UPPER MISSISSIPPI RIVER RESTORATION - ENVIRONMENTAL MANAGEMENT PROGRAM

Joint Charter of the Upper Mississippi River Restoration - Environmental Management Program Coordinating Committee, Analysis Team, and Habitat Rehabilitation and Enhancement Projects Planning and Sequencing Framework Teams

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Introduction

The Upper Mississippi River Restoration Environmental Management Program (UMRR-EMP) is authorized under Section 1103 of the Water Resources Development Act of 1986, and as amended in 1990, 1992, 1999, and 2007, which charges the U.S. Army Corps of Engineers (Corps) with implementing the Program in consultation with the Department of the Interior and the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. Three major interagency initiatives, the Upper Mississippi River Restoration Environmental Management Program Coordinating Committee (UMRR-EMP CC), the Analysis Team (A-Team), and the Habitat Rehabilitation and Enhancement Projects (HREP) Planning and Sequencing Framework Teams (Framework Teams), are key mechanisms for this consultation and facilitate implementation of the UMRR-EMP. This charter, executed by the Program's partner agencies, describes the purpose, membership, roles and responsibilities, and operation of the UMRR-EMP CC, A-Team, and Framework Teams.

Authority

The UMRR-EMP CC, A-Team, and Framework Teams are consistent with the UMRR-EMP authority established under Section 1103 of the 1986 WRDA, as amended. Each member agency of the three major initiatives participates under the auspices of its own authorities governing interagency coordination and management of the Upper Mississippi River System (UMRS). Participation does not restrict any individual agency's authority to issue permits, manage programs, manage lands, operate projects, or fulfill other individual agency mandates. The views expressed and actions taken by individual agency representatives and by the UMRR-EMP CC, A-Team, or Framework Teams are not binding on any agency.

Upper Mississippi River Restoration
Environmental Management Program Coordinating Committee

Purpose:

The Upper Mississippi River Restoration Environmental Management Program Coordinating Committee (UMRR-EMP CC) is the over-arching body for coordinating issues related to all aspects of the Upper Mississippi River Restoration Environmental Management Program (UMRR-EMP). In this role, the UMRR-EMP CC provides the U.S. Army Corps of Engineers (Corps) with the partner agencies' perspectives on UMRR-EMP policy, budget, and implementation.

Membership:

The following federal and state agencies are official members of the UMRR-EMP CC:

Federal	State
U.S. Army Corps of Engineers	Illinois Department of Natural Resources
U.S. Fish and Wildlife Service	Iowa Department of Natural Resources
U.S. Geological Survey	Minnesota Department of Natural Resources
Natural Resources Conservation Service	Missouri Department of Conservation
U.S. Environmental Protection Agency	Wisconsin Department of Natural Resources
U.S. Maritime Administration	

Each member agency will appoint an official representative to the UMRR-EMP CC. In the event that an agency's official representative is unable to participate in an UMRR-EMP CC meeting, the agency may designate another staff person to serve in that capacity on a substitute basis.

Roles and Responsibilities:

The major roles of the UMRR-EMP CC include the following:

1. Provide a forum for the UMRR-EMP partner agencies and other interested parties to discuss policy, programmatic, and budgetary issues related to Program implementation.
2. Identify and communicate the official member agencies' perspectives on UMRR-EMP policy, programmatic, and budgetary issues to the Corps and other implementing agencies.
3. Seek to establish a consensus among the member agencies on major issues related to Program priorities and direction.
4. Review fiscal performance, project implementation, product quality, and other key measures of Program performance.
5. Provide guidance regarding the implementation of specific UMRR-EMP projects and studies when requested by a member agency or other interested party.
6. Foster coordination between the UMRR-EMP and other federal and state agency programs.

In serving these roles, the UMRR-EMP CC's specific responsibilities include the following:

1. Provide guidance to the A-Team regarding the UMRR-EMP CC 's perspectives and priorities. Seek and consider the A-Team's input regarding scientific and technical matters, in part by including an A-Team report as part of UMRR-EMP CC meetings.

