

**Minutes of the
Upper Mississippi River System
Environmental Management Program
Coordinating Committee**

**August 4, 2010
Quarterly Meeting**

**Radisson Hotel
La Crosse, Wisconsin**

Charles Barton of the U.S. Army Corps of Engineers called the meeting to order at 8:02 a.m. on August 4, 2010. Other EMP-CC representatives present were Kevin Foerster (USFWS), Barry Johnson (USGS), Pat Boddy (IA DNR), Tim Schlagenhaft (MN DNR), Janet Sternburg (MO DoC), Jim Fischer (WI DNR), and Bill Franz (US EPA). A complete list of attendees follows these minutes.

Minutes of the May 20, 2010 Meeting

Janet Sternburg requested that, on page A-7, the minutes be revised to reflect that Kat McCain and Bob Hrabik are both participating on the A-Team's *ad hoc* Indicators Group, on behalf of their respective agencies.

Sternburg moved and Jim Fischer seconded a motion to approve the draft minutes of the May 20, 2010 meeting as drafted, with the clarification offered. The motion carried unanimously.

Program Management

FY 10 Fiscal Update

Marv Hubbell said EMP's FY 10 appropriation is \$16.47 million. However, he noted that EMP's average annual funding level is around \$20 million. EMP's FY 10 funding allocations within the program are as follows:

- Regional Administration — \$626,000*
- LTRMP — \$4,983,180
- HREPs — \$10,886,820
 - Program Model Certification and Regional HREP Support — \$250,000
 - MVP — \$2,691,046**
 - MVR — \$5,254,728
 - MVS — \$2,691,046**

* Includes \$26,000 in carry-over funds.

** MVP and MVS are each receiving \$500,000 less than they would under the typical allocation formula in order to "repay" MVR for inter-district transfers from FY 09.

Hubbell said the regional administration account was reduced from FY 09, except for increased spending related to the 2010 Report to Congress. LTRMP's FY 10 efforts include base monitoring and three research projects. The Corps is currently supporting 22 HREPs, including two new construction starts and three to four new planning starts.

Hubbell explained that EMP's FY 10 obligation authority is \$31.539 million. In addition to the \$16.47 million annual appropriation, EMP had \$6.952 million in FY 09 carry-over and received \$8.117 million in stimulus funding. Hubbell said EMP has been very successful in executing these funds, but substantial carry-over into FY 11 is likely. In response to a question from Janet Sternburg, Hubbell said the majority of FY 09 carry-over was due to delays in awarding a construction contract for Lake Odessa. He said most of the anticipated FY 10 carry-over is attributed to the imposition of the 2007 Water Resources Development Act's new planning and review requirements, which will delay the award of a Rice Lake construction contract until FY 11.

FY 11 Appropriations Status

Hubbell reported that the Senate Appropriations Committee has included \$19.0 million for EMP in its FY 11 energy and water spending measure (S. 3635). The House Energy and Water Subcommittee's FY 11 appropriations markup includes \$21.15 million for EMP, matching the President's budget request. Hubbell said the final FY 11 appropriations number will almost certainly not be determined until after the November elections. For now, EMP's FY 11 planning assumes funding at \$21.15 million. Hubbell reported that, under this assumption, the program allocations would include:

- Regional Administration — \$868,000
- LTRMP — \$6,400,000
- HREPs — \$13,882,000
 - Program Model Certification and Regional HREP Support — \$250,000
 - MVP — \$4,100,000
 - MVR — \$5,432,000
 - MVS — \$4,100,000

Hubbell said the Corps will adjust these allocations when EMP's final appropriation is known. [Subsequent to the meeting, on September 30, Congress passed a continuing resolution for all spending measures that is in effect until December 3, 2010.]

In response to a question from Tim Schlagenhaft, Hubbell said EMP's FY 11 public outreach efforts will include partnering on the *Our Mississippi* outreach activities and MVP's possible public television documentary on Pool 8 Islands.

