Implementation Issues Assessment

A Partnership Report
Upper Mississippi River Restoration
Environmental Management Program

DRAFT
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Executive Summary

Program Overview

The Upper Mississippi River Restoration — Environmental Management Program (UMRR-EMP) uniquely and effectively combines ecosystem restoration with scientific monitoring and research. Integrating a broad range of restoration techniques, including approaches that strive to use or mimic the river's natural processes, the program's habitat rehabilitation and enhancement projects (HREPs) have effectively enhanced over 100,000 acres of critical fish and wildlife habitat throughout the Upper Mississippi River System (UMRS). These projects have improved the river's floodplain structure and function, restoring the river's natural processes and counteracting the effects of an aging, impounded river system. The program also informs river management through integrated environmental monitoring, research, and modeling, as well as data management and dissemination. Collectively, this element of the UMRR-EMP is known as the Long Term Resource Monitoring Program (LTRMP). This information is used extensively by resource managers, planners, administrators, scientists, academics, and the general public, enhancing management actions and scientific investigations on the UMRS.

A primary reason for UMRR-EMP's longstanding success is its strong interdisciplinary and interagency partnership, which transcends traditional state and agency boundaries. The U.S. Army Corps of Engineers (USACE) has the ultimate responsibility for managing and executing UMRR-EMP; while the U.S. Fish and Wildlife Service (USFWS); U.S. Geological Survey (USGS); and states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin have their own specific responsibilities under UMRR-EMP. Other federal agencies, nongovernmental organizations, and industry groups are also actively involved in UMRR-EMP implementation. The ongoing commitment from all partners and established coordination mechanisms have been vital to UMRR-EMP's effective and efficient implementation of its restoration and science components.

Purpose of the Implementation Issues Assessment

Section 509(b) of the 1999 Water Resources Development Action (WRDA) directed USACE, in consultation with the Secretary of the Interior and the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, to submit a report to Congress (RTC) regarding UMRR-EMP by the end of 2004 and every six years thereafter. These reports must evaluate UMRR-EMP's HREP and LTRMP elements, describe the program's accomplishments, provide an update of the system's habitat restoration needs, and recommend any necessary adjustments to the program's authorization. In UMRR-EMP's 2010 RTC, partners recommended that USACE, in collaboration with program partners, develop this Implementation Issues Assessment (IIA) to address various policy and program implementation issues that were not thought to require Congressional action. The IIA will not be formally submitted to Congress. Partners see the IIA as an important opportunity to address a variety of outstanding issues and challenges, with the goal of enhancing program implementation. The report is meant to document the issues discussed and partners' decisions regarding how best to advance or resolve those issues. The IIA's intended audience includes the Administration, USACE, partners, and external stakeholders.

For each issue, the report includes a concise overview; an outline of relevant policy; and an articulation of partner recommendations, including specific action items. The final section of the IIA outlines the process that partners will use to review progress on its implementation. This section also provides a table of all the action items and their primary leads, approximate timeframes, and relationship (if any) to the pending UMRR-EMP Strategic Plan. In 2013-2014, the UMRR-EMP strategic planning team will address many of the IIA's issues in greater detail, as well as other technical implementation priorities and issues for the program.

Progress Review

The UMRR-EMP Coordinating Committee will review progress in advancing the IIA's recommendations and action items at its August quarterly meetings. In addition, the review will consider partners' priorities for advancing the action items in the upcoming year, given anticipated resources and other factors that may influence the partners' ability to act on the recommendations.

Partner Recommendations

The UMRR-EMP Coordinating Committee would like to accomplish the following recommendations in order to maintain and enhance the UMRR-EMP.

Recommendations for maintaining and enhancing the program's overall success include:

- ✓ Advance habitat projects that include land acquisition from willing sellers, where that is the most efficient and effective option.
- ✓ Maintain UMRR-EMP's current delegated authority policy.
- ✓ Implement new and innovative restoration techniques and approaches, in an effort to enhance the program's capacity to address the partner-identified ecosystem goals and objectives.
- ✓ Include more explicit and consistent consideration of state and federal agencies' UMRS-related priorities in the program's habitat project planning and prioritization.
- ✓ Expand the criteria for constructing habitat projects at full federal expense.
- ✓ Consider habitat projects that have a nonprofit cost share sponsor.
- ✓ Improve habitat project evaluations.
- ✓ Pursue options to better enable USFWS and the states to completely and effectively implement HREP O&M.
- ✓ Seek to increase LTRMP resources, while also preparing strategies to guide implementation.
- ✓ Develop more deliberate and explicit approaches to implementing adaptive management.
- ✓ Evaluate emerging trends and issues that might affect UMRR-EMP's restoration, monitoring, and research efforts.
- ✓ Maintain and enhance the states' ongoing, active participation and leadership in the UMRR-EMP that are essential to program's success.

Table of Contents

Executive Summary i
- Program Overview i
- Purpose of the Implementation Issues Assessment i
- Progress Review ii
- Partner Recommendations ii

Table of Contents iii

Introduction 1
- Program Overview 1
- Purpose of the Implementation Issues Assessment 2

Land Acquisition 4
Delegated Authority 6
Habitat Project Types 8
Habitat Project Planning and Prioritization 9
Construction Cost Sharing 11
Nonprofits as Cost Share Sponsors 13
Habitat Project Evaluations 15
Capacity for Operation and Maintenance 17
Long Term Resource Monitoring Program Implementation 19
Adaptive Management 21
Emerging Trends and Issues 23
State Participation and Leadership Support 24

Future Action 26
- Progress Review 26
- Partner-Recommended Action Items 26

Appendix A: Upper Mississippi River Restoration—Environmental Management Program Authorization 30

Appendix B: Relevant Policy 35

Appendix C: Acronyms 76

Introduction

Program Overview

Authorization

In 1986, Congress declared the Upper Mississippi River System (UMRS) as "a nationally significant ecosystem and a nationally significant commercial navigation system." Following from this declaration, in Section 1103 of the 1986 Water Resources Development Act, Congress authorized the Upper Mississippi River Restoration — Environmental Management Program (UMRR-EMP) to address the river's ecological needs. The UMRR-EMP was the first federal program to combine ecosystem restoration and scientific monitoring and research on a large river system. Following successful implementation over the program's first 13 years, Congress established its two core elements as continuing authorities:

- Planning, construction, and evaluation of fish and wildlife habitat rehabilitation and enhancement projects (HREPs)
- Long term resource monitoring, computerized data inventory and analysis, and applied research (LTRMP)

UMRR-EMP is authorized to receive annual appropriations of $22.75 million for HREPs and $10.42 million for LTRMP. Per UMRR-EMP's authorizing legislation, Section 906(e) of the 1986 Water Resources Development Act, as amended, governs cost sharing for HREPs. In particular, this requires that a non-federal sponsor provide 35 percent of the construction costs of habitat projects. In accordance with Section 107(b) of the 1992 Water Resources Development Act, operation and maintenance (O&M) of HREPs is the responsibility of the entity that manages the land. See pages 31-34 for UMRR-EMP's authorization and page 36 for Section 107(b) of the 1992 Water Resources Development Act.

Partnership Collaboration

UMRR-EMP is rooted in a strong, collaborative interagency partnership. While UMRR-EMP's authorization assigns management and execution responsibility to the U.S. Army Corps of Engineers (USACE), it is a truly partnership program. The authorization directs USACE to implement the program in consultation with the Department of the Interior and the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. In addition, UMRR-EMP also coordinates with other federal agencies, nongovernmental organizations, industry, and the public that have an interest in the program's activities.

USACE regularly consults with program partners through the UMRR-EMP Coordinating Committee, which is a system-level forum for partners to discuss and consider program and budget priorities and issues regarding habitat restoration, scientific research, and monitoring. UMRR-EMP also has coordinating groups for partners to discuss technical implementation issues related to LTRMP and HREPs. These include the Analysis Team (A-Team) and HREP Planning and Sequencing Framework Teams, respectively. Partners have committed substantial resources to participate in these coordinating groups. This thoughtful and meaningful coordination has been vital to the program's success and now serves as a model for other regional, national, and international ecosystem restoration programs.

