

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

**May 24, 2012
Quarterly Meeting**

**Sheraton Westport Plaza
St. Louis, Missouri**

Tim Yager of the U.S. Fish and Wildlife Service called the meeting to order at 8:00 a.m. on May 24, 2012. Other UMRR-EMP CC representatives present were Renee Turner (USACE) on behalf of Charles Barton, Mike Jawson (USGS), Dan Stephenson (IL DNR), Diane Ford (IA DNR), Kevin Stauffer (MN DNR) on behalf of Tim Schlagenhaft, Janet Sternburg (MO DoC), and Ron Benjamin (WI DNR) on behalf of Jim Fischer. A complete list of attendees follows these minutes.

Tim Yager announced that Chuck Spitzack will retire in late May and Charles Barton will retire on July 28. Yager expressed appreciation for Spitzack's leadership on the Navigation Feasibility Study, the Navigation and Ecosystem Sustainability Program (NESP), and the Comprehensive Plan. He also expressed sincere gratitude for Barton's work in advancing the partnership's water resources priorities throughout the region.

Minutes of the March 1, 2012 Meeting

Janet Sternburg moved and Diane Ford seconded a motion to approve the draft minutes of the March 1, 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
- LTRM – \$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 LTRM to MVP for the Capoli Slough construction award and \$93,000 from LTRM to MVR for the Rice Lake construction award. 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 LTRM allocation is increased by a corresponding amount.

Hubbell reported that the program's obligation rates through the second quarter of FY 12 are as follows:

- Total (for the program) – 54 percent
 - MVP – 19 percent
 - MVR – 32 percent
 - MVS – 35 percent
 - LTRM – 100 percent

Hubbell said the FY 2010-2014 LTRM Strategic Plan has increased UMRR-EMP's efficiency in finalizing purchase requests (MIPRs) for LTRM work with the states and UMESC.

FY 13 Appropriations Status

Hubbell reported that the Senate Appropriations Committee matched the President's \$17.880 million request for UMRR-EMP in its FY 13 energy and water appropriations measure. The House Appropriations Committee approved \$16.986 million in FY 13 funding for UMRR-EMP. Hubbell said both funding levels would not fully support LTRM's base monitoring needs, under the program's standard allocation formula. He acknowledged that UMRR-EMP has been fortunate to maintain stable funding over the past several years relative to other USACE restoration programs.

UMRR-EMP/NESP Transition Plan

Hubbell said that, in January 2012, USACE Headquarters (HQ) provided comments to MVD on the June 2010 UMRR-EMP/NESP Transition Plan. On May 14, MVD responded to those comments, submitting a revised Plan to HQ that 1) clarifies what USACE understands to be Congress' intent in requesting a transition plan, 2) modifies language to reflect that Congress likely would not direct a transition but would simply start funding NESP and stop funding UMRR-EMP if it elects to merge the programs, 3) updates background information, and 4) describes the two programs' authorizations. Hubbell emphasized that no fundamental changes were made to the Plan's message regarding the possible program transition. If HQ is satisfied with the revisions, the Transition Plan will go to ASA(CW) Jo-Ellen Darcy, who will review the Plan and coordinate with OMB before submitting the Plan to Congress.

2010 UMRR-EMP Report to Congress

Hubbell said USACE HQ has indicated that it will transmit the 2010 UMRR-EMP Report to Congress to ASA(CW) Jo-Ellen Darcy together with the UMRR-EMP/NESP Transition Plan.

UMRR-EMP Regional Review Plan

Hubbell announced that, on May 16, 2012, USACE HQ formally approved UMRR-EMP's Regional Review Plan. Hubbell expressed appreciation to Jeff DeZellar for his role in authoring the Review Plan, which identifies ways to guide and streamline HREP reviews while ensuring compliance with the Corps' January 2010 project review guidance. The Plan addresses all phases of project review and ensures consistency in program planning across Districts. Hubbell said he will distribute a signed copy of the Plan to partners soon.

Janet Sternburg reflected on Major General John Peabody's comments at UMRBA's May 23, 2012 Board meeting, in which he said that USACE will be pursuing measures to increase its project planning efficiency. She asked what, if any, effect that might have on UMRR-EMP's HREP planning efforts. Hubbell said USACE's new strategy for planning efficiency was just recently announced, and District staff have not yet examined how HREP planning will integrate those principles. However, he emphasized that District staff have always striven for efficiency. As an example, Hubbell noted that

District staff are trying to maintain the composition of project delivery teams (PDTs) throughout project planning.

Tom Crump explained that USACE recently instituted the “3x3x3” rule to increase its project planning effectiveness and efficiency. The rule requires that, for individual feasibility studies, 1) no more than \$3 million is spent on planning, 2) planning is completed within three years, and 3) all three levels of USACE governance (i.e., District, Division, and HQ) are involved in some way in planning. He noted the importance for the Division and HQ to be well informed through project planning so that any issues are identified as soon as possible.

Roger Perk said UMRR-EMP habitat projects typically do not require HQ review/approval, thus saving a substantial amount time and money. Hubbell also noted that HREP planning costs are considerably less than \$3 million.

Program Naming Convention

Hubbell explained that, over the past several years, there have been many instances where internal and external program stakeholders have mistakenly believed LTRM is an independent program, separate from UMRR-EMP. For several reasons, this disconnect between LTRM and UMRR-EMP is problematic. In particular, LTRM’s products and activities are often not recognized as UMRR-EMP accomplishments. This could have implications for funding — e.g., stakeholders may not know on behalf of whom to advocate for funding. According to Hubbell, effectively communicating that LTRM is a component of UMRR-EMP will help increase its support and partnering opportunities, allowing the program to maintain its status as an internationally renowned large river science and restoration program. Hubbell said USACE and USGS managers agreed to drop “Program” from the component’s title and to include UMRR-EMP references on all LTRM products and communications, in an effort to clearly communicate that the component is an element of UMRR-EMP.

Hubbell reviewed a May 11, 2012 email from Jennie Sauer to UMRR-EMP partners sharing her perspectives on why “Program” should remain in the component’s title. Among her reasons, Sauer cited LTRMP’s historical use and strong recognition among internal and external stakeholders. As an alternative to renaming, she suggested that program partners more consistently and explicitly identify UMRR-EMP in their LTRM-related work. Hubbell expressed appreciation to Sauer, but stressed the need to ensure that the UMRR-EMP’s science and monitoring component is not misperceived as a stand-alone program, especially by external stakeholders. He noted that, in previous discussions with the LTRM Management Team, USGS staff suggested establishing a new LTRM name that reflects the component’s research activities.