2. Provide guidance to the Framework Teams regarding the UMRR-EMP CC's HREP planning and sequencing perspectives and priorities. Seek and consider the Framework Teams' input regarding matters related to project planning and sequencing, in part by including a Framework Team report as part of UMRR-EMP CC meetings, as needed.
3. Discuss and provide input on pending projects, studies, and products at UMRR-EMP CC meetings.
4. Provide a forum for interested stakeholders and members of the public to address the Committee at its regularly scheduled meetings.

The responsibilities of the official representatives of the UMRR-EMP CC include the following:

1. Consult with the UMRR-EMP CC regarding policy, programmatic, and budgetary issues and ensure that the Committee has the background information necessary to consider those issues.
2. Determine and communicate their agency or state's full range of interests and perspectives related to issues being addressed by the UMRR-EMP and reflect those interests and perspectives to the UMRR-EMP CC.
3. Ensure that other key people within their agency or state are aware of important decisions and developments related to the UMRR-EMP CC.
4. Coordinate review of key documents within their agency or state and communicate the results of that review as appropriate.
5. Respect the perspectives of other UMRR-EMP partner agencies and stakeholders and attempt to further the consensus positions of the UMRR-EMP CC to the extent possible.
6. Representatives must be prepared to fully participate at each quarterly meeting.

Operation:

The Corps' official representative, from the MVD, to the UMRR-EMP CC will co-chair the Committee with the U.S. Fish and Wildlife Service's official representative, from Region 3. If needed, each co-chair can appoint a designated representative in the event that they are not able to serve as co-chair at an UMRR-EMP CC meeting.

The Corps' MVD has delegated overall regional Program management responsibility to the Corps' Rock Island District but retains Program oversight responsibility. The Regional Program Manager is responsible for managing the Program on behalf of the Corps, and, as such, provides a Program report and update, and ensures that the official documents and records of the UMRR-EMP CC are developed and maintained.

The Upper Mississippi River Basin Association (UMRBA), under contract with the Corps, will be responsible for preparing meeting announcements, agendas, meeting summaries, and minutes and making meeting arrangements. Other UMRR-EMP CC communications, including communication with the A-Team, will be coordinated by the Corps. Each UMRR-EMP CC member agency will be responsible for all costs associated with its personnel's participation in UMRR-EMP CC meetings and activities. The UMRR-EMP CC will typically meet on a quarterly basis, or as needed, with the time and location of meetings to be determined by the Committee. The Committee may schedule additional meetings and/or conference calls as necessary.

Whenever possible, the UMRR-EMP CC will attempt to achieve unanimous consent among the official representatives present on questions before the Committee. When this is not possible, each

official member agency represented at the meeting will have one vote for the purpose of determining the UMRR-EMP CC 's position. A two thirds majority of the members present is required for formal recommendations. However, the meeting minutes will reflect all positions articulated by UMRR-EMP CC representatives and the Corps will consider all input received in making decisions regarding Program implementation.

Analysis Team

Purpose:

The Analysis Team (A-Team) addresses technical matters related to implementing the Long Term Resource Monitoring Program (LTRMP) component of the Upper Mississippi River Restoration Environmental Management Program (UMRR-EMP). The A-Team serves as an advisory body to the UMRR-EMP Coordinating Committee (UMRR-EMP CC) and advises the U.S. Army Corps of Engineers (Corps) and the U.S. Geological Survey (USGS) directly on technical issues that do not raise policy or budgetary concerns.

