion to approve the draft minutes of the May 24, 2012 meeting as written. The motion was approved unanimously.

Program Management

FY 12 Fiscal Update

Marv Hubbell reviewed UMRR-EMP's FY 12 allocations under its \$17.787 million budget, as follows:

- Regional Management – \$721,000
- LTRMP – \$6,232,000
- HREPs – \$10,834,000
 - Program model certification and regional support – \$150,000
 - MVP – \$2,687,000
 - MVR – \$4,530,000
 - MVS – \$3,467,000

Hubbell explained that, in FY 11, USACE shifted \$780,000 from LTRMP to MVP for Capoli Slough and \$93,000 from LTRMP to MVR for Rice Lake. The two Districts are essentially “repaying” this funding in FY 12. Thus their HREP allocations are reduced from what they would have otherwise received under the customary allocation formula, and the LTRMP allocation is increased by a corresponding amount. Hubbell said UMRR-EMP's long standing, excellent fiscal performance, including its high level of transparency and accountability, has allowed the program to exercise more regional flexibility in transferring funds than is typical within USACE.

Hubbell reported that the UMRR-EMP needs a total of \$938 million to complete projects currently on its books. This is an increase of \$100 million, relative to the amount estimated in the second quarter

budget spreadsheets presented at the May 24, 2012 UMRR-EMP CC meeting. The increased estimate reflects new planning requirements and inflation.

FY 13 Appropriations Status

Hubbell said the President's FY 13 budget request and the Senate Appropriations Committee's FY 13 energy and water appropriations measure both include \$17.880 million for UMRR-EMP. The House approved \$16.986 million in FY 13 funding for the program. Hubbell reported that Congressional leaders have recently agreed to a six-month continuing resolution authority (CRA) for the first half of FY 13. Although the CRA is expected to allow agencies to execute their programs and projects at FY 12 levels, USACE will take a conservative approach and execute UMRR-EMP at the lowest FY 13 funding level that has been advanced (i.e., \$16.986 million), until the final appropriation amount is determined. [Note: On September 28, 2012, Congress enacted an FY 13 CRA for most of the federal government that will expire on March 27, 2013.]

Hubbell said UMRR-EMP will allocate funds under its \$16.986 million FY 13 planning assumption, as follows:

- Regional Management — \$651,000
- LTRMP — \$5,129,000
- HREP — \$11,206,000
 - Program model certification and regional support — \$150,000
 - MVP — \$3,917,000
 - MVR — \$4,422,000
 - MVS — \$2,717,000

Hubbell reported that MVP transferred \$600,000 to MVS in FY 12. The FY 13 allocations to MVS and MVP shown above are adjusted to reflect repayment.

Hubbell said UMRR-EMP's annual appropriations have been relatively stable over the past decade. The program has been a national priority for USACE since 2001. However, because of inflation, LTRMP's base monitoring costs now exceed its annual allocation. Hubbell explained that, for several years, UMRR-EMP partners have anticipated this shortfall would happen. He predicted that program funding is very unlikely to increase substantially relative to the authorized amount for at least the next several years.

Diane Ford expressed appreciation to the LTRMP *ad hoc* group addressing low funding scenarios. She said the group was effective and useful, and hopes the group will continue to work on resolving issues related to LTRMP implementation in low funding.

Janet Sternburg asked what is planned for the \$50,000 allocated to habitat project sequencing in FY 13. Hubbell explained that the FY 13 funds would be used to reestablish the System Ecological Team (SET) and fund LTRMP component specialists to participate in SET meetings. In response to a question from Sternburg, Hubbell said the HREP/LTRMP Integration budget line item funds staff time devoted to specific integration efforts, including the District LTRMP staff. Jim Fischer asked why the component specialists are being funded separately, given that they are program staff. Hubbell said the initial portion of component specialists time would come from their base LTRMP FY 13 funding. Additional time and travel would be covered by the HREP-LTRMP integration funds.

Sternburg urged USACE staff to revisit the Program Management budget in light of low funding in FY 13. She suggested that some of this money might be well-used to offset LTRMP's shortfalls.

Hubbell agreed, and said he is developing a revised Program Management budget based on the projected lower appropriation. In response to a question from Sternburg, Hubbell said the focus of UMRR-EMP's public outreach expenditures varies annually. He recalled that about \$30,000 was transferred to the National Mississippi River Museum and Aquarium recently for the UMRR-EMP exhibit. Hubbell said plans for public outreach in FY 13 include restructuring UMRR-EMP's website to 1) meet USACE's new requirements following the agency's web migration, 2) unify the program's web pages among the Districts and LTRMP, and 3) make the website more user friendly and attractive. He said some of this work could be deferred, if needed. Fischer mentioned that there are several opportunities for public outreach and communication that have relatively little cost. Fischer expressed support for public outreach, noting that increased public awareness and engagement is important to building support and funding for the program.

Hubbell said USACE and USGS are currently developing LTRMP's FY 13 SOW and are referencing the February 15-17, 2012 LTRMP Team Meeting as well as the FY 10-14 LTRMP Strategic Plan. The SOW will reflect a systemic perspective. In response to a question from Tim Schlagenhaft, Hubbell confirmed that the SOW development process will be driven by the LTRMP Science Plan in future years.

Draft Joint Charter for UMRR-EMP Coordination Groups

Hubbell said USACE staff are revising the May 7, 2012 draft Joint Charter for the UMRR-EMP CC, A-Team, and HREP Planning and Sequencing Framework Teams based on partner comments. The revised draft will be presented at the November 29, 2012 UMRR-EMP CC meeting.

Outreach

Hubbell said USACE and USFWS are hosting a Pool 8 Islands dedication in Brownsville later today. In addition to the landside ceremony, participants will have the option of touring the project by boat. Hubbell reported that USACE is planning to upgrade and migrate its website, including enhancing UMRR-EMP's web pages. This will result in modified URLs. In addition, work continues on the program's database, which will be presented in its completed form at the UMRR-EMP CC's February 28, 2013 meeting. Hubbell said River Action's September 27-29, 2012 Upper Mississippi River Conference will include several presentations on UMRR-EMP topics.