Barry Johnson outlined the main points of Jennie Sauer’s May 11, 2012 email, including:

- LTRMP is a fairly unique acronym. Partners should consider uniqueness when selecting a new name. This is important for internet searches and enhancing name recognition.
- Changing LTRMP’s name will erode some of the component’s historical context, complicating document searches on the internet and breaking links from other sites.
- Activities are more likely to be reduced and eliminated than an entity. Dropping “Program” might give LTRM the appearance that it is simply an activity.
- There are other ways to communicate that LTRM is a component of UMRR-EMP without changing the component’s name.

Hubbell also explained that the Administration and Congress began referring to EMP as Upper Mississippi River Restoration (UMRR) in 2006. USACE staff have since been directed to use UMRR

in the program's documents, activities, and other communications, primarily to strengthen program recognition. Thus, USACE staff recently began referring to the program as UMRR-EMP. However, Hubbell asked partners for input on how to reference the program in daily activities — i.e., EMP, UMRR-EMP, or UMRR. Hubbell noted that the program's logos are outdated and said District staff will create a new UMRR-EMP logo that is more contemporary and illustrates the full breadth of the program. He said new logo options will be presented at a future UMRR-EMP CC meeting.

Hubbell observed that UMRR-EMP has the advantage of 1) being place-based and 2) including EMP's historical name. Renee Turner advised that it is in the program's best interest to regularly use UMRR, particularly in linking the program's documents and other efforts with its identification in the federal budget. Judy DesHarnais said phasing out EMP may be in the program's best interest eventually, but now is not the right time to do so. Turner said HQ, following its review of the UMRR-EMP Regional Review Plan, expressed interest in being briefed on UMRR-EMP, recognizing its significance as a program. Janet Sternburg agreed with DesHarnais' observation. She expressed support for the addition of UMRR since it adds a place-based identity to the program, but cautioned against losing the strong historical recognition associated with EMP. The UMRR-EMP CC generally agreed to refer to the program as UMRR-EMP going forward.

DesHarnais noted that "Program" in LTRMP suggests that the component has its own funding stream. Hubbell agreed, emphasizing the need to modify the name in order to avoid such confusion. Hubbell asked partners to send him name suggestions for the LTRM component if they believe that further modification beyond dropping "Program" from the component's name is necessary — e.g., to better reflect its combination of monitoring and research.

Draft Joint Charter for UMRR-EMP Coordination Groups

Hubbell presented the May 7, 2012 draft Joint Charter for the UMRR-EMP CC, A-Team, and HREP Planning and Sequencing Framework Teams. He said USACE will consult with the USEPA, NRCS, and Maritime Administration regarding those agencies' capacity for, and interest in, participating on the various groups. Hubbell said USACE would also like partners to provide him with input on the following questions:

1. The HREP Planning and Sequencing Framework Teams section currently refers to the 2003 Planning and Sequencing Framework as its governing document. Should an updated framework serve as the governing document or should the Charter itself explicitly define the teams' roles and responsibilities?
2. Should roles and responsibilities related to adaptive management (AM) and HREP/LTRM integration be incorporated into the Charter? If so, how?

Bob Clevestine suggested that the Joint Charter include roles and responsibilities related to HREP/LTRM integration, noting that the A-Team section of the draft Joint Charter does not speak to any HREP-related activities. Hubbell agreed. Ron Benjamin expressed reservations against detailing AM roles and responsibilities in the Joint Charter, noting that the groups' roles and responsibilities are more general and already encompass AM-related activities. He also acknowledged that UMRR-EMP has a long history of employing AM techniques that are established in the program's project planning and construction processes. Hubbell said USACE staff is considering including AM roles and responsibilities in the Joint Charter to explicitly and formally define who would be accountable for implementing certain aspects of the program's AM. Ken Barr clarified that there are considerable governance issues associated with AM implementation and it may be helpful to describe the roles and responsibilities in the Joint Charter.

Benjamin said that, if a new group is created specifically to coordinate AM implementation, its relationships with UMRR-EMP's other established coordinating groups (e.g., river management teams)

need to be clearly defined. Mike Jawson suggested that this discussion about including AM implementation responsibilities in the Joint Charter be tabled until the AM Issue Paper is complete. He said partners are still considering how the program will more explicitly operationalize AM. Karen Hagerty noted that the Joint Charter only generally describes the groups' roles and responsibilities and various programmatic activities. She said the Joint Charter's purpose is to simply outline the groups' composition and general functions. Barb Naramore agreed and observed that the Joint Charter is meant to be a high-level document that articulates how the partnership is *organized* to execute the program, not how the program itself is executed. She said this is important if the Charter is to be flexible and serve the program well over time. Kevin Stauffer agreed, suggesting that AM implementation details would be more appropriately outlined in a different type of document.

Hubbell agreed that AM tasks should not be included in the Joint Charter, but suggested that HREP/LTRM integration be included since integration efforts will require the groups to coordinate in new ways. He asked that, by July 13, partners send him general comments on the May 7 draft Joint Charter. In addition, Hubbell asked partners for specific input on 1) whether the HREP Teams element of the Joint Charter should explicitly define roles and responsibilities or use an updated HREP Planning and Sequencing Framework as the governing document and 2) how to incorporate HREP/LTRM integration roles and responsibilities into the Charter. A revised Joint Charter will be discussed at the August 30, 2012 UMRR-EMP CC quarterly meeting.

Public Involvement and Outreach

Hubbell highlighted MVR's recent and upcoming public involvement and outreach activities, including:

1. USACE staff are revising UMRR-EMP's website based on previous input.
2. The National Great Rivers Research and Education Center (NGRREC) and Lewis and Clark Community College plan to submit a proposal to implement outreach to Mississippi River communities about UMRR-EMP.
3. A dedication ceremony for Lake Odessa will be held this summer. Details are forthcoming.
4. This summer's edition of *Our Mississippi* will feature UMRR-EMP.