History of Success

UMRR-EMP successfully combines a broad range of restoration techniques, including approaches that strive to use or mimic the river's natural processes, with state-of-the-art monitoring and research. Over the past 26 years, the program has improved over 100,000 acres of critical fish and wildlife habitat. Innovations and lessons learned from HREPs benefit not only the UMRS but also national and international aquatic ecosystems, where similar efforts are underway to preserve and restore habitat. At the same time, UMRR-EMP effectively and efficiently integrates environmental monitoring, research, modeling, data management, and reporting, providing a solid foundation upon which to base UMRS management actions and policy. Known as LTRMP, the breadth of information, monitoring protocols, and data management and dissemination infrastructure creates enormous possibilities to learn about the river's natural functions and processes, human influences, and opportunities to best address critical restoration needs.

Future Restoration and Science Needs

The UMRR-EMP has made substantial advances in improving critical habitat and ecological processes and has made significant scientific discoveries over the past 26 years. Yet there are still many outstanding restoration and science needs. In 2008, partners established five system-wide ecological objectives, including managing for:

1) a more natural hydraulic regime,
2) functions that shape diverse and dynamic channels and floodplain,
3) more natural materials transport and processing functions,
4) diverse and dynamic patterns of habitat to support native biota, and
5) ecological understanding to inform decisions.

Partners agreed to focus the program's monitoring and research activities on enhancing:

1) knowledge about the UMR's ecosystem status and trends and process, function, structure, and composition;
2) use of scientific knowledge for implementation of ecosystem restoration programs and projects; and
3) ecological understanding to inform decisions.

Purpose of the Implementation Issues Assessment

In an effort to maintain and further enhance UMRR-EMP's success in restoring and understanding the river system, partners agreed to address 12 policy- and program-related issues in this Implementation Issues Assessment (IIA). The issues include:

1. Land Acquisition
2. Delegated Authority
3. Habitat Project Types
4. Habitat Project Planning and Prioritization
5. Construction Cost Sharing
6. Nonprofits as Cost Share Sponsors
7. Habitat Project Evaluations
8. Capacity for Operation and Maintenance

9. LTRMP Implementation
10. Adaptive Management
11. Emerging Trends and Issues
12. State Participation and Leadership Support

Similar to UMRR-EMP's 1999 and 2004 Reports to Congress (RTCs), partners had identified a suite of policy and programmatic issues to explore in the 2010 RTC. However, because of significant time constraints, partners agreed to address the 12 issues listed above in this IIA since these issues were not thought to require Congressional action. The IIA is intended to communicate partner recommendations to the Administration, Corps staff, partners, and external stakeholders on resolving issues or enhancing UMRR-EMP's implementation. As an initial step, the UMRR-EMP Coordinating Committee approved a series of statements articulating partners' perspective of each issue. Lead authors were then assigned to develop detailed working papers that described the issue's background, identified potential options for addressing the issue, and documented partners' judgments about those options. These papers allowed partners to have comprehensive discussions about the issues and reach consensus about how UMRR-EMP should best advance or resolve them. This process has also created a better awareness and understanding of the issues among partners. USACE will maintain these papers for future reference.

This IIA provides a brief overview of each issue, identifies applicable policies, and articulates the partnership's broad recommendation and specific actions for each issue. See Table 1 on pages 27-29 for a comprehensive list of the specific actions and details relevant to their implementation — e.g., responsible leads, approximate timeframes, etc.

Land Acquisition

Issue Overview

Acquisition of real estate interests from willing sellers (hereafter referred to as land acquisition) can be a valuable tool for UMRR-EMP, expanding restoration opportunities along the entire UMRS. **However, for a variety of reasons, the program has rarely advanced habitat projects with substantial land acquisition components. These reasons include varying interpretations about the program's land acquisition policy among USACE staff and partners, a backlog of habitat projects due to overall program funding limitations, and constraints on the ability and/or willingness of non-federal sponsors to cost share.** In addition, acquisition requires willing sellers and, in the case of easements, the landowner's long term commitment to managing the lands in accordance with the agreed upon habitat objectives. As a result of these and other factors, UMRR-EMP's major focus has been on habitat projects located on land already in federal and state ownership. Land acquisition could provide important opportunities to improve habitat in areas that lack public land, particularly below St. Louis.

Relevant Policy

In 1994, USACE Headquarters issued policy guidance confirming UMRR-EMP's ability to acquire lands and easements from willing sellers and setting forth several requirements. The 1994 implementation guidance is provided on pages 37-38. This policy is consistent with USACE's national policy governing land acquisition for all water resources projects, Engineering Regulation 1165-2-501 (see pages 39-46). Key provisions of the 1994 UMRR-EMP-specific policy are:

a) Land acquisition as a part of an HREP must be primarily for fish and wildlife preservation, enhancement, or restoration purposes.

b) Land acquisition must be cost efficient compared to other available habitat restoration techniques.

c) The non-federal sponsor must acquire the land, fulfill the construction cost share requirements (if applicable), and assume full responsibility for all restoration project operation and maintenance (O&M) on the acquired lands.

d) The non-federal sponsor is responsible for 35 percent of the total project costs (or 35 percent of the portion of the project subject to cost sharing). [Note: The 1994 guidance identifies a 25 percent non-federal share, but the cost-share for HREPs shifted from 75/25 to 65/35 in the 1999 Water Resources Development Act reauthorization.]

e) For habitat projects that include both land acquisition and construction elements, the costs of lands, easements, rights-of-way, relocations and dredged material disposal (LERRDs) would be applied to the non-federal sponsor's overall project cost share (35 percent). If the value of the LERRDs contribution exceeds the non-federal project share, the federal government would reimburse the difference to the non-federal project sponsor. [Note: This provision appears be in conflict with USACE's national policy not to provide reimbursement for excess LERRDs. USACE District staff and state UMRR-EMP Coordinating Committee members have agreed to explore issues associated with excess LERRDs (see Specific Action Item 3).]

f) Lands purchased for inclusion in a national wildlife refuge would be acquired under the existing programs and authorities of the USFWS — i.e., UMRR-EMP will not use federal funds to acquire lands for the refuge system as part of an HREP.

g) Any land acquired must include active construction and/or operation and maintenance measures to improve fish and wildlife habitat over its value in its current condition. [Note: Engineering Regulation 1165-2-501 caps acquisition costs for construction projects at 25 percent of total project costs.]

Partner Recommendation

UMRR-EMP partners support advancing habitat projects that include land acquisition from willing sellers, when such projects are determined to be the most effective and efficient means of advancing the partnership's ecosystem goals relative to alternative projects under consideration.

Specific Action Items

1. ***Effectively communicate UMRR-EMP's land acquisition policy to USACE staff and program partners, including documenting the policy in all relevant reference materials***. USACE staff will provide examples of projects that do and do not fit within the policy limits, including land-intensive O&M projects. [Lead: UMRR-EMP Program Manager and District HREP Managers. Completion target: ongoing.]

2. ***Address the question of whether non-federal HREP sponsors will be reimbursed if the value of real estate interests they provide exceeds the required 35 percent project cost share***. In 2012, USACE Headquarters indicated that UMRR-EMP's 1994 land acquisition policy allowing reimbursement to non-federal HREP sponsors for real estate costs that exceed the required 35 percent cost share may conflict with USACE's general policy not to provide such reimbursement. Project partnership agreements have historically been silent on the issue, with sponsors waiving their right to reimbursement after signing the agreement. However, USACE has now directed that project agreements explicitly address the issue of reimbursement for excess real estate costs. District staff and the UMR states (i.e., the only UMRR-EMP cost-share sponsor to date) have agreed to work together to explore options for addressing this issue. [Lead: Mississippi Valley Division Regional Integration Team Lead, UMRR-EMP Program Manager, and state UMRR-EMP Coordinating Committee members. Completion target: one to three years.]

