

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

**May 14, 2014  
Quarterly Meeting**

**Hampton Inn – Gateway Arch  
St. Louis, Missouri**

Tim Yager of the U.S. Army Corps of Engineers called the meeting to order at 8:00 a.m. on May 14, 2014. Other UMRR-EMP CC representatives present were Mark Moore (USACE), Kevin Richards (USGS), Dan Stephenson (IL DNR), Diane Ford (IA DNR), Kevin Stauffer (MN DNR), Janet Sternburg (MO DoC), Dan Baumann (WI DNR) on behalf of Jim Fischer, Ken Westlake (USEPA), and Harold Deckerd (NRCS). A complete list of attendees follows these minutes.

**Minutes of the February 26, 2014 Meeting**

Diane Ford moved and Mark Moore seconded a motion to approve the draft minutes of the February 26, 2014 meeting as written. The motion carried unanimously.

**Regional Management**

*FY 2014 Fiscal Update*

Marv Hubbell reported that UMRR-EMP is on schedule to fully execute its FY 2014 appropriation of \$31.968 million. Allocations within the program for FY 14 are as follows:

- Regional Management — \$1,000,000
- LTRMP element — \$5,225,000
- HREPs element — \$25,743,000
  - Regional science support — \$1,065,700
  - MVP — \$6,980,400
  - MVR — \$10,466,500
  - MVS — \$7,230,400

[Note: At the end of FY 2013, funds were transferred among UMR Districts to get critical work accomplished and to maximize the amount of funds obligated. The FY 2014 allocations to all three Districts reflect rebalancing of those internal transfers.]

Hubbell said questions have been raised about UMRR-EMP's spending on science with the recent increase in appropriations. He explained that the program's overall spending on science in FY 2014 is \$7.754 million, which includes \$314,000 for regional management, \$5.4 million for base monitoring (includes FY 2013 carry-over funds), \$1.065 million for research and analysis to inform restoration, and \$325,000 for standardizing the program's habitat project monitoring protocols. In response to a question from Olivia Dorothy, Hubbell said Section (e)(6) of UMRR-EMP's authorization allows for transferring up to 20 percent of the amounts authorized for the HREP and LTRMP elements.

### *FY 2015 President's Request*

Hubbell reported that the FY 2015 President's budget request for UMRR-EMP is \$33.17 million, which is its full annual authorized amount. This funding level is substantially more than its average annual appropriations. Hubbell attributed the program's partnership to this increase in funding as well as the success in executing the additional funds. Together, all partners increase the program's capabilities and diffuse risk. The partnership also provides a great diversity of ways to accomplish the program's mission.

### *Agency Leadership Event Update*

Hubbell said the UMRR-EMP agency leadership event is rescheduled for September 18, 2014, per input from the UMRR-EMP CC since its February 26, 2014 quarterly meeting. The summit will still be held at Eagle Point Park in Dubuque and will include an indoor discussion session in the morning and a field trip to Sunfish Lake in the afternoon.

Hubbell said the event's primary objective is to seek input from agency leadership on important issues for the program, including funding and staff resources as well as how to communicate externally about how UMRR-EMP relates to the river's other human uses. In addition, the event will highlight UMRR-EMP's partnership and accomplishments. Hubbell anticipates that the draft UMRR-EMP strategic plan will be ready to share at the event.

### *Public Outreach*

Hubbell said he presented on UMRR-EMP at the March 5, 2014 Iowa General Assembly House Natural Resources Committee meeting. Hubbell and Diane Ford said the meeting was valuable.

Hubbell said USACE published the Spring 2014 edition of *Our Mississippi* in March 2014 that is specifically devoted to UMRR-EMP. The edition highlights the program's partnership, featuring a diverse array of partners. Hubbell extended his appreciation to all partners who contributed their time and effort in writing articles and participating in interviews. Diane Ford said the edition did a great job of highlighting the program and expressed thanks to those who worked on the publication.