Tom Novak announced that MVP will host a dedication of Pool 8 Islands on August 30, 2012 at Wildcat Landing in Minnesota. The dedication will follow the UMRR-EMP CC meeting earlier that day. MVP staff will also host an August 28 tree planting event at Pool 8 Islands for high school students. Hagerty said USACE and Field Station Team Leaders continue work to develop an LTRM sign for installation at the field stations. Jawson said Representative Ron Kind intends to host a dedication of UMESC's new wing with DOI Secretary Ken Salazar. The event is tentatively scheduled for late August, with the specific date yet to be determined. The dedication may overlap with the August quarterly meetings.

Implementation Issues Assessment: Issue Paper Discussion

State Participation and Leadership Support

On behalf of Jim Fischer, the paper's lead author, Ron Benjamin presented the draft State Participation and Leadership Support Issue Paper. He explained that the UMRR-EMP CC had discussed earlier versions of the paper at its August 17, 2011 and November 16, 2011 meetings. The May 7 draft, which is included in the agenda packet, reflects partner comments following the November meeting.

Judy DesHarnais noted that some options in the State Participation and Leadership Support Issue Paper are not viable from a USACE perspective — e.g., Option 4.2 (transfer funding for small projects to the states to implement with state labor) is incompatible with Corps policy. She cautioned that outside

readers may mistakenly believe that partners intend to pursue all of the identified options. She suggested that any partner decisions regarding how to address the issue be highlighted at the beginning of the issue papers to avoid such confusion. Barb Naramore clarified that the issue papers are a means for partners to have comprehensive discussions about the issues and to brainstorm about ways to resolve or advance the issues. Some of the options may not have partner support or may not be feasible for other reasons. However, all identified options and partner conclusions about the options are documented to provide a complete record of the discussions and to inform any future consideration of the issues. In addition, Naramore said the issue papers are working documents that will inform the Implementation Issues Assessment (IIA), which will carefully and concisely articulate each issue and any partner-endorsed recommendations for future action. She said the issue discussions elicit important information about the feasibility of various options. For example, in discussing opportunities to implement certain restoration measures, MVD advised that the best approach for obtaining policy clarifications from USACE is through specific project proposals, rather than asking for policy interpretations in the abstract.

Benjamin explained that the purpose of the State Participation and Leadership Support Issue Paper is to address the challenges the states currently face in remaining fully engaged in UMRR-EMP while funding and other resources are becoming increasingly constrained. He emphasized the importance of UMRR-EMP to the states, and said the issue paper is simply designed to help address current and future limitations in state capacity.

DesHarnais reiterated her concern that some issue papers may trigger unanticipated consequences if those external to the IIA process misunderstand the nature of the issue papers, especially since these papers are available to the public.

In response to a question from Renee Turner, Marv Hubbell said he anticipates that some issue papers will be finalized today and that the other issue papers will be completed in August or November. In response to a question from Karen Hagerty, Naramore suggested that Hubbell and the lead authors identify potential statements of concern and revise them so that they do not convey unanticipated messages, rather than rewriting/restructuring the issue papers entirely. Hubbell agreed and asked partners to send him any such concerns. In response to a question from Hagerty, Naramore explained that the issue papers are not intended to be widely distributed beyond the partnership. Rather, the IIA will concisely articulate the issues and partner recommendations for resolving them. The IIA will be used as the tool for communicating about the issues to the Administration, Corps staff, partners, and external stakeholders. In response to DesHarnais' concern, Diane Ford suggested that a clarifying statement be added to issues papers that describes the IIA process and appropriately characterizes the papers. Hubbell agreed.

In response to a question from Barb Naramore, DesHarnais suggested that Option 4.3 (i.e., bundling various small-scale projects into one large project — e.g., installing rock at various sites) would be a better, more feasible approach for advancing small-scale restoration projects than Option 4.2. Option 4.3 would reduce total planning costs associated with several small projects and increase planning efficiency. Hubbell said he will work with Fischer to revise the State Participation and Leadership Support Issue Paper, which will be presented at the August 30, 2012 UMRR-EMP CC meeting.

LTRM Implementation

Karen Hagerty overviewed the options in the May 7 draft Long Term Resource Monitoring (LTRM) Implementation Issue Paper, as included in the agenda packet. She explained that the UMRR-EMP CC last discussed the issue paper at its August 17, 2011 meeting. Following the August meeting, further work on the paper was postponed until partners had considered a variety of LTRM issues and policies at the February 15-17, 2012 LTRM Team Meeting. Hagerty said the latest draft reflects only minor editorial changes relative to the August version.

Janet Sternburg suggested that Option A.3 be revised to 1) either expand the list of possible external stakeholder types or remove the list entirely to be as inclusive as possible and 2) specify that contributions could include non-monetary resources, such as data and other information. Sternburg suggested that partners consider how UMRR-EMP might seek outside contributions and outline possible approaches for collaborating and leveraging resources in the LTRM Science Coordination Plan.

DesHarnais suggested that Option A.1 be revised to more clearly articulate that federal partners would not be involved in advocating for UMRR-EMP funds and that those activities are limited to non-federal partners. Hubbell agreed that the language should more explicitly define partners' goals for ensuring sufficient funding and partners' roles for achieving those goals. Naramore explained that the issue papers are meant to explore a wide range of opportunities to improve UMRR-EMP implementation. Different partners have different tools at their disposal, and the papers allow for the identification and open discussion of those tools. The IIA will look much different than the issue papers and will be more carefully written and nuanced. She expressed appreciation for the sensitivities associated with some of the options, but cautioned against spending too much time perfecting the papers since they will not be widely distributed. Ford agreed with Naramore's explanation, and emphasized that the papers are working documents. She encouraged the UMRR-EMP CC to finalize the papers in a timely fashion.

Karen Hagerty recalled that, at its August 17, 2011 meeting, the UMRR-EMP CC agreed to convene an *ad hoc* group to discuss LTRM implementation in low funding years. That recommendation is being advanced.

Issue Paper Purpose and Development

Referencing the conversation thus far regarding the purpose and content of the issue papers, Hubbell confirmed that the papers are working documents that will provide a record of understanding. They should serve as a point-in-time articulation of the issue, options considered, and partnership conclusions. A clarifying statement on all issue papers will ensure that readers unfamiliar with the process understand the IIA and issue papers' purpose, including that the issue paper options are simply ideas that partners may or may not agree to advance. Hubbell said the issue papers will not be perfected, but rather will be viewed as complete when partners achieve a common understanding of the issue and agree on a recommendation(s) for resolving or advancing the issue. The issue papers will then be used to inform the IIA, as well as other programmatic activities — e.g., UMRR-EMP strategic planning.