3. ***Recommend to USACE Headquarters that the 25 percent cap on land acquisition cost relative to total project cost be increased to a more reasonable and realistic level***. It is unlikely that planning and construction costs would be three times greater than acquisition costs in a typical habitat project involving LERRDs. The Mississippi Valley Division and program partners agreed to identify and recommend an appropriate increase to the cap to Headquarters. [Lead: Mississippi Valley Division Regional Integration Team Lead, UMRR-EMP Program Manager, and state UMRR-EMP Coordinating Committee members. Completion target: two to three years.]

Delegated Authority

Issue Overview

In UMRR-EMP's early years, USACE Headquarters retained approval authority over all of the program's habitat projects. In 1993, USACE delegated approval authority to the Division level for HREPs with construction costs of $2 million or less that clearly fell within policy parameters established in previous decisions. In 2000, USACE issued implementation guidance related to the 1999 Water Resources Development Act that increased Division-level approval authority to projects with an estimated cost of up to $5 million. In addition, the District Commanders were granted authority to approve projects costing $1 million or less. See page 47 for an excerpt of the 1999 Implementation Guidance. In May 2012, the Mississippi Valley Division confirmed that USACE's 2004 national policy regarding delegated authority (Engineering Regulation 1165-2-502; see pages 48-53) applies to UMRR-EMP. This now gives the Division Commander approval authority for HREPs of any cost, unless there is a policy matter. The District Commanders' approval authority remains for habitat projects costing $1 million or less. However, HREPs are also subject to USACE review requirements under Engineering Circular 1165-2-209 (see Relevant Policy for more information). UMRR-EMP's expanded approval authority over time reflects the fact that many restoration practices have become fairly standardized, with deviations from the model or template largely coming in response to local, site-specific factors — e.g., pump station placement, dredge cut size, island siting, etc. **Increased delegated authority creates significant times savings in project planning, lowering project costs and accelerating completion schedules.** Evaluating several projects between 2000 and 2004, USACE staff estimated that Division-level approval saves 4 to 6 months per project relative to Headquarters approval. Approval at the District level is estimated to save an additional 2 to 3 months relative to Division approval.

Relevant Policy

Under USACE's national policy regarding delegated approval authority for post-authorization civil works projects (Engineering Regulation 1165-2-205, see pages 48-53), Divisions can approve HREPs of any cost, unless the project involves a policy matter requiring Headquarters review/approval. UMRR-EMP's 1999 Implementation Guidance allows District Commanders to approve HREPs costing $1 million or less. All HREPs are subject to review requirements set forth in Engineering Circular 1165-2-509 (see pages 54-56), which implements the project review requirements of the 1999 Water Resources Development Act. Specifically, Headquarters review is required for any project costing $45 million or more or involving a policy matter; public safety concern; high level of complexity; or significant economic, environmental, and social effects to the nation.

Partner Recommendation

UMRR-EMP partners support UMRR-EMP's current delegated authority policy.

Specific Action Items

1. ***Communicate UMRR-EMP's current delegated authority policy.*** It was only in May 2012 that the Mississippi Valley Division confirmed USACE's 2004 national policy regarding delegated authority for post-authorization civil works projects (Engineering Regulation 1165-2-205) applies to

UMRR-EMP. Some partners may not yet be aware of the expanded authority for Division-level approval. The UMRR-EMP Coordinating Committee agreed that articulating the program's current delegated approval authorities in this Implementation Issues Assessment would serve to document and communicate the current delegation policy to the full partnership. [Lead: N/A. Completion target: Completed.]

Habitat Project Types

Issue Overview

Since UMRR-EMP's inception, partners have been implementing innovative and effective HREPs that have served as models nationally and internationally. **Over time, insights from completed projects and enhanced planning tools have allowed partners to develop innovative solutions to address complex habitat needs. New biological and engineering techniques and approaches continue to emerge that offer great promise.** These include side channel restoration, pool-scale water level management, and several small-scale measures over a larger geographic area to jointly achieve a desired outcome. However, planning and designing innovative restoration projects may require new models and other planning tools to better estimate project benefits. These innovations in planning tools and project techniques often raise policy questions, such as how to reconcile project design life requirements with the desire to employ an untried technique. In the absence of specific guidance, such policy questions are generally encountered and addressed in the context of a specific project proposal. The Mississippi Valley Division has expressed willingness to work with UMRR-EMP to seek necessary policy clarifications and pursue sound changes that foster innovation.

Relevant Policy

UMRR-EMP's authorization does not specify the types of restoration projects the program can employ, thus there is opportunity for the program to advance new restoration techniques or approaches as long as they align with USACE's other habitat restoration policies.

Partner Recommendation

UMRR-EMP partners support implementing new and innovative restoration techniques and approaches, in an effort to enhance the program's capacity to address the partner-identified ecosystem goals and objectives for the UMRS.

Specific Action Items

1. ***Explore UMRR-EMP's ability to advance new restoration techniques and approaches through specific project proposals.*** If partners determine that a new restoration technique or approach is a top priority for the program, the UMRR-EMP should submit a project-specific proposal to the Mississippi Valley Division that clearly demonstrates the potential benefits of the new approach and its fundamental consistency with the program's authority. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

Habitat Project Planning and Prioritization

Issue Overview

The UMRR-EMP uses partner-endorsed ecological goals and objectives to guide project planning and prioritization, ensuring the most critical needs are addressed at the system, reach, and pool scales. Interagency planning teams, composed of multi-disciplinary state and federal partners, prioritize UMRR-EMP's HREPs based on their ability to effectively address the partner-endorsed ecological priorities as well as various administrative factors. To further optimize UMRR-EMP's restoration efforts, partners also reference other relevant state and federal priorities when identifying and prioritizing HREPs — e.g., state wildlife action plans, USFWS's National Fish Habitat Action Plan, and state water quality goals. **Such consideration of state and federal priorities for the river further optimizes the program's restoration efforts by developing projects that produce important ancillary benefits**. However, members have tended to offer these insights on an *ad hoc* basis, with variability depending on the dynamics of the planning team and team members' familiarity with those other relevant priorities.

Relevant Policy

The UMRR-EMP currently operates under the 2003 HREP Planning and Sequencing Framework, which is designed with several levels of review to ensure a mix of ecologically sound projects that also consider various administrative factors. State and federal interagency teams, organized by USACE Districts, first consider habitat needs at the pool and reach scales within their respective jurisdictions. A System Ecological Team then considers the District teams' recommendations and determines a system-wide sequence of candidate HREPs, based on ecological needs. Throughout the project prioritization process, state and federal team members may contribute important information about their agencies' respective priorities related to the UMRS's restoration. Finally, administrative factors are evaluated, including funding availability, workload constraints, construction capabilities, and project sponsorship. The Planning and Sequencing Framework is provided on pages 57-63.

Partner Recommendation

UMRR-EMP partners support more explicit and consistent consideration of state and federal agencies' UMRS-related priorities to inform habitat project planning and prioritization.

Specific Action Items

1. ***Develop a comprehensive list of state and federal priorities that are relevant to UMRS restoration***. By having such a comprehensive list, District-based interagency planning teams will be able to readily identify state and federal priorities relevant to a particular area and/or habitat need. This will inform project formulation and selection, creating habitat projects that produce ancillary benefits in addition to advancing the partnership's formally identified ecosystem goals and objectives. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

2. ***Document and communicate the incorporation of state and federal priorities in HREP planning and prioritization.*** Effectively conveying when and how an additional priority is

incorporated into project formulation and selection is important to demonstrate UMRR-EMP's restoration effectiveness beyond its own specific goals and to provide implementation details of the additional priority to key audiences, including the federal or state agency that identified the subject priority. The UMRR-EMP strategic planning team will develop a framework for partners to document and communicate the program's use of additional priorities, as well as the benefits produced from incorporating those priorities. [Leads: UMRR-EMP strategic planning team and District HREP Managers. Completion target: ongoing.]