### **Draft UMRR Strategic Plan**

Marv Hubbell said the UMRR-EMP strategic planning team met in-person on April 8-10, 2014 in Rock Island. The team finalized an April 19, 2014 draft strategic plan for partner review, agreed to an internal program targeted review process, and discussed how the plan will change (or not change) aspects of the program's work. The draft plan is included as Attachment C of the agenda packet. The plan is the first comprehensive strategic plan for the entire program. The planning team is recommending modifying the plan's timeframe to 2015-2025 and dropping "Environmental Management Program (EMP)" from its name, so it would now be referred to as Upper Mississippi River Restoration (UMRR) program. The draft strategic plan includes a vision for the river, mission statement for the program, and four goals to achieve the vision and mission, which are as follows:

- *Vision:* A healthier and more resilient Upper Mississippi River ecosystem that sustains the river's multiple uses
- *Mission:* To work within a partnership among federal and state agencies and other organizations; to construct high-performing habitat restoration projects; to produce state-of-the-art knowledge through monitoring, research, and assessment; to engage other organizations to accomplish the Upper Mississippi River Restoration Program's vision

- *Goal 1:* Enhance habitat for restoring and maintaining a healthier and more resilient Upper Mississippi River ecosystem
- *Goal 2:* Advance knowledge for restoring and maintaining a healthier and more resilient Upper Mississippi River ecosystem
- *Goal 3:* Engage and collaborate with other organizations and individuals to help accomplish the Upper Mississippi River Restoration vision
- *Goal 4:* Utilize a strong, integrated partnership to accomplish the Upper Mississippi River Restoration vision

Hubbell explained that the strategic planning team is currently employing a targeted review of the draft UMRR Strategic Plan, dated April 11, 2014. Under this approach, each team member is responsible for obtaining feedback from groups or individuals it represents on the team — e.g., Gretchen Benjamin of TNC will coordinate with non-profit organizations that frequently engage with the program. This approach seeks essential feedback from those who are directly involved in the program’s policy and implementation. The planning team will consider the input this summer and prepare a revised draft for the UMRR-EMP CC’s consideration at its August 6, 2014 meeting. Following the Committee’s approval of a draft strategic plan, the team will distribute the plan to external stakeholders for input.

Hubbell said the planning team believes that, when implemented, the strategic plan will result in:

- More effective habitat restoration projects
- More effective applications of science (especially ecological, biological, and engineering) to habitat restoration work
- Deeper understandings of the dynamics and details of river health and resilience
- Stronger commitments to the collection, maintenance, and application of long term resource monitoring data to measure the UMR’s health and resilience
- An even stronger partnership among the organizations that participate directly in the program
- And, most importantly, a healthier and more resilient UMR because of the program’s work

Kevin Stauffer said Minnesota’s Lake City field station staff are generally supportive of the plan. Stauffer said he had been coordinating with the staff throughout the plan’s development. Diane Ford said that, Mike Griffin, an Iowa DNR habitat manager who is on the planning team, has been discussing the plan with Iowa DNR staff and other river and local individuals. Ford said Iowa DNR staff are supportive of the plan and believe it is well thought-out.

Dru Buntin said that he and Gretchen Benjamin discussed the draft strategic plan with Olivia Dorothy of the Nicollet Island Coalition and Claudia Emken of the Mississippi River Network. They discussed the integration concepts embedded in the strategic plan as well as the plan’s direction for the program’s long term resource monitoring efforts. Dorothy expressed concerns with the level of funding being allocated to long term resource monitoring and said she plans to submit written comments. Hubbell said specific comments would be very helpful.

Bob Clevestine said USFWS UMR Refuges and Ecological Services are currently developing comments. Clevestine said no one has raised any major concerns. One suggestion is that the objectives should be more specific and measurable. Hubbell explained that the planning team will likely recommend that the strategic plan’s implementation is planned and prioritized through budget development.

Hubbell shared his own thoughts about what partners will need to do to achieve the UMRR Strategic Plan's vision, mission, and goals. These actions are as follows:

- *Actions for all partners*
  - a) Characterize/define the existing health and resilience of the UMR ecosystem
  - b) Use existing, and potentially new, data sets or indicators to establish a baseline and monitor change
  - c) Use existing, and potentially new, indicators to monitor progress
  - d) Identify, select, formulate new projects based on their potential contribution to increasing the UMR ecosystem's health and resilience
  - e) Communicate to the partnership more frequently regarding progress in achieving a healthier and more resilient UMR ecosystem
  - f) Enhance integration among the program's various restoration and science efforts
  - g) Focus science efforts to more effectively address rehabilitation and management needs
  - h) Refer to the program as UMRR with a habitat restoration element and a science element
  - i) Increase efforts to measure, and report progress to Headquarters and OMB in enhancing, UMR ecosystem health and resilience
  