Naramore explained that UMRR-EMP historically used issue papers to inform its reports to Congress (RTCs). However, because of significant time constraints in developing the 2010 RTC, partners agreed to defer issues not anticipated to require Congressional action and instead address them in the IIA. The issue papers themselves are simply a tool to facilitate and document the partners' consideration of those issues.

Land Acquisition

Hubbell said there have been various interpretations of Corps policy as it relates to HREPs involving a land acquisition component, resulting in limited use of acquisition in the program. Hubbell explained that UMRR-EMP and the Navigation Ecosystem Sustainability Program are functionally comparable in their capacity to employ land acquisition. He recalled that, at its March 1, 2012 meeting, the UMRR-EMP CC requested that USACE increase the 25 percent cap on land acquisition costs relative to the total project cost.

Naramore noted that USACE and UMRR-EMP CC state members have yet to resolve the question of reversing the 1994 land acquisition policy provision that allows non-federal sponsors to be reimbursed for excess lands, easements, rights-of-way, relocation and dredged material disposal area (LERRDs) (i.e., real estate costs that exceed their 35 percent cost share requirement). Hubbell explained that,

historically, HREP agreements simply did not speak to excess LERRDs and the states have agreed to waive their rights to reimbursement *after* signing the project partnership agreements (PPA). However, for the first time last year, USACE HQ required that a PPA explicitly indicate whether the non-federal sponsor would receive reimbursement for excess LERRDs. This was in the context of Illinois' Rice Lake HREP. In developing the agreement, Illinois determined that it could not legally waive its right to the reimbursement in the PPA because doing so would be in direct conflict with Illinois state law. In order to allow Rice Lake to proceed, USACE granted an exception to its general practice not to reimburse for excess LERRDs and Illinois will be reimbursed if its LERRDs for Rice Lake exceed 35 percent of the total project costs. However, HQ has said it does not intend to reimburse non-federal sponsors for excess LERRDs in the future. In addition, HQ has indicated that future PPAs will need to address reimbursement for excess LERRDs — i.e., the previous practice of remaining silent on the question will not be an option. Therefore, either the sponsor would have to explicitly waive any reimbursement in the PPA or the 1994 UMRR-EMP policy permitting reimbursement to HREP sponsors would have to be changed in order for projects involving excess LERRDs to be approved. Thus, at the March 1 meeting, Hubbell had suggested requesting that HQ formally reverse the 1994 UMRR-EMP policy providing for reimbursement of excess LERRDs. At the March 1 meeting, Hubbell requested input from the UMRR-EMP CC state members (the program's only non-federal sponsors to date) regarding their position on the potential policy change. The state members are currently considering the issue. Hubbell said the PPA for Rip Rap Landing in Illinois will likely be deferred until this issue is resolved.

In response to a question from Sternburg, Hubbell said UMRR-EMP has constructed 16 land acquisition projects that have involved a non-federal cost share sponsor waiving excess LERRDs. All five states have advanced such a project and waived reimbursement. In response to a question from Sternburg, Renee Turner said USACE's policy governing land acquisition for all water resources projects is to not reimburse non-federal sponsors for excess LERRDs. However, UMRR-EMP's 1994 land acquisition policy allows the program to provide reimbursement of excess LERRDs. She said Rice Lake received increased scrutiny at HQ because of the potential for a \$1 million reimbursement.

Naramore explained that UMRR-EMP partners can either 1) seek to modify UMRR-EMP's policy provision regarding excess LERRDs reimbursement or 2) maintain the provision and address the issue on an individual project basis. She noted that other UMRR-EMP policies have differed from USACE's national policies in the past. Turner cautioned that making a formal request to change UMRR-EMP's policy may trigger HQ to do a more extensive review of the program and its other policies.

The UMRR-EMP CC members agreed that the Land Acquisition Issue Paper is complete. Hubbell said he will report back to the Committee at a future meeting about 1) increasing the 25 percent cap on land acquisition costs relative to total project costs and 2) the potential repeal of UMRR-EMP's 1994 land acquisition policy that allows non-federal sponsors to receive reimbursement for excess LERRDs.

Nonprofits as Cost Share Sponsors

Hubbell reported that UMRR-EMP CC considered the Nonprofits as Cost Share Sponsors Issue Paper at its March 1, 2012 meeting and agreed to recommend that UMRR-EMP consider habitat projects that have a nonprofit sponsor (Option 2). Subsequently, ASA(CW) Jo-Ellen Darcy issued implementation guidance for Section 2003 of WRDA 2007 on April 5, 2012. Section 2003 provides the authority needed for nonprofits to serve directly as project cost share sponsors. The May 7 version of the Nonprofits as Cost Share Sponsors paper, included in the agenda packet, is revised to reflect the new guidance.

Hubbell recalled that, at the March 1 UMRR-EMP CC meeting, Todd Strole raised several important issues/questions that will need to be addressed before habitat projects involving nonprofit sponsors are advanced. For example, at what point in the project planning process is local government consent

needed, and what is the process for obtaining that consent? In response to a question from Janet Sternburg, Naramore said the UMRR-EMP CC agreed to recommend that USACE consider habitat projects involving a nonprofit cost share sponsor (Option 2). Sternburg emphasized the importance of providing potential nonprofit cost share sponsors with relevant information upfront about UMRR-EMP's habitat project selection and planning processes and expectations of them as cost share sponsors.

In response to a question from Olivia Dorothy, Hubbell said there has not yet been a concerted outreach effort to local land trusts, but they are eligible to serve as cost share sponsors if they meet the criteria.

The UMRR-EMP CC agreed that the Nonprofits as Cost Share Sponsors paper is complete. Hubbell said USACE staff will continue to address unresolved implementation issues pertaining to nonprofits serving as cost share sponsors.