Membership:

The following federal and state agencies are official members of the A-Team:

Federal	State
U.S. Fish and Wildlife Service	Illinois Department of Natural Resources
Natural Resources Conservation Service	Iowa Department of Natural Resources
U.S. Environmental Protection Agency	Minnesota Department of Natural Resources U.S.
Army Corps of Engineers*	Missouri Department of Conservation
U.S. Geological Survey*	Wisconsin Department of Natural Resources

* Non-voting members

Each member agency will appoint an official representative to the A-Team. In the event that an agency's official representative is unable to participate in an A-Team meeting, the agency may designate another staff person to serve in that capacity on a substitute basis. The Corps and the USGS are non-voting members of the A-Team (denoted by asterisk). The Team Leaders from each of the six LTRMP Field Stations, or their representatives, and the Component Specialists from USGS cannot be official A-Team representatives, however, they are expected to attend and participate in the A-Team, as appropriate.

Roles and Responsibilities:

The major roles of the A-Team include the following:

1. Provide a forum for the UMRR-EMP partner agencies and other interested parties to discuss technical issues related to LTRMP implementation.
2. Identify and communicate the official member agencies' perspectives on LTRMP technical issues to the Corps, USGS, and UMRR-EMP CC.
3. Advise the UMRR-EMP CC regarding the technical implications of policy, programmatic, and budget decisions affecting the LTRMP.
4. Seek to establish a consensus among the member agencies on priorities for LTRMP components, projects, activities, and research. Provide guidance regarding how the LTRMP can best further those priorities.
5. Promote the timely and effective reporting of LTRMP results and information to partner agencies, interested stakeholders, and the general public.

In serving these roles, the A-Team's specific responsibilities include the following:

1. Determine and articulate partner information needs for use in prioritizing and implementing the LTRMP.
2. Respond to UMRR-EMP CC, Corps, and USGS requests for information and perspectives regarding the LTRMP. Provide A-Team briefings at UMRR-EMP CC meetings.
3. Review, provide comments, and recommendations on major LTRMP guidance documents, including, but not limited to, strategic plans, research frameworks, scopes of work, and monitoring methods and protocols, and forward such recommendations to UMRR-EMP CC for consideration.
4. Review and provide comments on major LTRMP publications, LTRMP website, and other information dissemination efforts, when requested.
5. Provide advance notice and written summaries of its meetings to all official agency representatives and other interested parties upon request.
6. Ensure that interested stakeholders and members of the public have an opportunity to address the team at its regularly scheduled meetings.

The responsibilities of official agency representatives to the A-Team include the following:

1. Consult with the A-Team regarding LTRMP technical issues and ensure that the team has the background information necessary to consider those issues.
2. Determine and communicate their agency or state's full range of interests and perspectives related to the LTRMP and reflect those interests and perspectives in the positions they take as an official representative to the A-Team.
3. Ensure that their agencies' UMRR-EMP CC representative, LTRMP Field Station staff, and other key people within their agency or state are aware of important recommendations and developments related to the LTRMP.
4. Coordinate review of key documents within their agency or state and communicate the results of that review as appropriate.
5. Respect the perspectives of other UMRR-EMP partner agencies and stakeholders and attempt to further the consensus positions of the A-Team to the extent possible.
6. Representatives must be prepared to fully participate and provide technical expertise at each meeting.

Operation:

The chair of the A-Team will rotate among the team's state agency members on a two-year basis. Agencies have the option of declining the chair**.** Official agency representatives will serve as chair in the following order: Iowa Department of Natural Resources, Wisconsin Department of Natural Resources, Illinois Department of Natural Resources, Missouri Department of Conservation, and Minnesota Department of Natural Resources.

The A-Team will typically meet on a quarterly basis, or as needed, with the time and location of meetings to be determined by the team. The A-Team chair will be responsible, in consultation with the Corps and USGS, for preparing meeting announcements and agendas. The USGS will be responsible for making meeting arrangements. The A-Team chair, or his/her identified delegate, will be responsible for preparing minutes of A-Team meetings. The A-Team chair will be responsible for

working with the UMRR-EMP CC to ensure appropriate coordination and communication between the A-Team and the UMRR-EMP CC. The USGS will facilitate other A-Team communications as requested by the A-Team chair. Each A-Team member agency will be responsible for all costs associated with its official representative's participation in A-Team meetings and activities.