Kevin Foerster reported that there have been 291 "Summer of Paddling" events thus far along the entire Mississippi River. Foerster said many federal, state, and nonprofit partners collaborated to make this series of events possible. He said turnout has been excellent and feedback has been very positive. When leading paddling events, USFWS staff have highlighted UMRR-EMP's importance to river restoration.

In response to a question from Chris Erickson, Barb Naramore explained that while UMRR-EMP is not specifically on the September 26-27, 2012 America's Great Water Initiative agenda, it will undoubtedly be discussed as an example of a successful collaboration.

Jim Fischer said Wisconsin DNR leaders toured Pool 8 Islands on July 25, 2012, as part of a departmental review of the fisheries program. The tour highlighted both LTRMP and HREPs. Fischer said department leaders were very impressed with the program.

Hubbell mentioned that the Bassmasters "Mississippi River Rumble" fishing tournament was held in La Crosse on June 21-24, 2012. The tournament's winner fished the area surrounding Stoddard Islands, which are part of the Pool 8 Islands project.

Mike Jawson announced that UMESC will host its annual open house on September 8, 2012. He said about 1,300 people typically attend these open houses. Hubbell expressed appreciation to USGS staff for yesterday's tour of UMESC's new wing.

Program Naming Convention

Hubbell said the UMRR-EMP CC discussed potential changes to LTRMP's name at its May 24, 2012 meeting, but did not reach any conclusions. He explained that reconsideration of the component's name was prompted by several instances where internal and external stakeholders inadvertently concluded that LTRMP is an independent program, separate from UMRR-EMP. At the May meeting, Hubbell asked UMRR-EMP partners to send him any name suggestions, beyond the previously-discussed dropping of "Program" from LTRMP. Hubbell listed the suggestions partners submitted following the May meeting, but said he prefers long term resource monitoring (LTRM) component — i.e., simply removing "Program" from its title.

Mike Jawson said any new name should reflect the breadth of LTRMP, including its research and analysis efforts. He suggested that the UMRR-EMP CC vote on whether and how to rename LTRMP. Jennie Sauer said classifying LTRMP as a component, rather than a program, may diminish its stature, given that it already uses "component" to refer to its various monitoring elements.

Jawson moved, and Fischer seconded, a motion to request that UMRR-EMP partners vote on a new name for LTRMP. The UMRR-EMP CC would then choose among the top two candidates.

In response to a question from Kevin Foerster about the underlying issues associated with LTRMP's name, Sauer explained that there has been a disconnect between LTRMP and UMRR-EMP — e.g., LTRMP's products and activities are often not recognized as UMRR-EMP accomplishments. However, Sauer emphasized the strong history and identity associated with LTRMP. Instead of renaming LTRMP, she suggested renewed focus on ensuring UMRR-EMP is clearly identified in all programmatic activities.

Tim Schlagenhaft suggested that the UMRR-EMP CC vote on a name now, given that partners have already shared their perspectives. Jawson concurred, and suggested replacing "Program" with "Partnership," maintaining the acronym LTRMP. Jawson said he has received positive feedback on that alternative from field station staff. Fischer expressed support for Jawson's suggested alternative. Fischer recalled that participants at the February 15-17, 2012 LTRMP Team Meeting were concerned with losing LTRMP's historical identity if a new name is selected.

In response to questions from Bob Clevestine and Schlagenhaft, Hubbell explained that the disconnect between UMRR-EMP and LTRMP has implications for program recognition and support, including appropriations. He emphasized the importance of a coherent program identity to things such as partnering opportunities and non-federal partners' advocacy efforts. Sternburg said Missouri DoC administrators have mistakenly believed that LTRMP is an independent program, funded through USGS rather than USACE. She explained that the misunderstanding is problematic when it comes to seeking their support for UMRR-EMP and its monitoring and restoration work. Sternburg recognized the efforts made in recent years to more effectively attribute UMRR-EMP in LTRMP's products and activities. She suggested maintaining the historical name (i.e., LTRMP) over the next six months, at which point the UMRR-EMP CC would reevaluate progress towards more effectively communicating that LTRMP is a function of UMRR-EMP. Chris Erickson asked if any of the possible names for LTRMP would have greater strength or weakness in Congress. Hubbell explained that it is most important that program stakeholders, including Congressional members, know that LTRMP is funded through USACE's budget so that opportunities to leverage support are not lost.

Gary Meden, in summarizing the discussion, concluded that partners' recognize the need to better communicate that LTRMP is a function of UMRR-EMP, while preserving LTRMP's identity. Meden asked Hubbell if he supports Sternburg's suggestion, with a six-month check-in to ensure progress. Hubbell expressed support for the proposed approach. He acknowledged sensitivities in renaming LTRMP, but stressed the importance of clearly identifying LTRMP as part of UMRR-EMP. He said it will be important to focus on printed products, web pages, program communications, etc. Hubbell acknowledged that substantial progress has been made over the past year. In response to a question from Meden, Schlagenhaft said he does not believe replacing "Program" with "Partnership" would make a meaningful difference, as both programs and partnerships can be independent. Jawson disagreed, and stressed the need for a more descriptive name that fully encompasses the component's endeavors, including research, analysis, and monitoring, as well as the breadth of the partnership.

Fischer expressed support for this suggestion. He encouraged USGS to update LTRMP's website to better reflect that it is part of UMRR-EMP. In addition, he said there may be opportunities to meld the LTRMP website with UMRR-EMP's main web page when USACE redesigns its website. Sternburg encouraged USACE to also make LTRMP more visible on UMRR-EMP's web page. Ken Westlake said all program-related web pages should be more effectively linked to UMRR-EMP's main web page.