Adaptive Management

Barry Johnson said that, at its November 16, 2011 meeting, the UMRR-EMP CC confirmed its desire for the program to take more deliberate and explicit approaches to implementing adaptive management (AM). The May 7 draft AM Issue Paper reflects this decision and identifies next steps, including:

1. Define critical uncertainties
2. Develop ways to integrate existing LTRM data, procedures, and tools (e.g., models) to assist AM development and implementation
3. Develop a mechanism(s) to capture and communicate AM results and integrate the results into future management efforts
4. Develop standard and compatible metrics to evaluate the success of AM actions at various spatial and temporal scales
5. Define roles and responsibilities for UMRR-EMP's AM activities
6. Define research approaches to address critical uncertainties

In response to a question from Ron Benjamin, Johnson said Action 4 (i.e., standard metrics) would include developing biological response objectives and benchmarks to measure restoration success. In response to a question from Tim Yager, Hubbell suggested that the UMRR-EMP CC assume the overarching leadership role for implementing AM and assign specific tasks to individual partners and various coordinating groups.

Janet Sternburg asked what defining key uncertainties would entail — e.g., employing a full-scale information needs assessment or selecting management questions from existing reports. Johnson said he envisions that partners would first reference existing documents and then identify any other priority information needs that should be addressed through AM. Hubbell concurred. Ken Barr said the 2010 water level management report and the side channel restoration report, which will likely be released soon, include several important questions regarding the implementation of those two restoration tools. Barr emphasized that there is much valuable information already documented regarding restoration uncertainties. Johnson agreed and said partners will ultimately need to format uncertainties into questions that can be explored through a project. Ron Benjamin cautioned that projects with an explicit AM component generally have a greater failure rate because they are associated with a higher risk or uncertainty. Thus, he suggested that habitat projects under AM analysis include plans for secondary management actions to ensure that the restoration objectives are achieved, in the event that the project does not perform as intended.

Bob Clevestine characterized accountability as a key issue for ensuring AM is effectively employed. Johnson said Action 5 (i.e., defining roles and responsibilities) calls for the identification of some individual or group to be responsible for coordinating AM and ensuring partners' goals are accomplished. He said there will likely be several individuals and groups involved in implementing AM. In response to Clevestine's concern, Hubbell said that, as the UMRR-EMP Program Manager, he is ultimately responsible for overseeing the program's AM efforts, in consultation with UMRR-EMP CC. Clevestine suggested that partners reference NESP's AM institutional arrangements framework when defining UMRR-EMP's AM roles and responsibilities. Barr observed that existing groups (e.g., A-Team, project delivery teams (PDTs), system ecological team (SET), and river management teams) should be able to fulfill most of the program's AM implementation needs. He suggested that partners examine these existing groups to determine their roles in implementing AM and then identify any gaps and consider whether a new group(s) is(are) necessary to achieve partners' AM objectives. Johnson agreed with Barr's suggested approach.

In response to a question from Sternburg, Johnson said the program's AM outputs could include a variety of activities and products. Sternburg observed that approaches could include designing specific projects to address particular questions; evaluating restoration techniques, as was done in the water level management paper; and using LTRM data to inform more routine projects. Johnson explained that different approaches will be used to address different management uncertainties — i.e., some questions can be answered using existing information and other questions will require new modeling, focused research, or AM techniques to answer. Hubbell said UMRR-EMP will approach AM in a variety of ways and some activities will be more extensive than others. However, all learning opportunities are important and he encouraged partners to consider how AM can be applied to provide insights at multiple spatial scales.

Tim Yager requested a visual representation of the roles and responsibilities for implementing AM. Barr agreed and suggested that a webinar be convened this summer for partners to discuss a draft schematic. Johnson and Hubbell said USGS and USACE staff will develop materials for the call.

Johnson asked partners to send him comments on the draft AM Issue Paper by July 13. [Note: At the end of the meeting, the AM conference call was scheduled for July 18.]

Capacity for HREP Operation and Maintenance

Clevestine presented the May 7 draft Capacity for HREP Operation and Maintenance (O&M) Issue Paper, which is included in the agenda packet. The paper's purpose is to address the increasing O&M liabilities for UMRR-EMP's non-federal sponsors. As more projects have been completed, O&M costs for HREPs located on refuge lands have become substantial over the years and will likely total more than \$750,000 annually by 2015, according to Clevestine. He overviewed potential options for addressing rising O&M costs, including:

1. Design HREPs in ways that minimize O&M
2. States and NGOs support O&M for 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 O&M funds for UMRR-EMP's HREPs 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 identified data needs that would inform partners' consideration of the issue, including:

1. Total and annual O&M investments to-date, and who incurred the costs
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

Ron Benjamin asked why this is an implementation issue given that estimated O&M costs are provided in definite project reports (DPRs) and thus are known upfront. Clevenstine explained that issue paper acknowledges that O&M needs have become a significant responsibility for the states and USFWS as more projects have been constructed. Even though O&M costs can be estimated relatively accurately, the project sponsors face questions about how to effectively manage their cumulative O&M obligations and how to accommodate new habitat projects that add to these obligations. John Mabery said unexpected events (e.g., major floods) have resulted in O&M costs that are exceeding projections. Clevenstine added that UMRR-EMP's early HREPs (i.e., constructed in the 1980s) estimated O&M needs using hydrographs with much lower flood intensity and frequency rates. Hubbell recognized that USFWS manages about 70 percent of the constructed HREPs, and thus contributes substantially to UMRR-EMP's restoration effectiveness. Hubbell expressed support for the paper's identified data needs, as Clevenstine outlined above, and emphasized the need to determine how partners can effectively implement O&M as prescribed in the DPRs. He said there needs to be an appropriate balance between designing projects to reduce O&M expenses and minimizing first construction costs. This issue will likely be considered by partners in more detail in the UMRR-EMP strategic planning effort. Tim Yager also expressed support for researching the data needs, and suggested contacting Sharonne Baylor for information about USFWS's O&M investments.

DesHarnais said USACE cannot artificially raise first construction costs simply to lower O&M responsibilities. She also cautioned that expressing concerns related to O&M costs in this issue paper may unintentionally give Congress and others the wrong message that partners can no longer support additional HREPs. DesHarnais acknowledged that cumulative O&M is an issue, but encouraged partners to be careful in articulating the issue. Hubbell acknowledged DesHarnais's concern, but said shortfalls in maintaining O&M can have a very real impact on project outputs and thus the issue needs to be explored.