Whenever possible, the A-Team will attempt to achieve unanimous consent among the official representatives present on questions before the Committee. When this is not possible, each official member agency represented at the meeting will have one vote for the purpose of determining the A-Team's position. A two thirds majority of the members present is required for formal recommendations. However, the meeting minutes will reflect all positions articulated by A-Team representatives. The Corps, USGS, and UMRR-EMP CC will consider all input from A-Team member agencies in making decisions regarding Program and/or LTRMP implementation.

Habitat Rehabilitation and Enhancement Project (HREP)
Planning & Sequencing Framework Teams

The UMRR-EMP CC officially endorsed the Habitat Rehabilitation and Enhancement Project (HREP) Planning and Sequencing Framework (Framework) in 2003 (copy enclosed). The Framework identifies and outlines responsibilities for the following teams:

District Ecological Teams (DET) (one in each of the three UMR Districts on the Mississippi River and one on the Illinois River)
System Ecological Team (SET)
Program Planning Team (PPT)

The signatory agencies to this Charter agree that the 2003 Framework will serve as the governing document for the DETs, SET, and PPT until such time as the signatories elect to update the 2003 Framework or modify the Charter to more fully address the teams' roles and responsibilities.

HREP Planning and Sequencing Framework

I. Goals of HREP Planning and Sequencing Process

- To ensure that EMP habitat projects address UMRS ecological needs at pool, reach, and system scales by building on existing HREP prioritization mechanisms and integrating the HNA and other planning efforts into project evaluation.

- To enhance public understanding and trust in the decision-making process by making HREP evaluation criteria explicit and consistent.

- To retain the flexibility necessary to ensure efficient, effective program execution and to apply adaptive management principles to project planning, design and implementation.

II. Overview of HREP Planning and Sequencing Process

Below is a general overview of the proposed four-stage HREP planning and sequencing process. This process seeks to build upon the existing HREP selection process to create a more systemic, comprehensive approach that is transparent and accessible to project partners and stakeholders. The ecological merits of proposed projects will remain the most important factor in determining HREP priorities. Other factors to be considered will include project-specific administrative issues and consistency with overall program goals. It is important to emphasize that project implementation will not proceed rigidly in strict order of numerical rankings. Flexibility is essential; and the Corps of Engineers, in consultation with the program partners, will need to exercise reasonable judgment to resolve unexpected issues, respond to unforeseen opportunities, and ensure efficient program execution.

Fact Sheet Development:

The Fact Sheets will be developed in accordance with the attached Fact Sheet template. The developer of the Fact Sheet for a specific proposed HREP project will provide the requested information; to the extent it is available. The acquisition of new data or mapping is not required for Fact Sheet creation. However, it is expected that well thought-out projects, with information on cost and an assessment of how the project meets site specific, pool, reach and possibly system goals, will be presented. An ecological criteria checklist is also in the Fact Sheet template. This checklist (also shown as Table 1 later in this framework) will help identify the ecological factors that are being addressed by each proposed project.
This framework process addresses only the requirements for a project fact sheet. The way in which projects are initially conceived and identified, how the public is involved, and the role of potential project "sponsors" is not addressed. All of those pre-fact sheet steps are assumed to be the responsibility of the District in collaboration with EMP partner agencies.

Stage I - District Ecological Evaluation:

This first stage of the HREP planning and sequencing process is designed to review and sequence project fact sheets at the District level. A District Ecological Team (DET) will evaluate projects based on ecological factors at the pool and reach scales. In addition, the Team will identify anticipated system ecological benefits of the projects. Ecological evaluations will be completed annually by each District Team but may be postponed if a sufficient number of projects have previously been identified for planning and construction.

- The District Ecological Teams (DETs) will consist of MVP's Fish and Wildlife Work Group (FWWG), MVR's Fish and Wildlife Interagency Committee (FWIC), and MVS's River Resource Action Team - Technical Section (RRAT-tech). The relationship of the FWWG, FWIC and RRAT-tech to the River Resources Forum (RRF), the River Resources Coordinating Team (RRCT) and River Resource Action Team Executive Board (RRAT-exec) will not be affected by this HREP sequencing process. The DET's will be responsible for coordinating with their respective committee and receiving their concurrence on recommendations as is the current policy of each committee.