Sternburg moved and Fischer seconded a motion to maintain the name Long Term Resource Monitoring Program (LTRMP) for UMRR-EMP's science activities over the next six months, with the understanding that there will be a more concerted effort to consistently and explicitly credit UMRR-EMP for LTRMP products and activities. The UMRR-EMP CC unanimously approved the motion, with Jawson abstaining. The Committee will revisit this issue at its February 28, 2013 quarterly meeting.

Implementation Issues Assessment

Process Overview

Marv Hubbell overviewed progress and next steps in completing the Implementation Issues Assessment (IIA). The Assessment will communicate, and make recommendations, about how to resolve several policy and programmatic issues. The primary audiences include the Administration, USACE, and/or partners. Partners are using a series of issue papers to facilitate their IIA-related discussions and provide a record of their conclusions, including judgments about options for resolving the issues.

The UMRR-EMP CC identified a set of 13 issues to address in the IIA at its August 2010 quarterly meeting, and then adopted statements defining each issue at its February 2011 quarterly meeting. The Nonprofits as Cost Share Sponsors and Land Acquisition Issue Papers were finalized at the UMRR-EMP CC's May 24, 2012 meeting. Hubbell said his goal is for the UMRR-EMP CC to complete its discussion of most remaining issues at today's meeting, leaving only a handful to finalize at the Committee's November 29, 2012 meeting.

State Participation and Leadership Support

Jim Fischer explained that, recognizing the states' shrinking resources and increasing workloads over the past decade, partners agreed to explore options for facilitating state participation in more efficient ways and better engaging state agency leaders. In previous discussions of this issue, the Committee expressed support for advancing the following options:

Issue 1: Maintaining states' ongoing, active participation

- Option 1.1 — Establish a small working group to evaluate USACE's UMR institutional arrangements, including the functional roles of each team, and identify ways to integrate the UMR teams' functions and streamline participation.
- Option 1.3a — Evaluate the potential benefits (i.e., efficiencies) of replacing one in-person quarterly meeting per year with a webinar.
- Option 3.1 — Provide reimbursement to states for non-routine UMRR-EMP-related time and travel — e.g., LTRMP strategic planning meetings.
- Option 4 — Consider ways to advance small-scale habitat projects.
- Option 4.3 — Develop habitat projects that combine small-scale measures in several areas, similar to the Bank Stabilization project in Pools 5 through 10.

Issue 2: Engaging state agencies' upper level leadership

- Option 1.1 — Invite upper level state agency leaders to one UMRR-EMP CC meeting per year that is devoted to higher-level issues and program success highlights.
- Option 1.3 — Include UMRR-EMP as a regular agenda item when USACE's UMR District Commanders meet with the states.

Regarding Option 3.1 under Issue 1, Janet Sternburg urged states to request travel reimbursement only when necessary. Fischer agreed and clarified that Option 3.1 suggests travel reimbursement is provided for special occasions only, not for routine engagement. Hubbell noted that USACE has been addressing several options related to improving the efficiency of partner engagement — e.g., evaluating the potential roles of existing groups in implementing the program's adaptive management efforts, as described in Option 1.2 under Issue 1.

The UMRR-EMP CC agreed that the State Participation and Leadership Support Issue Paper is complete.

LTRMP Implementation

Karen Hagerty said minor modifications were made to the May 7, 2012 draft LTRMP Implementation Issue Paper, based on comments at the May 24, 2012 UMRR-EMP CC quarterly meeting. This includes clarifying that only non-federal partners are able to advocate to Congress and the Administration. Hagerty also noted that the option to task a small working group to address LTRMP implementation in low funding years is already underway. The UMRR-EMP CC agreed that the LTRMP Implementation Issue Paper is complete.

Delegated Authority

Hubbell said the revised Delegated Authority Issue Paper, dated July 10, 2012, clarifies that a 2004 Corps-wide policy allows Divisions to approve HREPs regardless of cost, unless the project involves a policy matter requiring HQ review/approval or triggers an HQ review requirement. These requirements, per Engineering Circular 1165-2-509, include any project costing \$45 million or more or involving a policy matter; public safety concern; high level of complexity; or significant economic, environmental, and social effects to the nation. MVD confirmed that the 2004 delegated authority policy applies to UMRR-EMP in May 2012. Hubbell noted that Option 2 of the issue paper, developed before the recent clarification, called for a briefing paper to document that relevant policy(ies). The UMRR-EMP CC

agreed that the issue paper and IIA will be sufficient to communicate the details of the delegated authority policy. The Committee agreed that the Delegated Authority Issue Paper is complete.

Adaptive Management

Hubbell recalled that, at its May 24, 2012 meeting, the UMRR-EMP CC asked USACE and USGS staff to develop a visual representation of the proposed roles and responsibilities for implementing adaptive management (AM). In response to that request, Hubbell developed two flow charts, which are included in the agenda packet: one describes AM implementation in the context of the program's partnership and the second provides more detail on specific actions at each phase of HREP planning and construction. Since the May meeting, Hubbell said USACE and USGS staff have agreed that an "AM Integrator" should be responsible for overseeing AM coordination throughout the program. The Integrator would be either an individual or a group and would assist partners in executing their AM roles — e.g., documenting and communicating the program's AM implementation and results/conclusions. Hubbell noted that the planning flow chart provides for UMRR-EMP CC review of all habitat projects with an AM component before those projects are submitted to MVD for approval. He said concepts from DOI's 2009 AM Technical Guide are integrated into the "Systemic AM Phase." But, the UMRR-EMP Regional Review Plan's requirements have yet to be incorporated in the HREP AM planning flow chart. Hubbell highlighted the "Technology Transfer" stage, which calls for documenting and communicating AM results more formally.

Hubbell observed that the partnership's original intent in raising this issue was simply to make the program's AM efforts more explicit and formal. He acknowledged concerns related to determining an appropriate balance between maintaining the *status quo* and doing extensive AM analyses at the expense of other program priorities. Hubbell said many questions, including the appropriate level of AM investment, will need to be explored. The UMRR-EMP Strategic Plan process and the actual project planning and sequencing process will provide the necessary opportunities.