John Chick asked if O&M of HREPs would become unrealistic for USFWS and the states if the status quo is maintained. Clevenstine said fulfilling all O&M responsibilities may not be achievable. Without complete O&M, project benefits would still remain, but project longevity may be shortened.

Clevenstine asked partners to send him comments on the May 7 draft O&M issue paper by July 13.

Delegated Authority

Hubbell reported that MVD recently confirmed that USACE's 2004 national policy regarding delegated approval authority for post-authorization civil works projects (ER 1165-2-502) allows the Division Commander to approve HREPs of any cost, unless the project involves a policy matter requiring HQ review/approval. All HREPs, however, remain subject to the project review requirements set forth in EC 1165-2-209. Hubbell said this expanded approval authority was confirmed in MVD's approval of the Rice Lake and Fox Island projects. He said District Commanders still retain their delegated approval authority for projects costing \$1 million or less, as provided in UMRR-EMP's 1999 Implementation Guidance.

Hubbell said USACE staff will develop a brief issue paper to communicate UMRR-EMP's new delegated authority policy. Partners are satisfied with the new delegated authority policy and will not seek any further modification.

Next Steps for Remaining Issue Papers

Hubbell said USACE staff will soon initiate work on two new issue papers regarding: 1) balancing cost-shared and full federally funded projects and expanding options for implementing projects at 100 percent federal expense and 2) the states' abilities to implement O&M on restoration projects involving navigation structures, including the potential for UASCE to assume O&M responsibility for certain HREP elements. Drafts of both issue papers will be presented to the UMRR-EMP CC in August or November. The construction cost sharing issue paper is meant to explore opportunities for expanding the range of UMRR-EMP's HREPs constructed at 100 percent federal expense — e.g., full funding for projects involving threatened and endangered species and treaty species under Section 906(e) of WRDA 1986 and projects located below the Ordinary High Water Mark (OHWM). Janet Sternburg recalled that, at the February 2010 UMRR-EMP CC quarterly meeting, Charles Barton advised that policy questions about HREPs are best explored in the context of individual project proposals.

Hubbell reported that, in response to UMRR-EMP CC's March 1 decision to streamline the IIA process, USACE staff are recommending dropping four issues from the IIA and instead forwarding them to the UMRR-EMP strategic planning team or other program efforts for consideration. These issues are HREP Planning and Prioritization, HREP Evaluations, UMRR-EMP's Habitat Project Types, and Emerging Trends and Issues. Hubbell noted that USACE staff are currently working to enhance HREP evaluations, including increasing consistency among the UMR districts. In response to a question from DesHarnais, Hubbell said the HREP Habitat Project Types paper was intended to address partners' interest in expanding UMRR-EMP's restoration approaches and document MVD's recommendation that partners advance specific project proposals to seek policy clarifications. Hubbell said partners simply need to design a project using innovative restoration techniques/approaches to address the questions they initially raised when calling for this issue paper.

Regarding emerging trends and issues, Hubbell explained that partners have recognized the need for a process to address the implications of new factors on UMRR-EMP's efforts to restore and monitor the river. He said the UMRR-EMP strategic planning team would be well suited to consider how partners could best identify and evaluate emerging trends and issues. That process could then be incorporated into the strategic plan. However, Jawson explained that this issue paper was partly an outgrowth of conversations with staff from the Congressional Research Service, who were interested in the program's provisions for addressing change and new developments. He suggested that there may be value in highlighting UMRR-EMP's plans to develop a process for evaluating emerging trends and issues in the IIA. Jawson expressed concern that the issue might get lost, or at least not be adequately addressed, in strategic planning. Sternburg agreed, and suggested that all four issues be addressed in the IIA. Hubbell said he will work with the four issue paper authors to prepare draft papers for discussion at the August 30, 2012 UMRR-EMP CC meeting.

Long Term Resource Monitoring Component

LTRM Highlight: Day Electrofishing Catch Per Unit Effort to Measure Fish Abundance

John Chick presented on the Great Rivers Field Station's assessment of the accuracy and precision of LTRM's electrofishing methods to reflect actual fish abundance. He explained that LTRM's electrofishing methods have been tailored to the UMRS and thus need to be tested in order to establish conclusions about its accuracy and precision, instead of simply drawing insights from scientific literature about standard electrofishing techniques.

The Great Rivers Field Station's assessment compared catch per unit of effort (CPUE) between LTRM's electrofishing methods and block nets in 10 backwaters (5 in La Grange and 5 in Pool 26). Chick said the study was labor intensive, involving crews of five to seven people working for three days in each backwater lake. While block nets are very effective at estimating fish abundance and diversity, they are destructive and expensive. The study concluded that LTRM day electrofishing methods are effective for several species, but are biased toward larger individuals within a species. Since electrofishing is not effective across all species, LTRM's multi-gear approach is necessary. The study also concluded that density appears to be a better metric for community analyses than biomass. Chick acknowledged that these results are specific to backwater lakes. To assess the accuracy and precision of LTRM's electrofishing methods in other habitats, similar comparison studies would be needed in those habitats.

Karen Hagerty asked whether and how block nets affect fish behavior. Chick said species react differently to block nets, but the results should reflect that variance. Fish behavior towards block nets could be analyzed through recapturing, but there would be limits to making conclusions about those results as well. Mike Jawson asked about using telemetry or sonar to determine fish abundance. Chick said those methods could be helpful, but would be expensive and would not provide information about individual species. Chick noted that this study used classic statistical approaches, and said he is working with Barry Johnson and Brian Grey to determine whether any contemporary statistical techniques could offer more insights. Chick said the Great Rivers Field Station is also discussing the possibility of sampling an additional six lakes.

Kevin Stauffer mentioned that water clarity is increasing in northern parts of the UMR, increasing fish awareness and deterrence of sampling efforts. He said some species may require electrofishing at night to detect. Chick said environmental conditions have a significant influence on catchability — e.g., high water versus low water conditions.

Habitat Rehabilitation and Enhancement Projects

District Reports

Judy DesHarnais said MVP has several projects in planning, including Harpers Slough, L&D 3 Fish Passage, Conway Lake, Lake Winneshiek, McGregor Lake, and North and Sturgeon Lakes. The L&D 3 Fish Passage study is almost complete. DesHarnais said MVP's FY 12 design and construction efforts are focused on Capoli Slough, with Stage 2 in design and Stage 1 in construction. She said the District will also finalize Pool 8 Islands this summer, with a dedication scheduled for August 30. In response to a question from Janet Sternburg, DesHarnais said there are no more projects in planning for Pool 8. Rather the District is now shifting its focus to other pools, with work in Pools 9 and 10 a high priority.