- Natural processes and ecological sequencing of projects will be considered as part of the Stage 1 evaluation. Ecological Evaluation Criteria will be used to determine how each project addresses pool, reach, and system goals. A draft set of Ecological Evaluation Criteria is shown in Table 1. (The criteria will have to be addressed in checklist form during the Fact Sheet creation.) The matrix in Table 2 may be used by the DETs to help visualize the regional distribution of the project objectives as the matrix will be used in Stage II to visualize the system distribution.

- The three District Ecological Teams will use similar, but not necessarily identical, Ecological Evaluation Criteria. The DETs will have the flexibility to tailor the criteria to reflect differences within the river system. Such modifications will be done in concurrence with the corresponding regional team (RRF, RRCT, or RRAT-exec.), and the System Ecological Team (described below) to ensure there is sufficient compatibility among the three Districts' criteria. The draft criteria were partially drawn from the districts' existing or previously used ranking processes, but will require consideration of the Habitat Needs Assessment (HNA), Pool Plans, and Navigation Study Objectives database and other pertinent databases to evaluate ecological habitat needs at the pool and reach scale.

- The DETs will each retain flexibility and discretion on how to address public involvement, preparation and submission of Fact Sheets, coordination and review procedures in their portions of the UMRS.

- The DETs are expected to use the Habitat Needs Assessment (HNA) to demonstrate how the proposed project will help fill the ecological habitat needs. The HNA Query tool will be used to help describe existing habitat conditions, review available Long Term Resource Monitoring Program (LTRMP) data and produce graphics as needed.

- The results of the DET evaluations, including the ecological sequencing of projects, will be forwarded to the Stage II - System Ecological Team (SET) for sequencing at a system level. The DETs will be encouraged to forward innovative projects that address significant resource needs at a pool or systemic scale, but which may not fit perfectly into the current program structure. The

DETs will document their considerations for sequencing projects and provide a summary of how a project meets ecological needs at various spatial scales. This documentation will also be forwarded to the SET.

Stage II - System Ecological Evaluation:

Once proposed project sequencing has been identified at the pool and reach scale at the District level (Stage I), the System Ecological Team will conduct a system-level evaluation and sequencing of the projects forwarded by the DETs. The purpose of the system evaluation will be to judge which projects best meet system ecological needs and goals.

- System criteria will consist of the following but may be modified with the concurrence of UMRR-EMP CC:
  - Measures of how well the project meets system needs as identified in the HNA, Long Term Resource Monitoring Program trends data, Environmental Pool Plans and Navigation Study Environmental Objectives
  - Consistency with other habitat goals such as those identified in master plans, the North American Waterfowl Management Program, state watershed and river programs, national hypoxia/nutrient plans, etc.
  - Natural river process considerations, such as hydrology, flow distribution, floodplain connectivity, etc.
  - Sequencing of projects on the basis of their anticipated ecological and geomorphic interrelationships
  - Considerations of the project's habitat sustainability and long term durability

- The System Ecological Team will consist of an interdisciplinary team of scientists and managers from state and Federal agencies and academia, with support from the District Ecological Teams. Team size is anticipated to be 4-6 members with suggested disciplines to include:
  - Geomorphology
  - Hydrology
  - Limnology/Water Quality
  - Wildlife ecology/management
  - Fish ecology/management
  - Wetlands
  - Forestry

- The project evaluation criteria presented above (Table 1) will be used to organize complex ecological characteristics in a spatially organized spreadsheet (Table 2). The matrix can be used to visualize project objectives and their distribution with shaded cells or can be scored to assist project sequencing.