Bob Clevestine suggested that a step be created in which the UMRR-EMP CC and System Ecological Team (SET) evaluate AM results and draw any conclusions and/or make recommendations relevant to future action. The new step would link the first and last steps, establishing the typical AM feedback loop. In response to a question from Sternburg, Hubbell clarified that the UMRR-EMP CC would only review definite project reports (DPRs) for projects involving an AM analysis. The intent is to ensure the UMRR-EMP CC's engagement in the program's AM efforts. In response to a question from Clevestine, Hubbell said this type of information exchange could be part of the standard District HREP reports at UMRR-EMP CC's quarterly meetings. Sternburg said the UMRR-EMP CC should more broadly review how the program implements AM, rather than examining individual projects. Hubbell said partners can determine the details of how to best engage the UMRR-EMP CC in the AM process. For now, Hubbell said he simply wants to make it clear that there will be a role for the Committee.

In response to a suggestion by Tim Schlagenhaft, Hubbell said USACE and USGS staff will modify the HREP AM planning flow chart to include more descriptive information about AM implementation within each stage. In response to a question from Barry Johnson, Hubbell said USACE has not indicated an intention to develop policy guidance based on Craig Fischenich's 2012 report on the application of AM techniques on ecosystem restoration projects.

Barry Johnson noted that the HREP AM planning flow chart includes a process for reevaluating project design if evaluation results show that the project is not performing as intended, regardless of whether the project includes an AM component. Barb Naramore expressed concern that the chart, which shows redesign flowing into project modification, may create an expectation that all projects that do not meet their management objectives will be modified. Gary Meden suggested that a decision point be added to the flow chart to clarify that all "underperforming" projects will not necessarily be modified.

Hubbell reported that USACE and USGS staff have substantially revised the May 7, 2012 draft AM Issue Paper based on partner comments. Most of the partners' suggestions are incorporated into the August 14 version, with the exception of Wisconsin DNR's call for a Restoration Team (R-Team) that would assume the SET's responsibilities and coordinate HREP-related AM. Instead, Hubbell said the SET, with some modifications, will assume the primary role for identifying and prioritizing AM opportunities.

In response to a question from Schlagenhaft, Hubbell explained that UMRR-EMP will continue to employ AM techniques in its current habitat projects (e.g., Pool 12 Overwintering), even as partners further explore AM-related implementation details in the UMRR-EMP strategic plan. Hubbell explained that UMRR-EMP's AM approach will likely evolve over time as insights emerge and partners continue to address implementation questions and other considerations. In response to a question from Sternburg, Hubbell said Chuck Thieling is serving in something of an AM Integrator capacity at present, aiding the HREP planning teams in exploring AM opportunities and designs.

In response to a question from Naramore, Hubbell agreed that the AM Issue Paper includes far more detail than will be included in the IIA. The UMRR-EMP CC agreed that the AM Issue Paper is complete for IIA purposes, though many questions remain for exploration in the Strategic Plan and beyond. Hubbell said USACE and USGS staff will soon distribute modified flow charts, based on today's discussion, and a revised AM issue paper that links the two flow charts.

Fischer emphasized that, because of limited resources, AM implementation will involve trade-offs with other program priorities. He suggested that partners define a scalable approach, starting with the AM-related requirements per Section 2039 of WRDA 2007.

Capacity for HREP Operation and Maintenance

Clevenstine presented a revised draft Capacity for HREP Operation and Maintenance (O&M) Issue Paper, dated August 14, 2012, that reflects partner comments on the May 7, 2012 version. Clevenstine explained that Section 107(b) of WRDA 1992 assigns full O&M responsibility to the agency that manages the lands on which the HREP is located. Additionally, Section 221 of the 1970 Flood Control Act as amended requires project sponsors to operate, maintain, repair, replace, and rehabilitate projects unless and until they are deauthorized. Clevenstine overviewed options for addressing the substantial and growing cumulative HREP O&M responsibilities of the Service and the states. These options include:

1. Design HREPs in ways that minimize O&M
2. States and NGOs contribute to the O&M of HREPs located on Refuge lands
3. Repeal the provision in WRDA 1992 that requires project sponsors to assume sole responsibility for O&M of HREPs located on lands they manage
4. Obtain HREP O&M funds from USACE's O&M account
5. Create a new line item in USFWS's budget to support its HREP O&M-related activities
6. Maintain *status quo*

Clevenstine noted that Option 2 is already being implemented to an extent, with states having assumed O&M responsibility for some projects on General Plan lands. He said the following additional information would help inform the partners' consideration of this issue:

1. Total and annual O&M investments to date, by partner
2. Five- and 10-year estimates of HREP O&M costs and other resource needs

3. Examples of how USACE provides direct support to project sponsors for O&M within its other large aquatic restoration programs — e.g., Everglades
4. Comprehensive summary of HREP sponsor requirements, including project agreement terms and conditions

Hubbell said USACE is working with project delivery teams (PDTs) to more accurately estimate O&M obligations in definite project reports (DPRs).

Sternburg observed that related issues remain concerning a sponsor's ability to implement O&M on HREPs that involve navigation structures. Hubbell explained that Deanne Strauser is preparing a separate paper on that issue, as well as USACE's potential to assume O&M responsibility for certain HREP elements. Strauser's issue paper will be presented to the UMRR-EMP CC at its November 29, 2012 meeting. Meden said Option 4 (i.e., USACE paying for HREP O&M) is likely not feasible, unless the O&M is on USACE-owned infrastructure. Fischer suggested expanding Data Need 1 (i.e., total and annual O&M investment to date) to include cost data by project and project type.