Briefing with ASA(CW)

Hubbell announced that the Administration has selected the UMRS as one of its ten ecosystems of national significance. Colonel McGinley is scheduled to brief ASA(CW) Jo-Ellen Darcy regarding the Corps UMRS ecosystem restoration programs (i.e., EMP, NESP, and 519) on August 17, 2010. Darcy has requested similar presentations regarding other Corps restoration programs involved in improving the ten nationally significant ecosystems. In considering these areas as its national priorities, the Administration has said it will focus on the ongoing and future restoration efforts within these ecosystems and identify ways it can better support them.

In response to a question from Janet Sternburg, Hubbell and Barb Naramore clarified that the Administration also selects three to six priority projects or programs to highlight in annual budget documents. In recent years, this has also included EMP. The list of ecosystems of national significance is a separate effort that focuses at a larger scale and describes the Corps' national goals.

USACE's High Priority Performance Goals

Hubbell reported that USACE has identified Pool 8 Islands, Lake Odessa, and Calhoun Point among 15 National High Performing Projects for FY 11. These projects must be included in the President's FY 11 budget and completed within the fiscal year. The Corps will highlight the projects' performance, giving them greater attention and public visibility.

Public Outreach

Jeff DeZellar said MVP's contracting staff are developing a bid for a public television feature on the Pool 8 Islands. Initially, a Twin Cities public television station proposed the idea. But since the Corps would fund some of the production costs, a bid needs to be solicited in order to avoid sole sourcing. Recently, a Wisconsin public television station has emerged as a potential bidder. DeZellar said MVP staff are capturing footage of the project's ongoing construction in the interim.

DeZellar reported that MVP's July 27 public meeting on L&D 3 fish passage was well-attended. He said discussions mostly focused on issues related to Asian carp and potential impacts to fishing activities in upper Pool 4. DeZellar said MVP will host an August 4 public meeting regarding Pool 8 construction activities and an August 30 boat tour of the Pool 8 project.

Naramore asked what the anticipated product(s) and costs are related to the public television feature. DeZellar said the Twin Cities public television station's proposal includes a 45- to 50-minute documentary on Pool 8 Islands. The television station would broadcast the documentary. The Corps would retain rights to, and have joint editorial control of, the documentary. He said the television station estimated total production costs at about \$50,000, of which it would provide 50 percent through in-kind services. DeZellar said MVP would like to proceed with a very similar arrangement.

Kevin Bluhm said the Corps has distributed the *Our Mississippi* 2010 summer newsletter, which is the newsletter's third edition. The Corps is currently distributing 30,000 copies to the Corps partner and local visitor centers and businesses. He said the *Our Mississippi* Team hopes to expand the newsletter's distribution, install informal kiosks along the river, and develop an outreach website. In response to a question from Bernie Schonhoff, Bluhm said the newsletter's distribution includes about 14,000 individuals, agencies, or organizations. About 1,000 of those have asked to be added to the distribution list. Pat Boddy encouraged the Corps to contact the UMR states' tourist directors. She also suggested exploring the possibility of co-mailing the newsletters with the states' conservation-related outreach materials.

Tim Schlagenhaft asked if these newsletters are published on a web site. Bluhm said the newsletters are available on NESP's web page:

<http://www2.mvr.usace.army.mil/UMRS/NESP/Projects/NESPProjects/default.cfm?cat=np&sec=documents&tid=1>. He also reported that the Corps is currently creating an *Our Mississippi* web site.

Kevin Foerster asked how article ideas are generated. Bluhm said the Corps receives many suggestions for story ideas from readers. The *Our Mississippi* Team then finds the best fitting articles related to each newsletter's theme.

Roger Perk suggested that Corps staff consult with partners regarding outreach strategies and opportunities, such as exploring creative ways to expand the newsletters' readership. Hubbell noted that the *Our Mississippi* newsletters are located at the Corps UMRS distribution centers, which represent great opportunities to connect with a wide-ranging audience.

2010 Report to Congress

Marv Hubbell outlined the below major milestones for the 2010 Report to Congress (RTC) development and review. He said Chapter 3 of the RTC will focus solely on the EMP/NESP Transition Plan.

- August 23 — September 24: Partner review of draft RTC
- October 18 — November 5: Partner review of revised draft RTC
- December 1: MVR submits final RTC to MVD

Charles Barton expressed MVD's commitment to submitting the 2010 RTC to Corps Headquarters in December, but acknowledged that the report will not reach Congress by the end of this year.