- *Actions for Corps staff*
  - a) Access monitoring data and scientists to a greater degree throughout project planning
  - b) Increase use of habitat projects to test important science questions regarding the UMR ecosystem
  - c) Improve project monitoring plans to measure project outcomes – e.g., biological responses
  - d) Focus future research more on science questions related to restoration and management
  - e) Focus the next generation of habitat projects more on enhancing ecological health and resilience
  - f) Link models used for plan formulation and project evaluation
  - g) Increase involvement in management of habitat projects post-construction
  - h) Create a central database of science and habitat project information
  - i) Use standard monitoring techniques/protocols across Districts
  
- *Actions for USGS-UMESC and field stations*
  - a) Increase use of habitat projects to test important science questions regarding the UMR ecosystem
  - b) Focus future research more on science questions related to restoration and management
  - c) Increase involvement with project planning teams in project formulation

Janet Sternburg asked Hubbell what he envisions as greater involvement of Corps staff post-construction of habitat projects. Hubbell said this concept is related to monitoring for adaptive management; however, those details have yet to be determined. Hubbell said an *ad hoc* partner group will need to consider what is monitored and how results are reported. In response to a question from Sternburg, Hubbell said specific details would be identified in each project's definite project report (DPR) and the project would not close out until adaptive management analyses are complete.

Clevenstine recognized that some of the “actions for the Corps” apply to the entire partnership. Hubbell agreed. In response to a request by Stauffer, Hubbell said he will send these action items to these strategic planning team. Ken Barr said the list of actions is helpful to Corps staff and partners in identifying themselves in the plan and how they will contribute to its implementation.

In response to a question from Sternburg, Hubbell said the draft strategic plan will be presented at the May 28, 2014 web-based joint conference call of the river resource technical groups (i.e., FWWG, FWIC, RATT-Tech, and IRWG). Hubbell said the strategic planning team will review comments from the targeted review this summer and he anticipates presenting a revised draft plan to the UMRR-EMP CC. Pending the Committee’s approval, the draft strategic plan will be distributed more widely to stakeholders and interested public for input.

Janet Sternburg asked if there is a similar documenting process to the LTRMP element scope of work (SOW) for the HREP element. Hubbell explained that the Corps uses the budget spreadsheets included on pages B-1 to B-5 of the agenda packet to document allocations to, and expenditures of, UMRR’s individual habitat projects. The spreadsheets are updated and reported to the UMRR-EMP CC on a quarterly basis. Sternburg acknowledged that this information will be helpful in working towards program integration. She suggested that the habitat and science information is presented in a more coordinated fashion.

Tim Yager expressed appreciation to Hubbell for leading the strategic planning effort. Karen Hagerty thanked Brian Stenquist and Beth Carlson from Minnesota DNR for their facilitation.

## **LTRMP Element**

### *Product Highlights*

Barry Johnson presented LTRMP element’s accomplishments in FY 2014’s second quarter. Johnson reported that a technical report was published that examines the relationship between the abundance of submersed aquatic vegetation (SAV) and vegetation-associated fish: weed shiners and young-of-youth bluegills and largemouth bass. The analysis indicates that there may be a threshold of 60 to 75 percent of SAV present in backwaters to have a positive effect on the fish. Above that threshold, the fish become either more affected by other environmental factors or SAV levels become too high.

Johnson said UMRRCC’s 2014 annual meeting focused on progress in advancing the Master Plan’s long term resource monitoring goals. Jeff Houser presented on the original purpose of the long term resource monitoring program and whether UMRR-EMP is fulfilling that purpose. The original purpose was to collect scientifically and statistically valid data through time and detect site-specific or system-wide changes. Houser concluded that the original purpose has largely been achieved; partners have gone even further than understanding trends to how the UMRR functions through knowledge gained about ecological patterns, relationships between variables, responses to management, and so on. In his UMRRCC presentation, Houser said partners are entering a new phase of using system manipulations (i.e., HREPs) to expand collaboration and ecological knowledge, as a compliment to long term resource monitoring.

Johnson said UMRR-EMP’s scientists played a strong role in April 2014’s Mississippi River Research Consortium. There were 19 platform papers and 9 posters related to the LTRMP element showcased at MRRC.

Johnson presented the results of a participant survey on the UMRR-EMP’s February 11-13, 2014 Science Coordinating Meeting. The meeting received very positive feedback, particularly for facilitating interaction and communication among program partners.

Johnson listed the many individual contributions to outreach and assistance to internal and external stakeholders. The UMESC water quality lab participated in USGS Standard Reference Sample Testing, which showed that the lab is within acceptable limits, mostly within five percent. Hubbell emphasized that UMESC's labs also provide a cost efficiency over commercial labs.