Tim Schlagenhaft asked whether project partnership agreements (PPAs) explicitly detail O&M responsibilities — e.g., a requirement to dredge a backwater if it fills in with sediment. Clevenstine and Hubbell said the PPAs are very specific regarding a sponsor's O&M obligations. Regarding Schlagenhaft's example, Hubbell explained that O&M estimates assume an average sediment rate. If a project site experiences significant damage (e.g., massive sedimentation following a major flood event), then removing that sediment would be considered rehabilitation, which would be subject to the project's original cost share formula. Schlagenhaft emphasized the importance of being explicit and comprehensive about O&M and rehabilitation obligations since they become future liabilities for the project sponsor. In response to a question from Barb Naramore, Mike Steuck and Tim Yager said the current level of O&M information provided in PPAs is sufficient. Hubbell said the definition of what constitutes rehabilitation rather than O&M is ambiguous and needs to be clarified. However, he said this question is beyond the IIA's scope and is being addressed on a separate track.

Sternburg said different project types will have different life spans, and suggested that a project's life expectancy should be factored in O&M estimates. Hubbell said there have been a couple of situations when USACE has not held a project sponsor responsible for O&M when a project features does not function properly. Kevin Foerster observed that early HREP designs entailed substantial O&M — e.g., large-scale pumps. He said projects have evolved in ways that are much more efficient to O&M. Clevenstine said the 50-year design life that is standard for civil works projects is not as well suited to aquatic restoration. Yager said efforts to work with the natural river processes will tend to lower O&M costs. Schlagenhaft and Kevin Stauffer mentioned that Minnesota is currently exploring legal issues associated with sponsoring an HREP, given that state agencies cannot obligate future legislatures.

In response to a question from Steuck, Clevenstine clarified that Option 5 (i.e., create a new line item in USFWS's budget to support HREP O&M) is referring to the Refuge budget. Karen Hagerty cautioned partners not to unintentionally send the message that they are no longer interested in sponsoring HREPs. If agencies on the UMR are not willing to assume O&M responsibilities, Hagerty said there are plenty of sponsors elsewhere in the country who would happily use the funds. Meden said that, in addition to Option 4, Options 3 (i.e., repeal the provision in WRDA 1992 assigning sole responsibility for O&M of HREPs to the agency that manages the lands on which the project is located) is likely not feasible.

Schlagenhaft suggested that Option 1 be revised to also call for designs that either minimize or eliminate O&M. Foerster disagreed, noting that all projects will entail some level of O&M costs. In response to a question from Hubbell, Schlagenhaft said Minnesota has not yet cost shared an HREP. Hubbell explained that PPAs are intentionally very detailed and include many provisions regarding O&M obligations in order to protect the federal government. He said these will likely cause significant concern with some of the

state's reviewers, but observed that the provisions are largely standard and non-negotiable. He said a state's comfort level and trust tend to build as it gains experience with PPAs. Hubbell added that Minnesota's specific concerns likely cannot be addressed in the context of the IIA. Mike Jawson and Meden suggested that partners research comparable USACE restoration programs to determine whether UMRR-EMP's approach to O&M is consistent. The UMRR-EMP CC agreed to eliminate current Options 3 and 4, and instead adding the comparability analysis Jawson and Meden suggested to the list of data needs. Clevenstine suggested advancing Options 1 and 2 as partner recommendations. Foerster suggested that Option 5 also be a recommended option, noting the potential for UMRBA and other non-federal partners to advocate regarding the Service's budget. UMRR-EMP CC members agreed to explore Options 1, 2, and 5 of the Capacity for HREP O&M Issue Paper. In response to a question from Naramore, Hubbell said the upcoming strategic planning process will consider whether and how to respond to the identified data needs.

HREP Planning and Prioritization

Hubbell explained that the August 13, 2012 draft HREP Planning and Prioritization Issue Paper calls for a more explicit and consistent consideration of relevant state and federal priorities in planning and prioritizing HREPs. This consideration would follow the HREP component's use of partner-endorsed ecological goals and objectives to guide project planning and prioritization and ensure the most critical needs are addressed at the system, reach, and pool scales. The USFWS's Northern Hemisphere Migratory Bird Plan is an example of an ancillary river-related priority. Hubbell said consideration of agency plans and priorities is currently somewhat *ad hoc*, depending in part on individual PDTs. Clevenstine suggested pursuing Option 2 — i.e., more explicitly and consistently considering state and federal priorities related to river restoration. He said DPRs should document any state and/or federal priorities that will be addressed. He said this information has not been captured in the past.

In response to a question from Hagerty, Hubbell said he anticipates that the UMRR-EMP strategic planning team will develop a list of relevant state and federal priorities for partners to consider in planning, designing, and prioritizing HREPs. Fischer expressed support for Option 2. He also suggested that, for any state or federal priority that is utilized in project planning, its associated targets or measures of success are included in project evaluation, if available.

HREP Evaluations

Hubbell outlined the options included in the August 13, 2012 draft HREP Evaluations Issue Paper, as follows:

1. Maintain *status quo*.
2. Increase fiscal and staff resources devoted to completing project evaluation reports, including biological monitoring either through adaptive management analyses or focused research.
3. Direct the UMRR-EMP Strategic Planning Team to address the following questions:
 - a) How can UMRR-EMP best implement biological monitoring and analysis in a cost effective manner?
 - b) How can project evaluations make more effective use of LTRMP data?
 - c) How can project evaluations be used in UMRR-EMP's adaptive management efforts?
 - d) How can evaluation results be most effectively communicated to partners — e.g., HREP Design Handbook, communications with site managers, presentations to District-based planning teams, etc.?
 - e) How can partners determine when projects no longer require monitoring?

- f) How can response variables be compared across projects? What consistencies in monitoring are needed?, what information is needed?, and who would do the comparison?
- g) How can monitoring data be used to inform future projects?
- h) Given other program priorities, what level of resources should be devoted to project evaluation?