Hubbell said the Implementation Issues Assessment (IIA) is scheduled for completion on September 15, 2011. The IIA will address various program- and policy-related issues. Partners have identified these issues to include:

- Nongovernmental organizations as cost share partners
- Cost sharing
- HREP operation and maintenance
- Delegated authority
- Land acquisition
- LTRMP program implementation
- HREP planning and prioritization
- HREP evaluations
- UMRS trends/emerging issues
- EMP's habitat project types
- Coordination with other UMRS restoration programs
- Increasing demands on limited state resources

Habitat Rehabilitation and Enhancement Projects

Regional Review Plan

Marv Hubbell reported that many new review requirements mandated in Sections 2034 and 2035 of WRDA 07 took effect on January 1, 2010. All new planning starts and projects currently in planning are subject to the new requirements, which will add significant delays to projects with substantial planning already completed. For example, Rice Lake must undergo another review following the new requirements, considerably delaying the award of a construction contract.

Hubbell explained that the Corps anticipates finalizing a Regional Review Plan to standardize the three UMR District's project review protocols by December 2010. According to Hubbell, coordination among the districts will lead to significant cost efficiencies. For example, EMP, NESP, and MVD are collaborating to certify 8 new models to use in plan formulation. In response to a question from Janet Sternburg, Hubbell clarified that Implementation Guidance regarding the WRDA 07 requirements pertain to District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), and Types I and II Independent External Peer Review (IEPR). Charles Barton said the Corps will present

more detailed information on these new internal and external review requirements and cost estimation procedures, including their implications for study time and cost, at the November 17 EMP-CC/NECC meeting.

In response to a question from Sternburg, Hubbell said he is not aware that any UMR Districts' models used in plan formulation have been identified to require significant changes. However, he said the Corps is now required to provide more detailed documentation on the models. Roger Perk said the certification contractor will identify any issue areas related to the models, but the Corps is responsible for correcting any models.

In response to a question from Jim Fischer, Barton clarified that the new requirements apply to all Corps construction projects, including all planning, engineering, and operation and maintenance products. In response to a question from Tim Schlagenhaft, Perk estimated that additional costs associated with the new requirements could increase average project review costs around ten percent.

Jeff DeZellar noted that many HREPs will not be subject to an IEPR. However, Gary Meden said projects still need a waiver to be exempt from undergoing an IEPR.

Ongoing EMP Projects

In response to previous requests, Hubbell said the Corps staff will distribute a complete inventory of EMP HREPs within the next couple of weeks.

District Reports

Brian Markert reported that MVS submitted Ted Shanks to ATR on August 2. Rip Rap Landing and Wilkinson Island are MVS's other planning priorities. He said design work for Pools 25 and 26 Islands is nearly complete and MVS anticipates awarding a contract for Batchtown dredging this fall. Calhoun Point is the District's current construction priority. However, Markert explained that all MVS construction projects have been delayed this summer due to high water levels. The Swan Lake Performance Evaluation Report should be ready for distribution shortly.

Jeff DeZellar said MVP's construction priority remains Pool 8 Islands Phase III. He anticipates the District will complete construction on Stage 3A next year and on Stage 3B in 2012. MVP's FY 11 planning priorities are L&D 3 fish passage and Capoli Slough. DeZellar reported that MVP received MVD's approval on fact sheets for Lake Winneshiek, McGregor Lake, and L&D 3 fish passage, and minor comments on five more fact sheets. The District will submit revisions of those five fact sheets shortly. DeZellar said a completion report for Guttenburg Ponds is undergoing review. MVP is going to try contracting out one or two of the seven pending completion reports. If this is successful, the remaining reports will also likely be contracted.

Barb Naramore noted that the L&D 3 fish passage planning cost estimate included in the Corps' task order is higher than the initial estimate. In response to a question from Naramore, DeZellar said MVP has reserved additional stimulus funds to cover the increase in the project's planning costs.