Construction Cost Sharing

Issue Overview

UMRR-EMP's authorization provides for full federal funding of projects HREPs that are either located on lands managed as a national wildlife refuge, are intended to benefit a federally-listed threatened or endangered (T&E) species, or provide a national benefit — e.g., a treaty species. However, as a matter of policy and priorities over successive Administrations, USACE has only approved full federal funding for projects located on national wildlife refuge lands. All other UMRR-EMP habitat projects require a 35 percent nonfederal cost share. **Partners would like to maintain the appropriate balance between cost-shared and full federally funded HREPs that has served the program well thus far. At the same time, partners have continually discussed the need to expand the criteria for 100 percent federal funding in order to advance important restoration opportunities that have not proven feasible through non-federal cost share.** This could include providing full federal funding for projects located under the ordinary high water mark (OHWM), within navigation servitude, and on all federally owned lands — e.g., lands owned by USACE, the National Park Service, and the National Forest Service. **Expanding full federal funding criteria would allow UMRR-EMP to implement priority habitat projects that involve contemporary restoration techniques (e.g., side channel restoration, wing-dam notching, and pool-scale water level management) in areas not on refuge lands.** This is particularly important in the southern portions of the UMR, where refuge lands are quite limited.

Relevant Policy

Section 906(e) of the 1986 Water Resources Development Act (see page 34) authorizes full federal funding of first construction costs for UMRR-EMP's habitat projects that 1) would advance a national benefit (e.g., treaty species), 2) would benefit a federally-listed T&E species, or 3) are located on national wildlife refuge lands. In addition, Section 2(c)(1) of the 1973 Endangered Species Act as amended (see page 64), requires all federal agencies to "seek to conserve" T&E species and "utilize their authorities in furtherance of the [Endangered Species] Act." USACE's long standing policy is that benefiting T&E species is not a primary objective for the agency and falls more appropriately under the purview of other federal agencies. Thus, USACE has not provided full federal funding for habitat projects based on benefits to T&E species. This position was reiterated in Headquarter's preliminary guidance on Schenimann Chute, which sought full federal funding given that the project would have directly benefited a T&E species.

Partner Recommendation

UMRR-EMP partners support expanding the criteria for constructing habitat projects at full federal expense in order to increase the program's capacity to advance the partner-identified ecosystem goals and objectives for the UMRS.

Specific Action Items

1. ***Explore options to construct habitat projects at full federal expense through specific project proposals***. If partners determine that a priority habitat project's construction would be best

funded at full federal expense and the project is not located on refuge lands, the UMRR-EMP should submit a project-specific proposal to the Mississippi Valley Division that clearly demonstrates the benefits of the new approach and its fundamental consistency with the program's authority. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

Nonprofits as Cost Share Sponsors

Issue Overview

Nonprofit organizations are increasingly involved in the acquisition, restoration, and management of lands in and along the UMRS. Over the past decade, USACE has increased its collaboration with nonprofits on restoration projects nationwide. USACE has established memorandums of understanding (MOUs) with The Nature Conservancy, Ducks Unlimited, and the National Audubon Society, all of which could potentially serve as cost share sponsors of UMRR-EMP's HREPs. The MOUs express a mutual commitment to manage the nation's water resources in environmentally sustainable ways, and to pursue habitat restoration projects of mutual interest. **The addition of nonprofits to UMRR-EMP's non-federal cost share sponsors on habitat projects could substantially increase the program's restoration opportunities, particularly in the southern river reaches where there is a considerably higher proportion of private land and therefore fewer options for USFWS and the states to sponsor projects.** Nonprofits have not yet cost-shared a UMRR-EMP habitat project. Thus, a variety of implementation details would need to be addressed through individual projects.

Relevant Policy

Section 2003 of the 2007 Water Resources Development Act amended the 1970 Flood Control Act to expand the non-federal interests eligible to sponsor water resources projects to include nonprofit entities. On April 5, 2012, USACE Headquarters issued implementation guidance that confirms that nonprofits can serve directly as non-federal sponsors of USACE's civil works water resources projects, including UMRR-EMP's HREPs. The 2012 Implementation Guidance is provided on pages 65-67. The guidance outlines specific eligibility standards for candidate nonprofits, as follows:

1. Consent from all affected local governments in each jurisdiction throughout the impacted area must be secured in writing.
2. The nonprofit must be incorporated under the laws of the state in which it operates and be exempt from paying federal taxes, under Section 501 of the Internal Revenue Code.
3. The proposed project's purpose and nonprofit's mission must be directly related.
4. The nonprofit must demonstrate the full legal and financial authority and capability to perform the terms of the project partnership agreement and to pay damages, if necessary, in the event of failure to perform. This includes the ability to perform operation, maintenance, repair, rehabilitation, and replacement in perpetuity.
5. For projects with additional purposes, such as recreation or flood risk management, a legally constituted public body must agree to co-sponsor the project.

A nonprofit must also demonstrate its capability to meet the non-federal sponsor requirements articulated in Section 221 of the 1970 Flood Control Act as amended. These requirements are described in Appendix A of USACE's Engineering Circular 1165-2-208 (see pages 68-70) and include the following:

1. Provide the required 35 percent construction cost share.
2. Provide all lands, easements, relocations, rights-of-way, relocation of utilities and other existing structures, and disposal of dredged or excavated material (LERRDs).
3. Land and project may not be part of a wetland bank or mitigation for another project.

4. Operate, maintain, repair, replace, and rehabilitate the project, or functional portion of the project, using non-federal funds as long as the UMRR-EMP is authorized.
5. Maintain the federal government's right to enter the property.
6. Hold and save the federal government free from all damages.
7. Assume all responsibility for hazardous, toxic, and radioactive waste clean up and liability.
8. Prevent any obstructions or encroachments to the project.
9. Comply with USACE's bookkeeping standards, the project partnership agreement, and all applicable federal and state laws and regulations.

Additionally, the nonprofit sponsor must meet the requirements currently applicable to UMRR-EMP's non-federal HREP sponsors. These include a Letter of Intent, Self-Certification of Financial Capability, and Project Partnership Agreement.

Partner Recommendation

UMRR-EMP partners support considering habitat projects that have a nonprofit cost share sponsor.

The UMRR-EMP Coordinating Committee agreed that:

1. The program's established process for identifying, prioritizing, and selecting habitat projects will remain fundamentally the same. All projects are first prioritized based on their ability to address ecological goals and objectives and then are sequenced based on administrative factors, including the availability of a nonprofit project sponsor.
2. The UMRR-EMP Coordinating Committee and the District-based interagency groups will maintain their current composition of federal and state resource agencies, consistent with maintaining exemption from Federal Advisory Committee Act requirements. Nonprofits will continue to be invited to the various interagency meetings to discuss cost sharing opportunities and project priorities.

Specific Action Items

1. ***Establish a framework to guide project planning teams in identifying and partnering with potential nonprofit sponsors.*** In developing the framework, District HREP staff and program partners will consider how other USACE restoration programs cost share with nonprofit sponsors; including what definitions/criteria to use for identifying and evaluating candidate nonprofits; how operation, maintenance, repair, rehabilitation, and replacement requirements are addressed; and how to coordinate with local units of government. [Lead: District HREP Managers. Completion target: two to three years.]

2. ***Coordinate with nonprofit organizations to address any questions related to their serving as cost share sponsors***. Implementation questions will almost certainly arise as partners prioritize and plan habitat projects that have a nonprofit cost share sponsor. Program partners and nonprofits will coordinate in addressing any questions if, and when, they do arise. [Leads: UMRR-EMP Program Manager, UMRR-EMP Coordinating Committee, and nonprofits. Completion target: ongoing.]