Hubbell noted that, regardless of which option(s) is selected, partners' roles and responsibilities as they relate to HREP evaluations should be clearly communicated in definite project reports (DPRs) and the UMRR-EMP Strategic Plan. Sternburg observed that Option 2 relates to concepts in the Adaptive Management Issue Paper. Tim Schlagenhaft said HREP evaluations are an important component of the program's ability to learn about the effectiveness of its restoration efforts. He emphasized the need to employ adaptive management concepts at a systemic level. Fischer noted that LTRMP's status and trends information can also contribute to project evaluation.

Barb Naramore recognized that project evaluation reports have frequently been delayed in recent years. She suggested that, as part of Option 2, the IIA express a commitment to establishing a schedule for completing of project evaluations in a timely manner following project completion. She suggested the UMRR-EMP Strategic Plan as an appropriate place to determine the schedule. Hubbell agreed with Naramore's suggestion.

The UMRR-EMP CC agreed that the HREP Evaluations Issue Paper is complete.

UMRR-EMP's Habitat Project Types

Hubbell overviewed the August 8, 2012 draft UMRR-EMP's Habitat Project Types Issue Paper. He said partners have been implementing Option 2 over the past year — i.e., submitting a project-specific proposal to MVD when exploring UMRR-EMP's ability to advance a new restoration approach. In particular, this has included exploring opportunities to advance fish passage and water level management through project proposals. By approving the L&D 3 Fish Passage fact sheet, MVD confirmed that UMRR-EMP can implement fish passage projects. By consensus, the UMRR-EMP CC agreed to recommend Option 2. The UMRR-EMP CC agreed that the HREP Evaluations Issue Paper is complete.

Next Steps

Hubbell said USACE will distribute draft issue papers regarding emerging trends and issues, construction cost sharing, and HREP O&M involving navigation structures to partners by the end of September. A conference call will be convened in mid-October to discuss the draft papers, and then revised versions will be included in the November 29, 2012 UMRR-EMP CC meeting packet, with the objective of completing work on these papers at the meeting.

UMRR-EMP Strategic Plan

Hubbell said UMRR-EMP strategic planning will likely be initiated in early spring 2013, with the goal of having the program strategic plan in place prior to LTRMP's FY 10-14 Strategic Plan's expiration at the start of FY 15. He anticipates the planning process will include seven to nine meetings, some of which will be held via webinar. More detailed information will be provided at the November 29, 2012 UMRR-EMP CC meeting.

Habitat Rehabilitation and Enhancement Projects

District Reports

Charlie Hanneken said Illinois recently signed its sponsorship letter of intent for Rip Rap Landing. The District's current planning focus includes Clarence Cannon and Piasa and Eagles Nest Islands, with habitat modeling having been recently completed for Clarence Cannon. Hanneken said MVS's design priority is the interior and exterior water control structures for Ted Shanks. Its construction priorities are Batchtown, Pools 25 and 26 Islands, and Ted Shanks. Hanneken said dry conditions have permitted good progress on construction. District staff are scheduled to complete a draft evaluation report for Stump Lake this fiscal year and for Calhoun Point in FY 13.

Marv Hubbell said MVR staff anticipate that the DPR for Pool 12 Overwintering will be approved soon, with construction beginning in the second half of FY 13. The District continues planning on Huron Island and construction on Fox Island and Rice Lake. Low water conditions have allowed construction to proceed efficiently on both projects. Hubbell explained that Huron Island will be MVR's next construction priority, following construction of the first phase of Pool 12 Overwintering. During Huron Island's construction, District staff will evaluate Pool 12 Overwintering's success. This will allow staff to incorporate lessons learned from the first stage of Pool 12 Overwintering to the project's second stage. MVR recently completed the Lake Odessa levee repair to address safety concerns. Final inspection of the project is pending.

Tom Novak said USACE and USFWS will host a dedication ceremony for Pool 8 Islands in Brownsville, following today's meeting. Novak said MVP staff anticipate awarding a construction contract soon for Capoli Slough Stage 2, which will become MVP's top construction priority in 2013. The District's current planning priorities include Harpers Slough and L&D 3 Fish Passage. Novak said work on Capoli Slough Stage 1 will likely be completed in November. Novak noted that NESP's implementation guidance specifically identifies fish passage projects L&Ds 4, 8, 22, and 26. However, Headquarters recently confirmed that NESP can also construct fish passage at L&D 3.

HREP Highlight: North and Sturgeon Lakes

Novak presented on the North and Sturgeon Lakes habitat project, which is proposed for an area just upstream of L&D 3. The project includes 1) seven islands in North Lake and five islands in Sturgeon Lake and 2) possible a pool-scale water level drawdown of between 9 and 18 inches that would follow island construction. The project's habitat improvement goals include restoring aquatic vegetation (e.g., wild rice) and bathymetric diversity, reducing wind fetch, and increasing the quantity and quality of overwintering habitat for centrarchids. Novak explained that UMRR-EMP is coordinating with USACE's channel maintenance program. This coordination promises substantial cost savings for both UMRR-EMP (i.e., reduced sand costs) and the channel maintenance program (i.e., reduced unloading costs). The channel maintenance program would cover the cost of dredging the navigation channel during the pool-scale drawdown, with UMRR-EMP still responsible for supplemental dredging. He cited several issues with the project, some of which cannot be resolved. These issues include that some islands are not incrementally justified, drawdowns of any depth conflict with other stakeholder priorities, the drawdown may only be able to produce minor benefits, river conditions may not be favorable when the drawdown is planned, and a cost share sponsor has yet to be identified.

Mike Jawson mentioned the potential to extract frac sand from dredged material and asked if that demand could compete with UMRR-EMP's habitat projects. Novak acknowledged that increased frac sand demand could be a potential issue, but said specific impacts are unknown at this time. Fischer said that, if 40 percent of the dredged material is of sufficient quality for fracing, there will still be 60 percent of the material remaining that could be used for island building.