Steve Rumble said MVR plans to award a construction contract for Fox Island in FY 10. He reiterated that the new WRDA review requirements have delayed progress on Rice Lake and are expected to impact Pool 12 Overwintering next year. Rumble said he anticipates Rice Lake and Pool 12 Overwintering will move to construction in FY 11 and FY 12, respectively. The District has initiated planning on Huron Island and has recently submitted six fact sheets to MVD for review. Hubbell also noted that MVP has transferred funds to USFWS per its typical agreement. He also expressed appreciation to USFWS for its efforts in rehabilitating Lake Odessa following last year's flooding.

In response to a question from Janet Sternburg, Hubbell explained that the Corps had previously requested that EMP-CC cost-share partners provide evaluation reports and annual information on O&M activities and costs. This request was triggered after MVS lost many of its HREP-related files in a fire. Currently, Corps staff are compiling all O&M manuals and evaluation reports available for completed projects and incorporating that information into the HREP database, which will be available to the public.

Reach Planning

Chuck Spitzack reviewed the UMRS reach planning process, which is intended to encompass both top-down and bottom-up approaches:

- NESP/EMP Regional Support Team (RST) prepares a reach and system planning notebook, which guides the reach planning process.
- On an ongoing basis, RST coordinates with NESP's Science Panel and EMP's Long Term Resource Monitoring Program (LTRMP) scientists for input regarding habitat and information needs and monitoring and adaptive management approaches.
- The reach planning teams (RPTs) draft floodplain reach objective reports and reach plans, from which the RST develops a systemic objectives report and a plan for ecosystem restoration for the UMRS.
- Corps district-based River Management Teams (RMTs) and the Illinois River Team review the documents listed above that apply within their respective district boundaries.
- NECC and EMP-CC consider endorsement of the system-level documents — i.e., the notebook, system objectives report, and system plan.

Spitzack noted that the RST also provides guidance to NESP's system planning teams (SPTs) in their development of specialty system plans (e.g., systemic forest management plan), which are provided to the RPTs to inform reach planning. The RTPs then identify restoration needs and recommend systemic adaptive management activities to the RST.

Spitzack acknowledged that this first attempt at reach planning had complications. But, he said this effort has produced good products and insights. Tim Schlagenhaft expressed discontent with the reach planning structure, specifically the seeming disconnect between system goals and project identification and sequencing. He said MVP's RPT did not address system-scale objectives, such as water level management or floodplain restoration. For example, while partners identified restoring the river's natural hydrograph as the highest system goal, none of the RPTs' priority new starts include water level management techniques. Schlagenhaft encouraged the Corps to simplify the overall process.

Pat Boddy said the reach planning process diagram suggests there is not a clear, direct connection between the system and reach plans at any point in the process. Spitzack said the RST serves as the "connection point" between the two plans. The system plan summarizes and synthesizes the four floodplain reach plans. Boddy also recalled that system goals and objectives are supposed to drive the reach plans. Spitzack said the reach planning notebook, which outlines the system vision and goals, should serve as a guide for the RPTs to prioritize projects that address floodplain and systemic habitat and ecosystem needs. Spitzack said the Corps will incorporate lessons learned from this first iteration into the next round of reach planning.

In response to a question from Hubbell, Schlagenhaft stressed his concern that the reach plans do not address major systemic goals. He said this process does not facilitate a systemic approach to selecting projects that are best for the system. Bernie Schonhoff expressed his mutual concern. Jim Fischer asked if the floodplain reach projects are meant to reflect geomorphic needs or systemic needs. Spitzack said projects should address local habitat needs and also directly link to system goals in some way.

Sternburg observed that each RPT implemented reach planning very differently and focused only on their respective geographic boundaries. She asked how the system and floodplain reach plans will be linked, when there is currently no defined mechanism for partners to consider projects systemically. Sternburg also suggested that the Corps address the issue areas from this first iteration prior to implementing the next iteration. Spitzack acknowledged partners' concerns and said the Corps will reexamine the reach planning process.

Schlagenhaft noted that, if the system objectives report was available in this first iteration, the RPT's floodplain reach plans and prioritized projects might have been substantially different. Spitzack acknowledged that the first iteration of reach planning was not implemented as intended — i.e., the system objectives report and special systemic plans were not completed before initiating floodplain reach planning.