Habitat Project Evaluations

Issue Overview

Since UMRR-EMP's inception, HREP evaluations have provided important insights about restoration design and construction techniques and enhanced partners' overall understanding of the river ecosystem. **Project evaluations improve knowledge about the river system and monitoring capabilities, increasing partners' abilities to detect direct and indirect physical, chemical, and biological responses to habitat projects.** Evaluation results are synthesized in and communicated via the Environmental Design Handbook, which details UMRR-EMP's restoration techniques, design methodologies, and lessons learned. The Handbook is periodically updated and is extensively used by program partners to inform project selection and design. Project performance information is obtained from data collection, site visits, site managers, biological observations, and focused research. Relatively extensive physical and chemical response data exists for all completed HREPs, including discharge and velocity, bathymetry/topography, water quality, sediment transects, levee transects/cross sections, aerial photography, light detection and ranging (LiDAR), and land use/land cover. The program is currently increasing its emphasis on understanding biological responses to restoration efforts. In a closely related effort, partners are currently developing a more formalized approach to applying adaptive management techniques to address critical ecosystem and habitat questions and optimize UMRR-EMP's restoration investments. Project evaluation results are critical in supporting these adaptive management efforts.

Relevant Policy

Section 2039 of the 2007 Water Resources Development Act requires USACE ecosystem restoration projects to include a monitoring plan for determining project success. USACE issued implementation guidance for this provision in 2009 (Engineering Regulation 1105-2-100, see pages 71-74). Project monitoring expenses are considered construction costs and are cost-shared accordingly. However, any monitoring beyond 10 years following construction must be fully paid by the project sponsor. The monitoring plans must be outlined in project decision documents and include the following:

a) Description of, and rationale for, the proposed monitoring, including the specific monitoring parameters and how they will demonstrate project success and/or inform future project phases
b) Plans for communicating and using the monitoring information
c) Monitoring procedures, including duration and/or periodicity and estimated costs
d) Agency(ies) involved and its(their) roles
e) A contingency plan (i.e., adaptive management) for making physical modifications to a project if it does not meet its objectives

Partner Recommendation

UMRR-EMP partners support improving habitat project evaluations.

Specific Action Items

1. ***Increase fiscal and staff resources devoted to project evaluation, including biological response monitoring, adaptive management, and focused research.*** The UMRR-EMP Strategic Plan will establish goals for completing project evaluations in a more effective and timely manner, including ensuring resources are available to meet those goals. [Lead: UMRR-EMP Program Manager and UMRR-EMP strategic planning team. Completion target: ongoing.]

2. ***Address implementation questions identified by the UMRR-EMP Coordinating Committee.*** Partners will address the questions below regarding how to improve habitat project evaluations. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

   a) How can UMRR-EMP best implement biological monitoring and analysis in a cost effective manner?
   b) How can project evaluations make more effective use of LTRMP data?
   c) How can project evaluations be used in UMRR-EMP's adaptive management efforts?
   d) How can evaluation results be most effectively communicated to partners — e.g., HREP Design Handbook, communications to site managers, presentations to District-based planning teams, etc.?
   e) How can partners determine when projects no longer require monitoring?
   f) How can response variables be compared across projects? And what consistencies in monitoring are needed?, what information is needed?, and who would do the comparison?
   g) How can monitoring data be used to inform future projects?
   h) Given other program priorities, what level of resources should be devoted to project evaluation?

3. ***Clearly define and communicate partners' roles in evaluating habitat projects.*** On occasion, and for various reasons, there have been misunderstandings about the roles and responsibilities for evaluating habitat projects. The UMRR-EMP Strategic Plan will clearly define these roles and responsibilities, and these definitions will be described in all of the program's definite project reports. [Leads: UMRR-EMP strategic planning team and District HREP Managers. Completion target: one to two years.]

Capacity for Operation and Maintenance

Issue Overview

Operation and maintenance (O&M) is essential to the ultimate success of an individual UMRR-EMP HREP, as well as the program's overall restoration effectiveness. Project O&M ensures that construction features are working properly, effectively advancing the project's fish and wildlife habitat goals and objectives. The agency that manages the lands on which the project is located assumes full responsibility for O&M for the life of UMRR-EMP. The USFWS and state resource agencies have been UMRR-EMP's only project sponsors to date, with the Service managing about 70 percent of the constructed HREPs. In its first 25 years, UMRR-EMP's 90 completed and ongoing habitat projects spanned over 175,000 acres of fish and wildlife habitat. Taken together, the Service's and states' O&M responsibilities are substantial and continue to increase. Between FY 2004 and 2009, the USFWS's estimated total cost for HREP O&M was more than $2.5 million. USFWS has estimated that its annual O&M expenses will likely total more than $175,000 by 2015. **While project sponsors remain committed to advancing future habitat projects, they face important questions about how to effectively manage their cumulative O&M obligations and how to accommodate new habitat projects that add to these obligations. Funding constraints will likely intensify in the foreseeable future, as cumulative O&M costs and constraints on federal and state spending continue to increase.**

Relevant Policy

Section 107(b) of the 1992 Water Resources Development Act assigns sole responsibility for O&M of UMRR-EMP's HREPs to the agency that manages the lands on which the project is located. The policy provision is provided on page 36. [Note: Prior to 1992, Section 906(e) of the 1986 Water Resources Development Act provided for cost-shared O&M.]

Partner Recommendation

UMRR-EMP partners support pursuing options that will better enable USFWS and the states to completely and effectively implement HREP O&M.

Specific Action Items

1. ***Design and construct habitat projects in ways that minimize O&M.*** Project delivery teams (PDTs) will design project features and employ construction techniques in ways that reduce O&M intensity, while also minimizing first construction costs. Project features requiring less O&M are typically more expensive to construct, thus PDTs will need to consider these tradeoffs. PDTs will consider past HREPs in identifying design and construction techniques that effectively reduce O&M while also minimizing construction costs, including features that effectively use the river's natural functions and processes. Insights gained from project experience will be communicated to future PDTs, including regionally. [Lead: Project delivery teams. Completion target: ongoing.]

2. ***Execute site-specific management agreements under which the states or others (e.g., nonprofits) would operate and maintain HREPs on refuge lands.*** Under successive cooperative agreements between USACE, USFWS, and the respective states, state agencies have been implementing O&M on select habitat projects that are located on General Plan

lands — i.e., USACE fee title. Partner opportunities such as this, including with nonprofits, may be useful in some instances to create efficiencies in implementing HREP O&M. [Lead: District HREP Managers, USFWS Refuge Managers, and state resource agencies. Completion target: ongoing.]

3. ***Request that the Administration establish a new line item in the USFWS's budget specifically to support its UMRR-EMP HREP O&M obligations.*** Currently, USFWS's HREP O&M activities are funded from the general Operations and Maintenance line item in the National Wildlife Refuge System account. Partners have agreed to explore the possibility of establishing a specific line item in the USFWS's budget in hopes that it would receive sufficient appropriations to support the Service's UMRR-EMP O&M obligations. However, partners also recognize potential risks associated with this approach, including the potential that the line item would not be funded in some years. [Lead: UMRR-EMP Program Manager, USFWS UMR National Fish and Wildlife Refuge Manager, and UMRR-EMP Coordinating Committee. Completion target: three to five years.]

4. ***Explore information needs that partners have identified as necessary to more completely understand, and make any further recommendations to address, HREP O&M resource constraints.*** Partners will research the information needs listed below as part of the UMRR-EMP strategic planning effort. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

   a) Annual O&M investments, by project feature and payer.
   b) Five and ten year estimates of total O&M expenses and other resource needs.
   c) Comprehensive summary of HREP sponsor requirements, including project agreement conditions.
   d) Funding alternatives offered to project sponsors under comparable USACE restoration programs — i.e., funding HREP O&M from UMRR-EMP's budget or USACE's O&M account. [Note: Modifying funding sources would require Congressional action. Specifically, it would require a repeal of the 1992 Water Resources Development Act provision that assigns sole responsibility for HREP O&M to the agency that manages the lands on which the project is located.]