In response to a question from Tim Schlagenhaft, Novak explained that the potential benefits from a pool-scale drawdown are limited because the nearby Prairie Island nuclear plant's water supply requirements limit the potential extent of the drawdown. Fischer expressed appreciation to Novak and MVP staff for coordinating with the channel maintenance program and creating cost savings for both programs.

Long Term Resource Monitoring Program

Product Highlights

Mike Jawson said there was no mention of UMRR-EMP throughout ESPN's coverage of the June 21-24, 2012 Bassmasters tournament in La Crosse. He said that was an important missed opportunity for UMRR-EMP to reach a broad public audience and urged partners to be more aware of such opportunities for public outreach in the future.

Jawson said UMESC staff are currently analyzing how field station staff and UMESC component specialists allocate their time. UMESC has found that relatively little time is spent on research and analysis, with most time spent on component monitoring. Jawson emphasized that, with low funding projected for several years, the time spent on research and analysis will decrease even further. He stressed that research and analysis are critical to gaining insight regarding status and trends. Jawson urged partners to consider whether the balance among monitoring, research, and analysis should be modified.

Jawson overviewed LTRMP's second quarter product highlights, including the following:

- Five presentations:
 - 1) Asian carp insights from the Mississippi River and China, including their ecological impact, given at a National Park Service Mississippi River Forum
 - 2) Terrestrial LiDAR and bathymetric data integration and potential UMR applications, given at the 2012 Digital Mapping Techniques Conference
 - 3) Adjusting water temperature data to reflect variation in date and time of day that samples are taken, given at the 2012 Joint Statistical Meeting
 - 4) Comparing detection accuracy of two alternating submersed aquatic vegetation survey methods — i.e., their ability to capture species of low abundance and/or patchy distribution within sites, given at the 2012 Joint Statistical Meeting
 - 5) Variation in nutrient delivery and composition in the UMR depending on connectivity and hydrologic exchange, given at the Ecological Society of America's 2010 Annual Meeting
- Report summarizing fish component data in Pool 13
- Chapters for two books: 1) Design and analysis of long-term ecological monitoring studies and 2) Modeling dynamic landscapes
- Workshop to assess what floodplain connectivity-related information scientists, managers, and decision makers most need
- Demonstration and evaluation of technology for mapping submerged aquatic vegetation
- Color infrared orthophoto mosaics of Pools 1-13 that will be used in the 2012 LC/LU dataset
- Quality assurance of the entire LTRMP electrofishing fleet

Jim Fischer concurred with Jawson's comment about the need for more research and analysis. However, Fischer also stressed the value of LTRMP's extensive monitoring database and the related reports and models it has made possible. For example, LTRMP data have been essential in understanding Asian carp, a key management concern. Fischer said LTRMP's information is extensively and frequently used by internal and external stakeholders, including the public. Jawson agreed with Fischer's comments, but expressed concern that, due to funding limitations, LTRMP may be at a point where continuing to collect data at current levels will come at the expense of providing important information. Jawson also said the HREP component is not making adequate use of LTRMP data in project planning and design.

LTRMP Activities Update

Karen Hagerty said USACE staff are currently developing FY 13 scopes of work (SOWs) for the three District LTRMP Technical Representatives. Hagerty said their focus areas will remain the same as FY 12; however, their budgets will be reduced by nine percent, which is in line with cuts to UMESC and the field stations.

Hagerty said the A-Team is currently reviewing the June 2012 draft report on Indicators of Ecosystem Health for the UMRS. The A-Team anticipates presenting a final report to the UMRR-EMP CC at its November 29, 2012 meeting.

Hagerty recalled that, in a June 11, 2012 email from Hubbell, partners were asked to submit habitat- and science-related questions or information needs. These might include the status of an individual species or the last ten years of data related to an ecological trend. The responses will inform the program's SOWs, science planning efforts and research frameworks, and UMRR-EMP strategic planning. Hagerty overviewed partners' submissions, as follows:

- Develop a fish habitat index (e.g., AHAG v.2.0)
- Invite component specialists to participate in the System Ecological Team's activities
- Convene a workshop(s) on how to use LTRMP's graphical browser
- Develop a paper regarding Asian carp
- Develop a paper regarding UMRR-EMP's contributions to other national and international programs
- Prioritize critical questions about the UMR's ecosystem for the program to address

Hagerty reported that an *ad hoc* group to address LTRMP implementation in low funding convened conference calls on June 26 and July 20, 2012. Group members include Marv Hubbell and Hagerty (USACE), Barry Johnson and Jennie Sauer (USGS), Tim Yager and Bob Clevenstine (USFWS), John Chick (Illinois Natural History Survey/NGRREC), Diane Ford (IA DNR), Walt Popp (MN DNR), Janet Sternburg (MO DoC), Pat Short (WI DNR), and Kirsten Mickelsen (UMRBA). Hagerty explained that the group developed an FY 13 LTRMP allocation plan, which is included in the agenda packet. The plan assumes a \$5.129 million LTRMP budget for FY 13, based on the UMRR-EMP's standard allocation formula and an assumed overall program budget of \$16.986 million. She said these assumptions leave LTRMP nine percent short of covering its base monitoring expense of \$5.638 million. The recommended allocations employ a variety of adjustments to keep LTRMP spending within the anticipated budget. In particular, field stations' travel budgets have been significantly reduced or eliminated and critical equipment purchases are being deferred. UMESC's LiDAR license and accuracy assessment of the 2010 land cover/land use data would not be funded in FY 13. In response to a question from Tim Schlagenhaft, Hagerty said the Field Station Team Leaders reviewed the proposed allocations and determined implications for their individual stations. Schlagenhaft moved and Ford

seconded a motion to endorse the FY 13 LTRMP allocation plan as presented in the agenda packet. The motion passed unanimously.