#### *USACE's LTRMP Element Report*

Karen Hagerty explained that, based on recommendations by the A-Team, USACE, and USGS, the UMRR-EMP CC voted via email in early March on how to allocate \$1.061 million of UMRR-EMP's FY 2014 funds for research and analysis that will inform restoration and management. The projects and associated lead(s) and milestones are on pages D-8 to D-10 of the agenda packet. Hagerty said all projects have now been funded, with the exception of an airboat that will likely be funded mid-June.

#### *A-Team Report*

Hagerty reported that the A-Team met in-person on April 23, 2014. The team is considering language regarding quorum for its meetings and may recommend an amendment to adding the language to the UMRR-EMP Joint Charter of Coordinating Groups. The team discussed the April 19, 2014 draft UMRR strategic plan and generally expressed support for the plan. In addition, the A-Team discussed USACE's science priorities, indicators of health and resilience, habitat project monitoring protocols, and research frameworks. In response to a question from Tim Yager, Hagerty said the A-Team will draft language regarding A-Team quorum for the UMRR-EMP Joint Charter and present it to the UMRR-EMP CC for consideration.

#### *LTRMP Element Highlight: Asian Carp in the UMR*

Quinton Phelps presented analyses of UMRR-EMP's monitoring data showing the impacts of Asian carp on native fish species by comparing pools with high and moderate abundance and no presence of Asian carp, as well as pre- and post-invasion data. Phelps explained that there are many parameters needed to thoroughly evaluate the forces that influence the fish community to make informed management decisions, including the role of invasive species on native fishes. Long term resource monitoring data that incorporates pre- and post-invasion can provide the best insight regarding such influence. Phelps said the upper three study reaches have not been invaded by silver carp and therefore serve as a control. The lower three study reaches have established silver carp populations.

Phelps provided background about Asian carps' introduction into the Midwest and the traits that make the fish a great invader. He said silver carp are widely understood to alter habitats, compete with native species, and disrupt the ecosystem. However, the actual effects remain largely unknown since Asian carp are fairly recent invaders. To understand these effects better, researchers recently explored the following research questions: what are the effects of silver carp invasion?, what are the effects of silver carp in UMRS floodplain lakes?, if there is negative interaction between silver carp and native fishes, is competition the mechanism driving this relationship?

Phelps explained the research objectives, methods, and results, as described below:

1. Objective: To compare native planktivore relative abundance before and after invasion.

Results: Using beyond before-after-control-impact analyses with data collected between 1993 and 2013, the data indicate that, following silver carp invasion, gizzard shad and bigmouth buffalo had significant declines in mean catch per year.

2. Objective: To evaluate short-term fish community changes in Mississippi River floodplain lakes with varying densities of silver carp.

Results: Sampling four UMR floodplain lakes to compare present/absence of dominant taxa, the results show that there is no change in fish community where there is not silver carp invasion, minor changes where there is moderate invasion, and drastic changes where there is high invasion (or abundance).

3. Objective: To determine if competition exists between gizzard shad/bigmouth buffalo and silver carp in a controlled setting, and whether that competition is direct or indirect.

Results: Comparing growth and survival of young-of-youth of silver carp, bigmouth buffalo, and gizzard shad in a laboratory as well as post-hoc behavioral experiments, the results indicate that silver carp outcompete the other fish because they are more effective at consuming prey.

Phelps concluded that there are multiple lines of evidence that suggest Asian carp may be impacting fish community composition and thus historic function. He said future study efforts could include evaluating potential management strategies that could effectively minimize effects on the UMRS, determining what stretches of the UMRS are the most important to invasive carp reproduction, the effects of Asian carp on the diets of piscivores and whether that alters community composition, and evaluating early life history and its role in recruitment and management efforts.

Bryan Hopkins asked why the research focuses only on silver carp and does not include impacts from bighead carp. Phelps explained that bighead carp are very difficult to catch. Noting that the filtrations systems are different between two fish, Hopkins asked if there are any differences in their impacts. Phelps said the silver carp has a finer mesh filtering mechanism and are not specific in their consumption, thus having a broader impact on filtering species. He noted that another issue is the potential for silver and bighead carp to hybrid.

In response to a question from Barry Johnson, Phelps said no bighead carp were found in the sampled floodplain lakes, but there may have been hybrids. Kevin Stauffer asked if the habitat among floodplain lakes was different enough to affect populations. Phelps said the researchers selected floodplain lakes with similar characteristics.