- The system ecological evaluation will be based on the information contained in project fact sheets and the District Ecological Teams' evaluations. All projects will be forwarded to Stage III with the District and System Teams' recommendations. In addition, the System Team will provide feedback to the District Teams, including a narrative outlining factors that were used to determine project sequencing and recommendations for modification of the project if necessary. This system evaluation will be done annually but may be postponed if sufficient number of projects have

previously been identified for planning and construction (determination made by Program Planning Team – Stage 3).

- The SET will work closely with the DETs and District HREP managers. The DETs and managers may be contacted for technical input, project clarifications, and results of public involvement or background information as needed.

Stage III - Program Planning:

Once the best ecological projects have been identified (those that best meet pool, reach and system needs), it is reasonable to shift the evaluation criteria to the question of which administrative *mix* of projects is best, rather than attempting to identify which *individual* project is best.

- The Program Planning Team will develop an "HREP Program Plan" based upon the high priority ecological projects resulting from the previous two-stage ecological screening process and documented considerations of the DETs and SET.

- The Program Planning Team will include; the EMP-CC members representing the States, Corps of Engineers, Geological Survey, and Fish and Wildlife Service; each District's HREP manager; and the Division EMP liaison. The EMP Program Manager will lead the Program Planning Team. The District HREP managers will prepare and recommend the HREP Program Plan for review and concurrence by the entire Program Planning Team.

- In selecting among the sequenced ecological projects, the Program Planning Team will use a variety of policy and administrative considerations to determine an optimal project mix. These considerations will include:
  - Combination of innovative and proven techniques
  - Variety in types of measures
  - Geographic distribution
  - Yearly funding
  - Maintaining minimum district delivery capability
  - Cost sharing
  - Public support
  - Readiness (NEPA, permits, land availability)
  - Leveraging non-EMP funds
  - Compatibility with other river uses
  - O&M requirements

- The Program Planning Stage will have two separate phases – initiation of Definite Project Reports (DPRs) and identification of a preferred implementation sequence.
  - Initiation of DPR: This phase will identify which habitat projects should proceed to plan formulation.
  - Identification of preferred implementation: This phase will identify a preferred implementation sequencing for approved DPRs.

- The Program Planning Team in developing its recommendations, will consult, as necessary, with the RRF, RRCT, RRAT-exec., project sponsors, SET and others regarding various factors affecting project implementation (including technical input, project clarifications, results of public involvement or background information as needed). The Team's recommended package of

projects (i.e., the HREP Program Plan) will be forwarded to Mississippi Valley Division (MVD) for consideration. MVD will retain final approval authority.

Stage IV – COE Management:

- MVD would retain ultimate responsibility and final approval authority on all programming and budgetary decisions.
- Authority may be delegated to the Districts for projects less than $1 million.

Table 1. Draft Ecological criteria to evaluate Habitat Rehabilitation Projects. (The DETs have flexibility to tailor the criteria with concurrence with the regional teams and SET).

Geomorphology	**Habitat**
Channel formation	Floodplain-river connectivity
Channel sedimentation	Longitudinal aquatic connectivity
Channel migration	Forest corridors
Filling between wingdams	Riparian buffers
Island erosion	Forest blocks
Backwater formation	Grassland blocks
Backwater sedimentation	Wetland blocks
Bathymetric diversity	Wetland patches
Sediment quality	
Backwater delta formation	**Biota**
Tributary delta formation	Plants species
Wind-wave erosion of islands	Animal species
Island dissection	Representative spp./guilds
Island formation	T&E Species
Island migration	Game species
Topographic diversity	Conservation targets
Upland Watershed Dynamics	Recovery plans
	Proximity of critical habitat
Water Quality	Proximity of life requisite habitat
Water clarity	
Suspended sediment	**Hydrology and Hydraulics**
Nutrients	Water stage regulation
Oxygen	Floodwater distribution
Natural toxicity (ammonia)	Current velocity
Contaminants	Flow distribution
Temperature	Water retention time
	Isolation/desiccation
	Natural hydrograph

Table 2. UMRS Habitat Rehabilitation and Enhancement Projects listed from upstream to downstream with the draft ecological criteria they address. [This table may be populated and used by the DETs and SET to visualize ecological characteristics, project objectives and their distribution in a spatial format. The DETs and SET have flexibility in the use of this table and to tailor the criteria (from Table 1) with concurrence from the regional teams and SET].