In response to a question from Bill Franz, Spitzack said NECC, EMP-CC, RST, and the Science Panel are all driving the reach planning process. Hubbell said he agrees with Schlagenhaft's concerns, and stressed the need to select program-neutral projects that are the most beneficial for the UMRS over the long term. Sternburg observed that previous planning efforts selected projects that resulted in important benefits to the river, even if sometimes only on a local scale. However, Sternburg emphasized that the ultimate goal is to restore the river's natural processes and functions, rather than simply making improvements to localized areas. To do that, projects need to have clear links to system goals and objectives.

Boddy suggested that the Corps and partners employ the Kaizen process to explore potential improvements prior to the next iteration of reach planning. [Note: Kaizen is an analytical approach focusing on continuous improvements to a process.] Fischer acknowledged that partners have been frustrated with the overall process and communication, but expressed appreciation to the RST and RPTs for their substantial efforts in developing the reports and making the effort program-neutral.

HREP Planning and Sequencing Framework

Hubbell proposed using the 2003 HREP Planning and Sequencing Framework this fall to select FY 11 planning new starts, in a program-neutral context. He reviewed the Framework's goals, which include:

- Ensure that HREPs address ecological needs at the pool, reach, and system scales
- Enhance public understanding and trust
- Retain flexibility for efficient and effective program execution and to apply adaptive management principles

Hubbell outlined the Framework's four-stage process, as follows:

1. District Ecological Teams (Fish and Wildlife Work Group, Fish and Wildlife Interagency Committee, River Resources Action Team—Tech, and Illinois River Work Group) identify potential habitat and rehabilitation projects to address natural river processes.

2. The System Ecological Team (SET) sequences potential projects based on their ability to address system ecological goals, using agreed-upon criteria.
3. EMP-CC develops an HREP implementation plan that also reflects administrative considerations.
4. Corps Headquarters and MVD approve EMP's budget and projects.

In response to a request by Kevin Foerster, Hubbell said Corps staff will compile and distribute a comprehensive membership list of the various UMRS technical and management teams, product delivery teams, etc. In response to a suggestion by Barry Johnson, Charles Barton said the Corps will provide this contact list on its website.

Hubbell asked partners whether EMP-CC should use the Framework to sequence the SET-endorsed projects. He said this would likely entail three meetings starting in February 2011. Schlagenhaft suggested that EMP simply select a few projects to implement in the near term, in light of the program-neutral reach planning effort. Hubbell agreed, but said the Framework would allow partners to sequence project that would reflect immediate and long-term UMRS ecological and programmatic needs. He said partners can explore various ways to sequence these projects to show direct benefits to ecosystem needs. For example, EMP could prioritize geographic areas with the greatest restoration needs.

Schlagenhaft and Franz stressed the need to sequence projects based on ecological needs that are also program-neutral, rather than focused on one program's needs. Hubbell said the Corps views the HREP strategic plan as a bridge between EMP and NESP. He clarified that, while Congress has directed the Corps to prepare for a program transition, EMP and NESP still have separate authorities and budgets, limiting the degree to which the two programs can meld. Meden noted that this is a time of considerable uncertainty for the two programs, and therefore the Corps must remain flexible and prepared to transition. The Corps is not sure how Congress will direct the two programs in the near future. Franz articulated that partners are not as concerned with which program implements the projects. He said selecting the best projects to enhance the river system is more important to the partners. Barb Naramore observed that the Corps has provided partners with a unique opportunity to engage in program implementation issues that sometimes also require partners to examine very detailed considerations. She said the challenge now for EMP and NESP is to determine how to implement projects in this time of significant uncertainty.

Spitzack referred back to Schlagenhaft's earlier suggestion to select program-neutral projects that fulfill immediate needs. Spitzack suggested that partners consider a structured decision-making process for determining the next couple of projects for planning based on overriding system needs for each floodplain reach instead of a complete sequencing of all potential projects. Boddy recognized that experimenting with sequencing approaches in the short-term could inform long-term sequencing processes.

In response to a question from Hubbell, Johnson expressed interest in updating the EMP HREP Planning and Sequencing Framework's process. In particular, he suggested that partners examine EMP's project sequencing process in the HREP Strategic Plan.