Long Term Resource Monitoring Program Implementation

Issue Overview

The UMRR-EMP's LTRMP element effectively and comprehensively combines monitoring, research, modeling, and data management, providing critical information about the status and trends of key ecosystem resources. In fact, LTRMP's database in one of the most extensive and comprehensive data sets on any large river system in the world. **LTRMP information is used extensively by resource managers, planners, administrators, scientists, academics, legislators, and the general public for improved understanding, problem solving, and decision making about issues important to the UMRS.** While LTRMP is authorized to receive $10.42 million annually and has the capability of executing at that level, funding for this component has been historically below that amount. Further, recent budgets constraints have made it difficult for the program to support its core, or base, monitoring efforts, which include annual sampling of water quality, aquatic vegetation, and fish, and development of decadal land cover/land use coverages. **Maintaining the continuity and integrity of the data set for the base components is crucial for making conclusions about recent and long term trends in indicators of management success, cyclical changes in important ecological components, and the status of indicators used for analyzing relationships among components.** Inflation has raised base monitoring costs over time, while funding has remained relatively steady. This has caused base monitoring to consume a growing share of LTRMP's available resources, lessening the funds available for analysis and research. Even though UMRR-EMP has realized efficiencies in its base monitoring efforts that have lowered overall implementation costs, these savings have now been outstripped by inflation and will not be sufficient to avoid budget shortfalls in the coming years.

Relevant Policy

Under the 1999 program reauthorization, UMRR-EMP is authorized to receive $10.42 million annually for its long term resource monitoring program.

Partner Recommendation

UMRR-EMP partners support seeking ways to increase LTRMP's resources, while also preparing a strategy to guide implementation under low funding scenarios.

Specific Action Items

1. ***Increase UMRR-EMP's fiscal resources to implement its monitoring and research priorities.*** Non-federal partners (i.e., states, nonprofit organizations, academic institutions, and others) have expressed a commitment to seek increased UMRR-EMP funding through targeted outreach to Congress and the Administration. In addition, more effectively communicating UMRR-EMP's successes, including explicitly identifying the program in all products and activities, will increase its visibility and reputation as a nationally and internationally renowned science and restoration program. [Leads: UMRR-EMP's non-federal partners and UMRR-EMP Program Manager. Completion target: ongoing.]

2. ***Leverage resources with program partners and external stakeholders to advance LTRMP efforts.*** UMRR-EMP partners often provide additional contributions (cash or in-kind) to accelerate LTRMP's priorities. This support has been extremely valuable to UMRR-EMP, and will continue to be vital in implementing LTRMP. In addition, several universities, colleges, and museums have expressed interest in collaborating on LTRMP activities. These entities can help fund various research projects that directly support the program's high priority monitoring and research efforts. The UMRR-EMP Strategic Plan will outline a formal process for identifying and exploring opportunities to collaborate with program partners and external stakeholders, including recording and communicating stakeholder contributions. [Leads: UMRR-EMP Program Manager and UMRR-EMP strategic planning team. Completion target: ongoing.]

3. ***Develop a coordinated strategy for implementing LTRMP in low funding years.*** It is difficult to predict whether a downward departure in funding will occur for just one year or span multiple years. Moreover, there is often relatively little time to reformulate the annual spending plan following enactment of the final funding measure, which is frequently delayed until well into the fiscal year. Thus, it is essential for program partners to have strategies in place for allocating resources in low funding years. Using the FY 2010-2014 LTRMP Strategic Plan, a small working group will develop a framework for LTRMP implementation under low funding scenarios and address implementation issues associated with the various options — e.g., decreasing the integrity of base monitoring components, reducing staff resources, etc. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

4. ***Ensure LTRMP's continuation as a world-renowned multi-partner collaborative monitoring and research program.*** Program partners examine LTRMP's functions and priorities through a strategic planning process every five years, focusing its implementation to most effectively meet the river's monitoring and research needs and addressing important implementation issues. In the FY 2015-2019 UMRR-EMP Strategic Plan, partners will articulate monitoring and research priorities for LTRMP, identify key program initiatives, address important new information needs, and provide a framework to efficiently and effectively structure annual work plans. [Leads: UMRR-EMP Strategic Planning Team. Completion target: 1-2 years.]

Adaptive Management

Issue Overview

UMRR-EMP continually enhances its restoration techniques through adaptive management, learning from its long term systemic base monitoring, project-specific monitoring, and focused research. Understanding how the ecosystem responds to various restoration approaches/techniques has always been a central theme and a top priority for the program. At its core, adaptive management is an iterative process that includes setting learning objectives, designing and implementing restoration projects, evaluating responses, reevaluating decisions if objectives are not met, and communicating and integrating learned information into future restoration alternatives and hypotheses. Most of the program's adaptive management efforts to date have been focused at the project-scale and on physical and chemical responses — i.e., adjusting project designs based on ecological models, evaluating local effects of individual projects, assessing operation and maintenance activities to achieve project goals, enhancing future restoration efforts through lessons learned from completed projects, and advancing focused research on ecological questions. **Applying adaptive management has significantly enhanced the program's restoration effectiveness and efficiency, by improving project formulation, advancing engineering and design, and decreasing project costs. Implementing adaptive management in more deliberate and explicit ways and increasing focus on measuring biological responses to restoration would further increase partners' abilities to measure project success and restore the UMRS's unique, large, and complex ecosystem. Program partners identified the following purposes for more deliberate and explicit adaptive management:**

- **Answer broad spatial questions about the UMRS ecosystem and its management, beyond the project-level**
- **Identify restoration needs that would be best addressed through "new" restoration techniques**
- **Enhance communication and understanding related to project performance and uncertainties in ecosystem management**
- **Learn from past and current efforts to inform future restoration**
- **Improve the overall effectiveness and efficiency of particular restoration techniques**
- **Inform long term UMRS ecosystem management**
- **Guide and optimize UMRR-EMP's investment in habitat restoration — e.g., determine at what point there are diminishing returns from investing in certain areas**

Relevant Policy

Section 2039 of the 2007 Water Resources Development Act requires that USACE ecosystem restoration projects include a monitoring plan for assessing project success. Project monitoring costs are considered construction costs and are cost-shared accordingly. Any monitoring that extends beyond 10 years, however, must be fully paid by the non-federal sponsor. **USACE's 2009 implementation guidance for this policy provision (Engineering Regulation 1105-2-100, see pages 71-74) requires an adaptive management component in the monitoring plan that details the nature and cost of any anticipated modifications if the project does not meet its ecosystem objectives.** Whereas prior project performance monitoring focused on physical features, the 2007 authority allows for greater consideration of biological response as part of project performance evaluations.

Partner Recommendation

UMRR-EMP partners support developing more deliberate and explicit approaches to implementing adaptive management.

Specific Action Items

1. ***Ensure compliance with Section 2039 of the 2007 Water Resources Development Act.*** All definite project reports must include a monitoring plan for assessing performance in achieving the project's restoration objectives. The monitoring plan must also include an adaptive management component that outlines potential modifications if the project does not perform as intended. The UMRR-EMP Strategic Plan will create a template for project delivery teams to use in developing project monitoring plans. This will include common metrics for evaluating restoration success, types of data collected, monitoring protocols, etc., so that monitoring data can be compared among habitat projects. The template will also outline the program's approaches to implementing the adaptive management component. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

2. ***Define priorities for adaptive management analyses.*** Partners will consider the level of investment desired for adaptive management, given all other programmatic priorities, and how best to direct that investment — i.e., what hypotheses should be tested and how? Specific adaptive management topics and studies will be identified and prioritized based on the vision statement, overarching ecological goals, and system-wide objectives for the UMRS that partners adopted in 2009. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

3. ***Establish a framework for deliberate and explicit adaptive management implementation.*** Partners have agreed to develop a framework to operationalize UMRR-EMP's adaptive management efforts. The framework will address when and how to apply certain adaptive management techniques and how to document, communicate, and integrate the results and conclusions. In addition, the framework will a) identify roles and responsibilities for program partners, b) define key assumptions and adaptive management terms specific to UMRR-EMP, and c) outline programmatic and scientific constraints. [Lead: UMRR-EMP strategic planning team. Completion target: one to two years.]