Essential Ecosystem Characteristic/ Ecological Critera	Rice Lake, MN	Long Meadow Lake, MN	Goose Lake, MN	Peterson Lake, MN	Indian Slough, WI	Finger Lakes, MN	Island 42, MN	Whitewater River, MN	Spring Lake Peninsula, WI	Spring Lake Islands, WI	Polander Lake, MN	Small Scale Drawdown, WI	Trempealeau Refuge, WI	Long Lake, WI	Lake Onalaska, WI	East Channel, WI/MN	Pool 8 Islands, Phase I, WI	Pool 8 Islands, Phase II, WI	Pool Slough, IA/MN	Blackhawk Park, WI	Lansing Big Lake, IA	Conway Lake, IA	Capoli Slough, WI	Pool 9 Island, WI	Cold Springs, WI	Harpers Slough, IA/WI	Ambrough Slough, WI	Bussey Lake, IA	Guttenberg Ponds, IA	Miss River Bank Stabilization, IA/MN/WI	Bertom-McCartney Lakes, WI	Pool 11 Islands, IA/WI	Peosta Channel, IA	Pool 12 Overwintering, IA-IL	Pleasant Creek,IA	Brown's Lake, IA	Spring Lake, IL	Potters Marsh, IL	Princeton Refuge, IA	Andalusia Refuge, IL	Big Timber, IA	Lake Odessa, IA	Huron Island, IA	Gardner Division, IL	Cottonwood Island, MO	Monkey Chute, MO	Bay Island, MO	Peoria Lake, IL	Banner Marsh, IL	Rice Lake, IL	Chautauqua Refuge, IL	Clarksville Refuge, MO	Alton Pool, IL	Pharrs Island, MO	Angle Blackburn, MO	Norton Woods, MO	Stag & Keeton Islands, MO	Sandy Chute, MO	Batchtown Mgmt. Area, IL	Pools 25 & 26, MO	Cuivre Island, MO	Dresser Island, MO	Stump Lake, IL	Swan Lake, IL	Calhoun Point, IL	Osborne Side Channel, IL	Least Tern, MO	Stone Dike Alterations, MO/IL	Schenimann Chute, MO	Fort Chartres Side Channel
Geomorphic Reach																																																																							
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Corps District																																																																							
River Mile																																																																							
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Natural toxicity (ammonia)																																																																							
Contaminants																																																																							
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Hydrology and Hydraulics																																																																							
Water stage regulation																																																																							
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T&E Species																																																																							
Game species																																																																							
Conservation targets																																																																							
Recovery plans																																																																							
Proximity of critical habitat																																																																							
Proximity of life requisite habitat																																																																							

Executed this 28th day of August, 2013 on behalf of the Upper Mississippi River Restoration Environmental Management Program's partner agencies by the undersigned official agency representatives to the Upper Mississippi River Restoration Environmental Management Program Coordinating Committee.

Mark Moore, UMRR-EMP CC Representative
U.S. Army Corps of Engineers

Dan Stephenson, UMRR-EMP CC Representative
Illinois Department of Natural Resources

Kevin Foerster, UMRR-EMP CC Representative
U.S. Fish and Wildlife Service

Diane Ford, UMRR-EMP CC Representative
Iowa Department of Natural Resources

Mike Jawson, UMRR-EMP CC Representative
U.S. Geological Survey

Kevin Stauffer, UMRR-EMP CC Representative
Minnesota Department of Natural Resources

Juan Hernandez
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Janet Sternburg, UMRR-EMP CC Representative
Missouri Department of Conservation

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James Fischer, UMRR-EMP CC Representative
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vacant, UMRR-EMP CC Representative
U.S. Maritime Administration