Dan Stephenson reported that the Havana Field Station has documented 13 tons of Asian carps per river mile and have seen three spawns per year, depending on river rise. He also reported that there was a half-mile die off of Asian carp below Barkley Lake about a year ago; the reasons for which are currently unknown. Phelps said the key is the transition from early life to being viable recruitment, and that may be the stressor. Hagerty added that evidence has indicated poor recruitment.

Ken Westlake asked what the impacts are to plankton in areas where silver carp are present. Phelps said the Havana Field Station has shown a shift in the plankton community population. Westlake asked if other filter feeding fish are affected by competition. Phelps said gizzard shad are not getting as big in size, making them more vulnerable to predation by piscivores over time. In response to a question from Olivia Dorothy, Phelps said the die off of gizzard shad occurred in both a controlled and field setting. The UMRR-EMP's long term monitoring data is also showing this occurrence.

### **Emerging Trends and Issues – Asian Carp**

Marv Hubbell clarified UMRR-EMP's role in addressing invasive species, and Asian carp in particular. Hubbell said the program maintains a base flow of critical monitoring data that forms a basis for understanding the UMRS ecosystem. Through that information, managers and researchers can evaluate the implications of invasive species on habitat and native species.

Karen Hagerty presented on UMRR-EMP's role related to aquatic invasive species, per USACE's policies, including knowledge, leadership and coordination among partner agencies, early detection and response, and prevention in so far that the program's restoration enhances the river's resilience to invasion by harmful non-native species. Hagerty said the program's invasive species work is governed by several federal and USACE policies, including National Invasive Species Act of 1966, Invasive Species Executive Order 13112, National Invasive Species Management Plan, and USACE's 2009 Invasive Species Policy. In addition, there are several other regional and state policies governing work on invasive species.

Hagerty described how the UMRR-EMP takes action on invasive species relative to USACE's 2009 Invasive Species Act, as follows:

- Leadership and coordination
  - Coordinate with USACE invasive species leaders
  - Program partners coordinate within their respective organizations
  - Program partners coordinate through UMRR-EMP CC and the A-Team
- Prevent introduction and establishment
  - No direct role
- Early detection and rapid response
  - All new detections reported to individual agencies
  - Program partners develop a process to report new discoveries to UMRR-EMP management
  - UMRR consider adding invasive species to habitat project monitoring plans
- Control and management
  - No direct role
- Restore native species, habitats, and processes
  - UMRR promotes native species re-establishment, identifies impacts and costs from invasive species to project benefits, and identifies and develops measures to prevent invasive species re-colonization
- Conduct research to ensure management programs are effective and science-based
  - UMRR identifies invasive species impacts to native communities, habitats, and key ecological processes, as well as develops knowledge to improve habitat project selection, planning, and construction
- Information management to track invasive species data
  - UMRR utilizes websites to make data and reports available; USACE's website for project data and UMESC's website for research and monitoring data
- Education and public awareness
  - Program partners continue outreach and education efforts regarding what the program is doing, the status and new findings on Asian carp, and what the public can do

Hagerty said USACE will convene a writing team to draft a UMRR-EMP invasive species strategy. She anticipates the A-Team will review the draft strategy this fall and UMRR-EMP CC's consideration at its November 19, 2014 meeting. Barry Johnson suggested that perhaps UMRR-EMP discourages establishment through its habitat projects that improve the river's ability to be resilient to invasion.

## **Habitat Rehabilitation and Enhancement Projects Element**

### *District Reports*

#### St. Louis District

Tim Eagan said MVS's current planning priorities are Rip Rap Landing and Clarence Cannon. Final construction details on Pools 25 and 26 Islands are nearing completion. Eagan reported that, given constraints on available new starts, the District is discussing with partners the possibility of moving Horseshoe Lake from USACE's Continuing Authorities Program to UMRR-EMP. District staff will present more information on the project at UMRR-EMP CC's August 6, 2014 meeting and ask the Committee for its support for transferring the project to UMRR-EMP. Eagan said the River Resources Action Team (RRAT) has expressed its support for transferring the project to UMRR-EMP.

Marv Hubbell said that Col. Chris Hall is interested in working on restoration in the open river reach. In response to a question from Dan Stephenson, Eagan said the project would include a water control structure and USACE and Illinois DNR are currently discussing the best option. In response to a question from Dan Baumann regarding the project site's proximity and connection to the river, Eagan explained that the site receives Mississippi River flood water.

#### St. Paul District

Hubbell said MVP anticipates completing plans on Harpers Slough and initiating construction on Stages 1 and 2 of the project this fiscal year.