Marv Hubbell said Pool 12 Overwintering and Huron Island are MVR's current planning priorities, with construction likely starting in FY 13 and FY 14-15, respectively. The District's construction priorities include Rice Lake and Fox Island, and finalizing the remaining construction elements on Lake Odessa. Jason Wilson reported that Fox Island's construction is advancing smoothly with the current low water conditions. In response to a question from Robert Stout, Wilson said the source of lead contamination at Fox Island has not yet been determined. Hubbell and Wilson said the contamination source could be a well located on the project site, but water quality sampling is needed to determine the source. Hubbell said the District anticipates completing a DPR for Beaver Island in FY 15. In response to a question from Janet Sternburg, Hubbell said Beaver Island will likely be very similar to Huron Island. The District anticipates that much of Huron Island's planning information will be transferrable to Beaver Island.

Brian Markert said MVS's FY 12 planning is focused on Rip Rap Landing, Clarence Cannon, and Piasa and Eagles Nest Islands. He reported that Calhoun Point was closed this year, and now the District's construction priorities include Pools 25 and 26 Islands and Ted Shanks. Markert anticipates that draft evaluation reports will be completed for Stump Lake this fiscal year and for Calhoun Point in FY 13.

HREP Highlight: Calhoun Point

Markert overviewed the Calhoun Point habitat project, which is located on 2,157 acres of USFWS lands at the confluence of the Illinois and Mississippi Rivers in Pool 26. The project's construction costs are 100 percent federally funded. Illinois DNR will manage the site under a cooperative agreement with the Service. Markert said the site's habitat condition is poor due to high sediment input from the Illinois and Mississippi Rivers, elevated surface and ground water tables, and limited fluctuation in water levels due to the 9-foot channel project. These issues have combined to reduce aquatic habitat diversity and inhibit reforestation. The project goals are to restore wetland, spawning, overwintering, waterfowl, and forested wetland habitats.

Markert described Calhoun Point's features, including a riverside berm, selective deep water dredging, water control facilities, interior berms, and forest management. He said the project was recently completed, and performance monitoring and evaluation is ongoing. Overwintering fish sampling was conducted in 2011, and 22 species were captured.

HREP/LTRM Integration

Marv Hubbell said HREP/LTRM Integration will be included as a regular agenda item at UMRR-EMP CC's quarterly meetings. Hubbell said USACE staff will work with partners to incorporate HREP/LTRM integration activities into the program's scopes of work (SOWs), starting in FY 13. He said USACE staff will also distribute an information needs survey in early June to the UMRR-EMP distribution list. Respondents can submit any habitat- and science-related questions — e.g., the status of an individual species or the last ten years of data related to an ecological trend. Hubbell said survey responses will be used to inform the program's SOWs, science planning efforts and research frameworks, and UMRR-EMP strategic planning. Insights gained will also facilitate communication and coordination among program partners. [Note: On June 11, 2012, a solicitation of HREP- and LTRM-related questions was distributed to UMRR-EMP partners.]

In response to a question from Janet Sternburg, Karen Hagerty said systemic bathymetry data is available upon request from Jim Rogala. Hubbell encouraged Sternburg to include bathymetry-related questions in her response to the upcoming information needs survey. In response to a question from Barb Naramore, Hubbell clarified that partners' survey responses do not need to be specific to HREP/LTRM integration efforts.

Long Term Resource Monitoring Component (Continued)

Product Highlights

Mike Jawson overviewed LTRM's second quarter highlights, including the following:

- A manuscript, "An investigation of fish community and water quality composition in an isolated side channel of the Upper Mississippi River."
- Several presentations and posters at the April 26-27, 2012 Mississippi River Research Consortium.
- Purchase of new electrofishing boats for the Lake City and La Crosse Field Stations.

LTRM Activities Update

Karen Hagerty said the FY 10-14 LTRM Strategic Planning Review Team convened a call on March 14, 2012 to review the FY 12 research proposals, ensuring that they align with the Strategic Plan. Call participants included Marv Hubbell, Hagerty, Kat McCain, and Dave Potter (USACE); Barry Johnson and Jennie Sauer (USGS); Scott Gritters (IA DNR); Rob Maher (IL DNR); Walt Popp (MN DNR); Janet Sternburg (MO DoC); and Jim Fischer and Pat Short (WI DNR). Hagerty said the Team agreed that future reviews should identify what LTRM has learned in the past year. Barb Naramore suggested that, following its annual meeting, the Review Team prepare a brief summary of the Team's deliberations and findings. This would make the process more informative for all UMRR-EMP partners. Sternburg and Hagerty expressed support for Naramore's suggestion.

Hagerty reported that six LTRM policy papers have been finalized and are included in the agenda packet. They are 1) LTRM principles, 2) modification process for the LTRM annual scopes of work, 3) providing credit to UMRR-EMP in LTRM's products and communications, 4) travel, 5) use of salary savings and carry-over funds, and 6) full cost accounting for LTRM. These papers are an outgrowth of the February 15-17, 2012 LTRM Team Meeting and are available at http://www.umesc.usgs.gov/ltrmp/program_docs.html.

In follow-up to the February 2012 LTRM Team Meeting, Hagerty reported that the LTRM Management Team plans to have a series of conference calls with the Field Station Team Leaders and component specialists regarding how to accurately determine the time required for base monitoring collection and analysis. The first call is scheduled for June 12. Hagerty stressed that better understanding LTRM's staffing and resource requirements is important to understanding how the program can function under different funding scenarios.

LTRM Implementation in Low Funding Years

Hagerty said the UMRR-EMP CC agreed to task an *ad hoc* group to consider LTRM implementation in low funding years. She explained that LTRM will likely experience a funding shortfall in FY 13. The estimated base monitoring costs for FY 13 are \$5,407,112. Under the \$17.880 million funding levels included in the President's FY 13 budget request and Senate's FY 13 energy and water appropriations measure, LTRM would receive \$5,378,820. This would create a shortfall of \$28,292. Under the \$16.986 million funding level included in the House's FY 13 energy and water appropriations bill, LTRM would receive \$5,105,954 and experience a shortfall of \$301,158.