Schlagenhaft asked Spitzack if NESP staff would be comfortable with implementing a program-neutral approach to project sequencing. Spitzack expressed his support for NESP and EMP partners to proceed in a program-neutral fashion, and incorporating lessons learned from the first iteration of reach planning.

HREP Strategic Plan

Hubbell reviewed that, at the November 19, 2009 EMP-CC meeting, EMP-CC expressed interest in exploring the possibility for an HREP strategic plan. Following that meeting, a group of EMP-CC members and other program partners developed a proposal for the plan, including the plan's potential objectives, end product, process, and timeframe. At its February 24, 2010 meeting, EMP-CC endorsed the proposal and requested that the Corps develop a detailed scope of work for consideration in August. However, given the proceeding discussion about program neutrality, the Corps would like to reconsider the HREP strategic planning process. Hubbell said the Corps will distribute a revised HREP Strategic Planning Framework prior to the November EMP-CC quarterly meeting.

Hubbell outlined the HREP Strategic Plan's purposes, which are to:

- Identify priorities and actions that will facilitate the HREP component's accomplishments of its goals and objectives;
- Address systemic and site-specific issues related to selection, design, management, construction, operation and maintenance, monitoring, and evaluation of HREPs;
- Develop systemic approaches that enhance delivery of HREP program and project planning, management, and evaluation; and
- Identify and recommend any necessary changes to the Corps' policies or EMP's authorization.

In response to a question from Gretchen Benjamin, Hubbell said Corps staff still need to consider the relationships among the HREP Strategic Plan, EMP/NESP Transition Plan, Implementation Issues Assessment, HREP Planning and Sequencing Framework, HREP Design Manual, and a possible HREP workshop.

In response to a question from Boddy, Hubbell said the HREP strategic plan's first purpose refers to EMP's various programmatic implementation goals for the HREP component. For example, the HREP Strategic Plan might explore how to determine the appropriate balance in project designs that minimize O&M obligations and provide the highest level of performance related to ecosystem objectives. In response to a suggestion from Boddy for the Plan to also consider ecological needs, Hubbell explained that partners agreed to address these needs in the program-neutral reach planning process.

In response to a question from Johnson, Hubbell said the Corps will also reconsider the Plan's development schedule when revising the HREP Strategic Planning Framework. Bernie Schonhoff mentioned that the HREP Strategic Plan could also explore ways to enhance EMP's use of adaptive management to learn from completed HREPs.

Hubbell overviewed the major assumptions for HREP strategic planning, as follows:

1. The purposes outlined above reflect the core items that are necessary to address in the Plan.
2. Basic administrative provisions and program infrastructure remain in place, including the Corps' planning, design, and construction protocols.
3. The Plan will incorporate the concurrent and related efforts of the Implementation Issues Assessment, HREP Planning and Sequencing Framework, a possible HREP workshop, and updates to the HREP Design Manual.

4. The Plan will consider ways to further integrate the HREP and LTRMP components.
5. The process should remain cognizant of NESP.

Hubbell recognized that the Corps will also need to reconsider these assumptions when revising the HREP Strategic Planning Framework. In response to a question from Hubbell, EMP-CC members did not express objections to, or offer any additional, issue topics that were proposed in the Framework.

Hubbell welcomed the USFWS to co-chair the strategic planning process. Kevin Foerster said USFWS is willing to do so, but does not yet know who will serve as USFWS's representative. Hubbell added that Minnesota DNR has offered to provide facilitation. Brian Stenquist, who provided very valuable contributions as a facilitator to the LTRMP strategic planning effort, has agreed to facilitate the HREP strategic planning effort. Hubbell said he is also exploring options to reimburse the states for travel costs.

Sternburg requested that the Corps convene a conference call to discuss the revised HREP Strategic Planning Framework prior to the November quarterly meeting. Hubbell said the Corps will provide a revised HREP Strategic Planning Framework, including a program-neutral exploration of project identification and prioritization, to partners for review by September 30. The Corps will convene a conference call in mid-October to discuss the revisions.