#### Rock Island District

Hubbell said MVR is focusing planning on Pool 12 Overwintering Stage II, Huron Island, and Beaver Island. Planning on Keithsburg will be initiated this summer. Hubbell said the District plans to initiate construction on Huron Island and Lake Odessa flood recovery this year. In addition, construction is proceeding on Pool 12 Overwintering Stage I, Fox Island, and Rice Lake Stage I.

### *New Project Starts*

Hubbell said that, following the FY 2015-2019 strategic planning process in late summer/early fall, UMRR-EMP will initiate a "data-driven" process for selecting new starts that will be informed by partners' expertise and experience, the strategic plan and other planning documents, and decision support tools. Hubbell requested that partners send him any input on the process by June 30, 2014.

In response to a suggestion by Janet Sternburg, Hubbell said the planning effort will build upon past efforts, including work on the Illinois River and Middle Mississippi River to identify projects as well as UMRR-EMP/NESP reach planning.

### *Question of the Quarter*

What is the total amount of funding that UMRR has received from FYs 1985 through 2014, with the following multiple choice options?

- a) \$250 million to \$350 million
- b) \$351 million to \$450 million
- c) \$451 million to \$550 million
- d) \$551 million to \$650 million

The answer is C.

*HREP Highlight: Clarence Cannon National Wildlife Refuge*

Eagan said the Clarence Cannon HREP is located in Pool 25 on approximately 3,750 acres of Refuge lands. He said the project site has experienced loss of native plant communities, invasive species colonization, habitat fragmentation, loss of floodplain connectivity, shallow water in backwaters and loss of historic meanders, as well as an altered water regime that is not followed by native species. The project plans to a) increase acreage of, and connectivity between, native plant communities by reducing acreage of invasive plant species; b) restore floodplain connectivity between the Mississippi River and the project area; and c) improve water delivery and drainage to the Refuge to simulate the pre-impoundment hydrograph. Eagan demonstrated visually, using a map of the project site, the conditions without the planned habitat improvement and the conditions post-project given the water control structures.

In response to a question from Barry Johnson, Eagan said the site was flooded in 2008 and 2011. Brian Markert added that floodwaters currently enter the site through a spillway, and does not have an effective way of leaving the site post-flood.

**Other Business**

*Future Meetings*

The upcoming quarterly meetings are as follows:

- **August 2014 — East Peoria**
  - UMRBA — August 5
  - **UMRR-EMP CC — August 6**
  
- **November 2014 — St. Paul**
  - UMRBA — November 18
  - **UMRR-EMP CC — November 19**
  
- **February 2015 — Quad Cities**
  - UMRBA — February 10
  - **UMRR-EMP CC — February 11**

With no further business, the meeting adjourned at 11:35 a.m.

**UMRR-EMP CC Attendance List  
May 14, 2014**

**UMRR-EMP CC Members**

Mark Moore	U.S. Army Corps of Engineers, MVD
Tim Yager	U.S. Fish and Wildlife Service, UMR Refuges
Kevin Richards	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
Janet Sternburg	Missouri Department of Conservation
Dan Baumann	Wisconsin Department of Natural Resources [On behalf of Jim Fischer]
Ken Westlake	U.S. Environmental Protection Agency, Region 5
Harold Deckerd	U.S. Department of Agriculture, NRCS

**Others In Attendance**

Renee Turner	U.S. Army Corps of Engineers, MVD
Gary Meden	U.S. Army Corps of Engineers, MVP
Marvin Hubbell	U.S. Army Corps of Engineers, MVR
Ken Barr	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
Tim Eagan	U.S. Army Corps of Engineers, MVS
Matt Crosby	U.S. Army Corps of Engineers, MVS
Bob Clevestine	U.S. Fish and Wildlife Service, UMR Refuges
William Guertal	U.S. Geological Survey, Midwest Region
Barry Johnson	U.S. Geological Survey, UMESC
Barb Naramore	Minnesota Department of Natural Resources
Patrick Phenow	Minnesota Department of Transportation
Quinton Phelps	Missouri Department of Conservation
Robert Stout	Missouri Department of Natural Resources
Bryan Hopkins	Missouri Department of Natural Resources
Tom Boland	AMEC
Mary Stroka	Fanning Communication, Our Mississippi
Olivia Dorothy	Nicollet Island Coalition
Brad Walker	Missouri Coalition for the Environment
Dru Buntin	Upper Mississippi River Basin Association
Dave Hokanson	Upper Mississippi River Basin Association
Kirsten Mickelsen	Upper Mississippi River Basin Association