Emerging Trends and Issues

Issue Overview

The UMRS, and therefore UMRR-EMP, is subject to various cultural, social, and environmental factors. Several major issues have recently surfaced and become prominent factors on the UMRS, including Asian carp and other invasive species, climate change, hydrokinetic and other energy development, and land use — e.g., frac sand mining. **Going forward, partners recognize the need to more deliberately consider potential effects of various emerging trends and issues on UMRR-EMP's efforts to restore and monitor the river. Additionally, it will be important to understand any potential role for HREPs in enhancing, inhibiting, or offsetting the advancement of these trends and issues; as well as LTRMP's ability to evaluate and document these trends and issues. The certainty and controllability of these trends and issues will vary, and thus too will UMRR-EMP's responses.**

Relevant Policy

Under UMRR-EMP's authorization, program partners have been successfully implementing habitat projects and conducting scientific monitoring and research efforts on the UMRS. In doing so, partners must routinely consider how emerging trends and issues might affect program implementation and vice versa.

Partner Recommendation

UMRR-EMP partners support formally selecting and evaluating emerging trends and issues that might affect UMRR-EMP's restoration, monitoring, and research efforts.

Specific Action Items

1. ***Institute a framework for identifying and evaluating emerging trends and issues that might affect UMRR-EMP implementation***. At the UMRR-EMP Coordinating Committee's February quarterly meetings, partners will consider whether there are specific emerging trends or issues that warrant further evaluation for potential program implications. If any trends or issues are selected, the UMRR-EMP will determine what level of analysis is necessary and who should complete the analysis. In addition, at the February meetings, partners will also discuss analytical results from trends or issues selected in previous years and determine if any further action is needed. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

2. ***Identify foreseeable emerging trends and issues for near term consideration.*** The UMRR-EMP Strategic Plan will outline emerging trends and issues that partners want the program to evaluate within the Plan's timeframe. [Lead: UMRR-EMP strategic planning team. Completion target: two years.]

State Participation and Leadership Support

Issue Overview

The UMRR-EMP is unique in terms of its solid, longstanding interagency partnership, which is a primary reason for the program's remarkable accomplishments. **Strong engagement from the states was a major element in UMRR-EMP's authorization in 1986 and its reauthorization as a continuing program in 1999. The states commit significant staff time and resources, contributing substantially to UMRR-EMP's national and international leadership in large river restoration and science.** The states participate in all aspects of the UMRR-EMP, including the program's various coordinating committees and all stages of implementing HREPs and LTRMP. States partner in project planning and design, provide water quality permitting and certification, construction consultation, pre- and post-construction monitoring, and 100 percent of operation and maintenance for projects on lands that they manage. The states fund staff to participate on the Analysis Team (A-Team) and contribute to the large breadth of LTRMP work products. Additionally, the states fund their appointed UMRR-EMP Coordinating Committee representatives, who attend the Committee's quarterly meetings, provide input on matters related to UMRR-EMP's implementation and policy development, and contribute to various programmatic efforts. For the past several years, the states have been experiencing increasing workload demands and diminishing fiscal and staff resources, making it increasingly challenging for them to maintain the same high level of participation.

Relevant Policy

UMRR-EMP's authorizing legislation directs USACE to implement the program "in consultation" with the Department of the Interior and the five basin states: Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The UMRR-EMP Coordinating Committee functions as the primary body for such interagency coordination regarding budgetary and policy issues. Other consultative interagency groups include the A-Team, which provides science and technical advice and recommendations on LTRMP implementation, and District-based teams that plan and prioritize habitat projects and provide critical links to other river management activities. In addition, when the states serve as non-federal sponsors of habitat projects, they are responsible for 35 percent of the total construction costs and 100 percent of the operation and maintenance of projects on lands that they manage. The states are also actively engaged in pre- and post-project monitoring. Using UMRR-EMP funds, the states staff and operate the LTRMP field stations, which implement long term resource monitoring.

Partner Recommendation

UMRR-EMP partners support maintaining and enhancing the states' ongoing, active participation and leadership in the UMRR-EMP that are essential to the program's success.

Specific Action Items

1. ***Address challenges facing the states in remaining fully engaged in all aspects of UMRR-EMP implementation.*** In the current era of declining staff and fiscal resources, the states are challenged both now and going forward in terms of their capacity to remain active participants in the program. Through the action items listed below, partners will explore opportunities to facilitate

state participation, either by creating efficiencies or providing additional resources to the states. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

a) Establish a small working group to evaluate options for eliminating overlap between various interagency teams, including integrating functions and streamlining participation.

b) Evaluate the benefits and negatives associated with replacing one in-person quarterly meeting per year with a webinar.

c) Provide reimbursement to states for non-routine UMRR-EMP-related time and travel.

d) Consider ways to advance important, small scale projects — e.g., developing habitat projects that combine multiple small-scale measures in several areas (similar to the Bank Stabilization HREP).

2. ***Proactively and directly communicate to state and agency leaders on a routine basis about UMRR-EMP.*** States' upper level leadership undergoes regular turnover, yet continued support for UMRR-EMP depends on informed leaders. State agency upper level leaders typically receive information about UMRR-EMP's efforts through internal communications with program-level staff and at Upper Mississippi River Basin Association meetings. More proactive and routine communications to state and agency leaders will enhance UMRR-EMP's visibility and leaders' understanding of their states' efforts on the UMRS. This includes a) inviting upper level state and agency leaders to one UMRR-EMP Coordinating Committee quarterly meeting per year that is devoted to higher-level issues and program success highlights and b) having UMRR-EMP as a regular agenda item when USACE's UMR District Commanders meet with the states. [Lead: UMRR-EMP Program Manager. Completion target: ongoing.]

Future Action

Progress Review

The UMRR-EMP Coordinating Committee will review annual progress in advancing the IIA's specific action items at its August quarterly meetings, as well as the opportunities created from that progress. In addition, the review will consider partners' priorities for advancing the action items in the upcoming year, given funding and staffing constraints and other factors that may impact the ability for partners to act on the recommendations. The August meetings will not be a time to revisit and revise the IIA itself, nor the specific partner recommendations and action items. Rather, as UMRR-EMP has historically done, partners will complete a full-scale analysis of the implementation issues in conjunction with the program's reports to Congress. The next report to Congress is due to be submitted in December 2016.

Partner-Recommended Action Items

The following table is a comprehensive list of partner-recommended action items for advancing or resolving each implementation issue area. The table also identifies associated leads, approximate timeframes for completion, and whether each issue will be addressed in further detail in the upcoming UMRR-EMP Strategic Plan. In 2013-2014, the UMRR-EMP strategic planning team will address several of these partner recommendations in greater detail, as well as other technical implementation priorities and issues for the program.

Table 1. Partner Recommendations for Future Action

Issue Number	Issue	Action Items	Lead	Approximate Timeframe	UMRR-EMP Strategic Plan Issue
1	**Land Acquisition**	**1.1:** Effectively communicate UMRR-EMP's land acquisition policy to USACE staff and program partners, including documenting the policy in all relevant reference materials	UMRR-EMP Program Manager and District HREP Managers	Ongoing	No
		1.2: Address the question of whether non-federal HREP sponsors will be reimbursed if the value of real estate interests they provide exceeds the required 35 percent project cost share	MVD RIT Lead, UMRR-EMP Program Manager, and state UMRR-EMP CC members	1-3 years	No
		1.3: Recommend to USACE Headquarters that the 25 percent cap on land acquisition costs relative to the total project cost be increased to a more reasonable and realistic level	MVD RIT Lead, UMRR-EMP Program Manager, and state UMRR-EMP CC members	2-3 years	No
2	**Delegated Authority**	Communicate UMRR-EMP's current delegated authority policy	N/A	Completed	No
3	**Habitat Project Types**	Explore UMRR-EMP's ability to advance a new restoration techniques and approaches through specific project proposals	UMRR-EMP Program Manager	Ongoing	No
4	**Habitat Project Planning and Prioritization**	**4.1:** Develop a comprehensive list of state and federal priorities that are relevant to UMRS restoration	UMRR-EMP strategic planning team	1-2 years	Yes
		4.2: Document and communicate the incorporation of ancillary state and federal priorities in HREP planning and prioritization	UMRR-EMP strategic planning team and District HREP Managers	Ongoing	Yes
5	**Construction Cost Sharing**	Explore options to construct habitat projects at full federal expense through specific project proposals	UMRR-EMP Program Manager	Ongoing	No