Long Term Resource Monitoring Program

Product Highlights

Barry Johnson reported that USGS staff recently developed the 2010 land cover/land use data (LC/LU) collection protocols (e.g., resolution, flight and shutter speeds, light conditions, etc.), and have also increased their proficiency with operating the new 3-D processing equipment. LC/LU collection efforts began on August 4, starting in the Open River and moving north, and will likely finish in about three weeks. In response to a question from Gretchen Benjamin, Johnson said the accuracy assessment is still under development.

Karen Hagerty asked how USGS will account for the current flood conditions. Jennifer Dieck explained that LC/LU data sets are just a snap-shot in time and USGS needs to work where there are areas of maximum vegetation. In response to a question from Jim Fischer, Hubbell said the LC/LU accuracy assessment has not yet been included in USGS's FY 11 scope of work. Partners still need to determine the appropriate approach and level of investment. Hubbell said the November 17, 2010 EMP-CC meeting will include a discussion on options for completing an accuracy assessment. These options will include a combination of field- and map-based validations.

Kevin Stauffer asked if the LC/LU data set will include Pool 4 and Lake Pepin. Dieck said the LC/LU effort will capture images along the entire UMRS main stem.

Johnson reported that LTRMP's third quarter product highlights include the following:

- Two manuscripts: 1) Cumulative effects of restoration efforts on ecological characteristics of an open water area within the Upper Mississippi River; and 2) Longitudinal trends and discontinuities in nutrients, chlorophyll, and suspended solids in the Upper Mississippi River: implications for transport, processing, and export by large rivers.
- A completion report: Evaluation of light penetration on Navigation Pools 8 and 13 of the Upper Mississippi River.

Johnson noted that the completion report showed a strong relationship between suspended solids and light extinction. Tim Schlagenhaft mentioned that this type of information is very valuable to river managers, including efforts to minimize sedimentation in Lake Pepin.

Johnson reported that USGS's Water Resources Division (WRD) is conducting its periodic review of the Wisconsin Water Science Center. On July 19-22, USGS WRD representatives met with UMESC and Corps staff to conduct a technical review of LTRMP. Johnson said UMESC anticipates receiving WRD's written review report in about six weeks. However, Johnson anticipates an overall positive review. He said USGS will share the WRD's review findings when they are made available.

Bathymetric and LiDAR Update

Hagerty reported that systemic bathymetry data collection is complete. She said data collection was funding entirely through the 2009 American Reinvestment and Recovery Act stimulus funds. The data are currently undergoing QA/QC. In FY 11, UMESC staff will integrate the data into GIS. Hagerty said Corps staff also hope to complete data collection for systemic LiDAR this fall, contingent on weather and water level conditions.

In response to a question from Janet Sternburg, Hagerty said the systemic bathymetry and LiDAR data sets will be publicly available in GIS shape files. Sternburg expressed appreciation to the Corps and UMESC in developing the bathymetric and LiDAR data sets, noting the value of these data.

A-Team Report

Kevin Stauffer said the next A-Team meeting is scheduled for Thursday, August 5. He said the meeting will include the typical program updates, a report from the *ad hoc* Indicators Group, and a discussion of the new annual field station product report.

Ad Hoc Indicators Group Update

Hagerty said the A-Team's *ad hoc* Indicators Group anticipates convening a conference call shortly to review draft fish and macroinvertebrates subgroup reports. Hagerty is currently drafting the parent document.

LTRMP Showcase: Using Squarified Treemaps to Summarize LTRMP Data

Ben Schlifer showcased the use of squarified tree maps, which display complex data in a space-constrained view. Schlifer explained that squarified treemaps convert data into rectangles that are arranged by hierarchy in a chart. This web-based tool provides an overall analysis of a data set, including status and trends, in one view. Multiple dimensions of a data set can be visually represented concurrently by the color and relative size of the associated rectangles.

Schlifer said LTRMP staff have created a squarified treemap that queries LTRMP fisheries data, which is available at http://umesc.usgs.gov/data_library/fisheries/graphical/treemap/ltrmp_fish_treemap.html. He demonstrated how the tool can arrange the fisheries data to display status and trend information about catch-per-unit in each pool, and how to create tables and graphs of the queried information.