Hagerty overviewed several long term issues that need to be addressed related to LTRMP's implementation in low funding years, including assessing impacts to staff and equipment and evaluating UMESC, USACE, and field stations' indirect rates. She said the *ad hoc* group will also begin focusing on LTRMP's implementation in FY 14 under continued low funding. Hagerty said that, if base monitoring continues to be the partners' top priority for LTRMP, then additional funding should go to equipment needs first. In response to a question from Gary Meden, Hagerty said UMRR-EMP will execute at \$16.986 million in FY 13, until the final appropriation is known. That is the House's approved funding level and is the lowest FY 13 funding scenario that has been advanced.

Sternburg encouraged USACE to look for reductions in regional administration expenses that could help LTRMP address unfunded needs, such as failure of key monitoring equipment. Schlagenhaft expressed appreciation to the *ad hoc* group for its work developing the FY 13 LTRMP plan and encouraged the group to continue addressing remaining issues related to LTRMP's implementation in low funding years, given that fiscal conditions will likely remain difficult for the foreseeable future. Hagerty also urged the state field stations to seek carry-over funds.

A-Team Report

Scott Gritters reported that the A-Team met on February 3, 2012 to discuss the A-Team's roles and responsibilities, in connection with the draft Joint Charter for the UMRR-EMP's coordinating groups. At its April 25, 2012 meeting, the A-Team again discussed the draft Joint Charter and reviewed LTRMP research frameworks for the mussel, aquatic vegetation, and land cover/land use components. Gritters said the A-Team will review research frameworks for the floodplain connectivity and biological indicators components upon their completion. Gritters said Pat Short from Wisconsin DNR and Stephen Winter from USFWS recently joined the A-Team.

Gritters said the five LTRMP research frameworks identify many new important opportunities for the program. However, limited funding is challenging. The A-Team will work to prioritize activities among the research frameworks, and will consider how the long term data set may be affected by limited resources.

Gritters reported that the A-Team convened via conference call on August 28 to discuss the draft report on Indicators of Ecosystem Health for the UMRS. The A-Team plans to meet in-person this fall at the Havana Field Station.

LTRMP Highlight: Land Cover/Land Use and LiDAR Products Update

Larry Robinson reported that UMRR-EMP collected both LiDAR and aerial photography for nearly all of the UMRS between 2007 and 2011. Robinson overviewed the data collection process and described the various products and their uses. These include a range of images, such as first return and bare earth hillshade, aerial photograph, etc. He reported that Tier 1 LiDAR products for Pools 2-14 and 20-24 are available online, and Tier 2 LiDAR products for those pools will be available by October. Tier 1 LiDAR products for Pools 15-19 will also likely be available by October, with Tier 1 processing remaining on Pool 25 through the Open River. Robinson reported that LC/LU images are available for the following locations: Pools 4, 8-9, 13-14, 18, and 26; the Open River South; and the Alton, La Grange, Peoria, Starved Rock, and Marseilles Pools. LC/LU images for the remaining locations are scheduled to be published throughout FY 13. Robinson said the geospatial products will be served via shapefiles and on Google Earth in FY 13. He demonstrated how Google Earth can be used to easily view the LC/LU data.

Other Business

Kevin Foerster introduced Rich King who is the new District Manager for USFWS's McGregor District, which spans Pools 9-11.

The upcoming quarterly meetings are as follows:

- **November 2012 — St. Paul**
 - UMRBA WQEC — November 27-28
 - UMRBA Board — November 28
 - UMRR-EMP CC — November 29

- **February 2013 — Quad Cities**
 - Pending (possible UMRBA Board annual work planning session) — February 26
 - UMRBA — February 27
 - UMRR-EMP CC — February 28

- **June 2013 — St. Louis***
 - UMRR-EMP CC and Water Quality Meetings — June 4
 - Joint UMRBA/ORSANCO Meetings — June 5
 - UMRBA — June 6

* Dates, location, and meeting line-up are all tentative at this point. [Note: Subsequent to the meeting, USACE determined that UMRR-EMP CC will likely hold its spring quarterly meeting via webinar, at a date and time to be determined.]

With no further business, the meeting adjourned at 1:56 p.m.

**UMRR-EMP CC Attendance List
August 30, 2012**

UMRR-EMP CC Members

Gary Meden	U.S. Army Corps of Engineers, MVR [on behalf of Renee Turner]
Kevin Foerster	U.S. Fish and Wildlife Service, UMR Refuge
Mike Jawson	U.S. Geological Survey, UMESC
Dan Stephenson	Illinois Department of Natural Resources
Diane Ford	Iowa Department of Natural Resources
Tim Schlagenhaft	Minnesota Department of Natural Resources
Janet Sternburg	Missouri Department of Conservation
Jim Fischer	Wisconsin Department of Natural Resources

Others In Attendance

Tom Novak	U.S. Army Corps of Engineers, MVP
Chris Erickson	U.S. Army Corps of Engineers, MVP
Marvin Hubbell	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Tom Hodgini	U.S. Army Corps of Engineers, MVR
Charlie Hanneken	U.S. Army Corps of Engineers, MVS
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuge
Bob Clevestine	U.S. Fish and Wildlife Service, UMR Refuge
Rich King	U.S. Fish and Wildlife Service, UMR Refuge
Steve Winter	U.S. Fish and Wildlife Service, UMR Refuge
Dave Bornholdt	U.S. Geological Survey, MWA
Barry Johnson	U.S. Geological Survey, UMESC
Nate De Jager	U.S. Geological Survey, UMESC
Jennifer Dieck	U.S. Geological Survey, UMESC
Brian Ickes	U.S. Geological Survey, UMESC
Larry Robinson	U.S. Geological Survey, UMESC
Jennifer Sauer	U.S. Geological Survey, UMESC
Mike Steuck	Iowa Department of Natural Resources
Scott Gritters	Iowa Department of Natural Resources
Kevin Stauffer	Minnesota Department of Natural Resources
Robert Stout	Missouri Department of Natural Resources
Tom Boland	AMEC
Brad Walker	Missouri Coalition for the Environment
Cecily Smith	Prairie Rivers Network
Don Powell	SEH Inc.
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association