In response to a request by Hagerty, the following individuals volunteered to participate on the *ad hoc* group to consider LTRM implementation in low funding: Tim Yager and/or Bob Clevensine (USFWS), John Chick (IL Natural History Survey, NNGREC), Diane Ford and Scott Gritters (IA DNR), Janet Sternburg (MO DoC), and Kirsten Mickelsen (UMRBA). The LTRM Management Team will also participate in the group. Kevin Stauffer suggested that Hagerty contact Walt Popp regarding Popp's willingness to participate. Ron Benjamin suggested that Hagerty also ask Jim Fischer if he would like to participate.

Sternburg urged the LTRM Management Team to convene the group quickly and allow sufficient time for the group to identify the best approaches to implement LTRM under low funding, especially given that LTRM faces a likely funding shortfall in FY 13. Sternburg asked what direction the Administration typically provides to Divisions and Districts regarding program execution under a continuing resolution authority (CRA). Marv Hubbell explained that most USACE programs are only allowed to execute at the lowest level of funding included in either the President's budget or the House or Senate's appropriation measures. However, Congress may also provide alternate direction in the CRA.

A-Team Report

Sternburg reported that the A-Team met in-person on April 25, 2012. She said 22 individuals attended the meeting, including all voting members. New voting members include Gritters from Iowa DNR, who is also serving as the A-Team Chair; Stephen Winter from USFWS; and Pat Short from Wisconsin DNR. The meeting included 1) formal endorsement of research frameworks for the mussel, aquatic vegetation, and landscape cover/land use components; 2) discussion of the A-Team's roles and responsibilities; and 3) review of the draft Science Coordination Plan. In response to questions about USEPA and NRCS membership, Hubbell said he will consult with Josh Svaty and Ken Westlake and Tom Christenson about their agencies' capacity and desire to participate on the A-Team.

LTRM Science Coordination Plan

Barry Johnson presented the final LTRM Science Coordination Plan, dated May 6, 2012. He said the Plan will guide the identification and selection of LTRM's focused research efforts, based on the FY 10-14 LTRM Strategic Plan. The first science coordination meeting will likely be held in early 2013, and will be similar to the February 2012 LTRM Team Meeting.

Hagerty asked if cooperative agreements should specifically state that all field station staff are required to attend the science coordination meetings, in an effort to facilitate travel approval. Sternburg expressed support for Hagerty's suggestion, noting that it will be especially helpful for those states with out-of-state travel restrictions.

Other Business

Marv Hubbell said the AM Issue Paper authors will host a conference call on July 18, 2012 to discuss the revised AM Issue Paper and draft visual representation of AM roles and responsibilities.

Hubbell said USACE staff have completed a draft update to the HREP Design Handbook and will formally solicit partner review soon. He said District staff plan to finalize the Handbook this September. [Note: A request for partner review was sent on June 18, 2012.]

The upcoming quarterly meetings are as follows:

- **August 2012 — La Crosse**
 - UMRBA (strategic planning session) — August 28
 - UMRBA (quarterly meeting) — August 29
 - UMRR-EMP CC — August 30
- **November 2012 — St. Paul**
 - To be determined — November 27
 - UMRBA (quarterly meeting) — November 28
 - UMRR-EMP CC — November 29
- **February 2013 — Quad Cities**
 - To be determined — February 26
 - UMRBA (quarterly meeting) — February 27
 - UMRR-EMP CC — February 28

With no further business, the meeting adjourned at 2:44 p.m.

**UMRR-EMP CC Attendance List
May 24, 2012**

UMRR-EMP CC Members

Renee Turner	U.S. Army Corps of Engineers, MVD [On behalf of Charles Barton]
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuge [On behalf of Charlie Wooley]
Mike Jawson	U.S. Geological Survey, UMESC
Dan Stephenson	Illinois Department of Natural Resources
Diane Ford	Iowa Department of Natural Resources
Kevin Stauffer	Minnesota Department of Natural Resources [On behalf of Tim Schlagenhaft]
Janet Sternburg	Missouri Department of Conservation
Ron Benjamin	Wisconsin Department of Natural Resources [On behalf of Jim Fischer]

Others In Attendance

Judy DesHarnais	U.S. Army Corps of Engineers, MVP
Tom Crump	U.S. Army Corps of Engineers, MVP
Terry Birkenstock	U.S. Army Corps of Engineers, MVP
Tom Novak	U.S. Army Corps of Engineers, MVP
Kelly Obermiller	U.S. Army Corps of Engineers, MVP
Roger Perk	U.S. Army Corps of Engineers, MVR
Ken Barr	U.S. Army Corps of Engineers, MVR
Marvin Hubbell	U.S. Army Corps of Engineers, MVR
Karen Hagerty	U.S. Army Corps of Engineers, MVR
Brian Johnson	U.S. Army Corps of Engineers, MVS
Brian Markert	U.S. Army Corps of Engineers, MVS
Deanne Strauser	U.S. Army Corps of Engineers, MVS
Greg Bertoglio	U.S. Army Corps of Engineers, MVS
Charlie Hanneken	U.S. Army Corps of Engineers, MVS
Donovan Henry	U.S. Army Corps of Engineers, MVS
David Israelitt	U.S. Army Corps of Engineers, MVS
Kat McCain	U.S. Army Corps of Engineers, MVS
Ken Westlake	U.S. Environmental Protection Agency, Region 5 [by phone]
Bob Clevestine	U.S. Fish and Wildlife Service, Refuges
Jon Duyvejonck	U.S. Fish and Wildlife Service, RIFO
John Mabery	U.S. Fish and Wildlife Service, Two Rivers Refuge
Jason Wilson	U.S. Fish and Wildlife Service, Clarence Cannon and Great Rivers Refuges
Barry Johnson	U.S. Geological Survey, UMESC
John Chick	Illinois Natural History Survey, NGGREC
Dru Buntin	Missouri Department of Natural Resources
Robert Stout	Missouri Department of Natural Resources
Tom Boland	AMEC, St. Louis
Olivia Dorothy	Izaak Walton League
Brad Walker	Missouri Coalition for the Environment
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association