In response to a question from Bernie Schonhoff, Schlifer said users are able to select portions of the fisheries database as inputs to the squarified treemap. Brian Ickes explained that users can adjust the squarified treemap query of LTRMP's database to address a particular focused research question. For example, users may not want to include rare species that would create outliers, or invasive species if the users want to focus on the native population. Ickes and Barry Johnson said USGS staff can customize LTRMP's squarified treemap of the fisheries database according to partner-identified priority uses for

this treemap. Karen Hagerty said the A-Team's *ad hoc* Indicators Group could identify and recommend those priority uses. Johnson encouraged partners to test out the treemap tool and provide feedback to USGS regarding its possible applications.

Other Business

Kevin Foerster said the Ramsar Convention on Wetlands has designated the Upper Mississippi River floodplain between Wabasha and the Quad Cities as a Wetland of International Importance. He announced that, on October 10, 2010, there will be public events at many sites along the river designed to recognize the designation and encourage people to engage with the river. On October 14, USFWS will also host an invitation event with several dignitaries, including the current Ramsar Secretary and the Interior Secretary Salazar.

Foerster also announced that Bob Clevenstine will now serve as the UMR refuge liaison to MVR and MVS. He will be based in Rock Island.

Upcoming quarterly meetings are as follows:

- **November 2010 — Quad Cities**
 - UMRBA — November 16
 - NECC — November 17
 - **Joint EMP-CC and NECC — afternoon of November 17**
 - **EMP-CC — November 18**

- **February 2011 — St. Louis**
 - UMRBA — February 15
 - **EMP-CC — February 16**
 - **Joint EMP-CC/NECC — afternoon of February 16 (if needed)**
 - NECC — February 17

- **May 2011 — Quad Cities**
 - UMRBA — May 15
 - NECC — May 16
 - **Joint EMP-CC and NECC — afternoon of May 16 (if needed)**
 - **EMP-CC — November 18**

With no further business, the meeting was adjourned at 12:35 p.m.

**EMP-CC Attendance List
August 4, 2010**

EMP-CC Members

Charles Barton	U.S. Army Corps of Engineers, MVD
Kevin Foerster	U.S. Fish and Wildlife Service, UMR Refuge
Barry Johnson	U.S. Geological Survey, UMESC
Pat Boddy	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
Bill Franz	U.S. Environmental Protection Agency, Region 5

Others In Attendance

Jeff DeZellar	U.S. Army Corps of Engineers, MVP
Don Powell	U.S. Army Corps of Engineers, MVP
Kevin Bluhm	U.S. Army Corps of Engineers, MVP
David Potter	U.S. Army Corps of Engineers, MVP
Chuck Spitzack	U.S. Army Corps of Engineers, MVP
Gary Meden	U.S. Army Corps of Engineers, MVP
Roger Perk	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
Steve Rumple	U.S. Army Corps of Engineers, MVR
Chuck Theiling	U.S. Army Corps of Engineers, MVR
Brian Markert	U.S. Army Corps of Engineers, MVS
Charlie Hanneken	U.S. Army Corps of Engineers, MVS
Kat McCain	U.S. Army Corps of Engineers, MVS
Jon Duyvejonck	U.S. Fish and Wildlife Service, RIFO
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Nate De Jager	U.S. Geological Survey, UMESC
Jennifer Dieck	U.S. Geological Survey, UMESC
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Brian Ickes	U.S. Geological Survey, UMESC
Becky Kreiling	U.S. Geological Survey, UMESC
Jennifer Sauer	U.S. Geological Survey, UMESC
Ben Schlifer	U.S. Geological Survey, UMESC
Yao Yin	U.S. Geological Survey, UMESC
Bernie Schonhoff	Iowa Department of Natural Resources
Kevin Stauffer	Minnesota Department of Natural Resources
Mike Wells	Missouri Department of Natural Resources
Jeff Lee	Barr Engineering
Greg Orum	Inter-Fluve, Inc.
Brad Walker	Izaak Walton League
Marc Schultz	La Crosse County Conservation Alliance
Tom Boland	MACTEC
Laura Kammin	Prairie Rivers Network
Gretchen Benjamin	The Nature Conservancy
Thomas Ball	Sierra Club, Piasa Palisades
John Wetzell	
Barb Naramore	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association