	Issue	Recommendation	Lead	Approximate Timeframe	UMRR-EMP Strategic Plan Issue
6	**Nonprofits as Cost Share Sponsors**	**6.1:** Establish a framework to guide project planning teams in identifying and partnering with candidate nonprofit sponsors	District HREP Managers	2-3 years	No
		6.2: Coordinate with nonprofit organizations to address any questions related to their serving as cost share sponsors	UMRR-EMP Program Manager, UMRR-EMP Coordinating Committee, and nonprofits	Ongoing	No
7	**Habitat Project Evaluations**	**7.1:** Increase fiscal and staff resources devoted to project evaluation, including biological response monitoring, adaptive management, and focused research	UMRR-EMP Program Manager and UMRR-EMP strategic planning team	Ongoing	Yes
		7.2: Address implementation questions identified by the UMRR-EMP Coordinating Committee	UMRR-EMP strategic planning team	1-2 years	Yes
		7.3: Clearly define and communicate partners' roles in evaluating habitat projects	UMRR-EMP strategic planning team and District HREP Managers	1-2 years	Yes
8	**Capacity for Operation and Maintenance**	**8.1:** Design and construct habitat projects in ways that minimize O&M	Project delivery teams	Ongoing	No
		8.2: Execute site-specific management agreements under which the states or others (e.g., nonprofits) would operate and maintain HREPs on refuge lands	District HREP Managers, USFWS Refuge Managers, and state resource agencies	Ongoing	No
		8.3: Request that the Administration establish a new line item in the USFWS's budget specifically to support its UMRR-EMP HREP O&M obligations	UMRR-EMP Program Manager, USFWS UMR National Fish and Wildlife Refuge Manager, and UMRR-EMP Coordinating Committee	3-5 years	No
		8.4: Explore information needs that partners have identified as necessary to more completely understand, and make any further recommendations to address, HREP O&M resource constraints	UMRR-EMP strategic planning team	1-2 years	Yes

	Issue	Recommendation	Lead	Approximate Timeframe	UMRR-EMP Strategic Plan Issue
9	**LTRMP Implementation**	**9.1:** Increase UMRR-EMP's fiscal resources to implement its monitoring and research priorities	UMRR-EMP's non-federal partners and UMRR-EMP Program Manager	Ongoing	No
		9.2: Leverage resources with program partners and external stakeholders to advance LTRMP efforts	UMRR-EMP Program Manager and UMRR-EMP strategic planning team	Ongoing	Yes
		9.3: Develop a coordinated strategy for implementing LTRMP in low funding years	UMRR-EMP Program Manager	Ongoing	No
		9.4: Ensure LTRMP's continuation as a world-renowned multi-partner collaborative monitoring and research program.	UMRR-EMP strategic planning team	1-2 years	Yes
10	**Adaptive Management**	**10.1:** Ensure compliance with Section 2039 of the 2007 Water Resources Development Act	UMRR-EMP strategic planning team	1-2 years	Yes
		10.2: Define priorities for adaptive management analyses	UMRR-EMP strategic planning team	1-2 years	Yes
		10.3: Establish a framework for deliberate and explicit adaptive management implementation	UMRR-EMP strategic planning team	1-2 years	Yes
11	**Emerging Trends and Issues**	**11.1:** Institute a framework for identifying and evaluating emerging trends and issues that might affect UMRR-EMP implementation	UMRR-EMP Program Manager	Ongoing	No
		11.2: Identify foreseeable emerging trends and issues for near term consideration	UMRR-EMP strategic planning team	1-2 years	Yes
12	**State Participation and Leadership Support**	**12.1:** Address challenges facing the states in remaining fully engaged in all aspects of UMRR-EMP implementation	UMRR-EMP Program Manager	Ongoing	No
		12.2: Proactively and directly communicate to state and agency leaders on a routine basis about UMRR-EMP	UMRR-EMP Program Manager	Ongoing	No

Appendix A

Upper Mississippi River Restoration – Environmental Management Program Authorization

Environmental Management Program Authorization

Section 1103 of the Water Resources Development Act of 1986 (P.L. 99-662) as amended by
Section 405 of the Water Resources Development Act of 1990 (P.L. 101-640),
Section 107 of the Water Resources Development Act of 1992 (P.L. 102-580),
Section 509 of the Water Resources Development Act of 1999 (P.L. 106-53),
Section 2 of the Water Resources Development Technical Corrections of 1999 (P.L. 106-109), and
Section 3177 of the Water Resources Development Act of 2007 (P.L. 110-114).

Additional Cost Sharing Provisions

Section 906(e) of the Water Resources Development Act of 1986 (P.L. 99-662) as amended by
Section 221 of the Water Resources Development Act of 1999 (P.L. 106-53).

SEC. 1103. UPPER MISSISSIPPI RIVER PLAN.

(a)(1) This section may be cited as the "Upper Mississippi River Management Act of 1986".

(2) To ensure the coordinated development and enhancement of the Upper Mississippi River system, it is hereby declared to be the intent of Congress to recognize that system as a nationally significant ecosystem and a nationally significant commercial navigation system. Congress further recognizes that the system provides a diversity of opportunities and experiences. The system shall be administered and regulated in recognition of its several purposes.

(b) For purposes of this section --

(1) the terms "Upper Mississippi River system" and "system" mean those river reaches having commercial navigation channels on the Mississippi River main stem north of Cairo, Illinois; the Minnesota River, Minnesota; Black River, Wisconsin; Saint Croix River, Minnesota and Wisconsin; Illinois River and Waterway, Illinois; and Kaskaskia River, Illinois;

(2) the term "Master Plan" means the comprehensive master plan for the management of the Upper Mississippi River system, dated January 1, 1982, prepared by the Upper Mississippi River Basin Commission and submitted to Congress pursuant to Public Law 95-502;

(3) the term "GREAT I, GREAT II, and GRRM studies" means the studies entitled "GREAT Environmental Action Team--GREAT I--A Study of the Upper Mississippi River", dated September 1980, "GREAT River Environmental Action Team--GREAT II--A Study of the Upper Mississippi River", dated December 1980, and "GREAT River Resource Management Study", dated September 1982; and

(4) the term "Upper Mississippi River Basin Association" means an association of the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, formed for the purposes of cooperative effort and united assistance in the comprehensive planning for the use, protection, growth, and development of the Upper Mississippi River System.

(c)(1) Congress hereby approves the Master Plan as a guide for future water policy on the Upper Mississippi River system. Such approval shall not constitute authorization of any recommendation contained in the Master Plan.

(2) Section 101 of Public Law 95-502 is amended by striking out the last two sentences of subsection (b), striking out subsection (i), striking out the final sentence of subsection (j), and redesignating subsection "(j)" as subsection "(i)".

(d)(1) The consent of the Congress is hereby given to the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, or any two or more of such States, to enter into negotiations for agreements, not in conflict with any law of the United States, for cooperative effort and mutual assistance in the comprehensive planning for the use, protection, growth, and development of the Upper Mississippi River system, and to establish such agencies, joint or otherwise, or designate an existing multi-State entity, as they may deem desirable for making effective such

agreements. To the extent required by Article I, section 10 of the Constitution, such agreements shall become final only after ratification by an Act of Congress.

(2) The Secretary is authorized to enter into cooperative agreements with the Upper Mississippi River Basin Association or any other agency established under paragraph (1) of this subsection to promote and facilitate active State government participation in the river system management, development, and protection.

(3) For the purpose of ensuring the coordinated planning and implementation of programs authorized in subsections (e) and (h)(2) of this section, the Secretary shall enter into an interagency agreement with the Secretary of the Interior to provide for the direct participation of, and transfer of funds to, the Fish and Wildlife Service and any other agency or bureau of the Department of the Interior for the planning, design, implementation, and evaluation of such programs.

(4) The Upper Mississippi River Basin Association or any other agency established under paragraph (1) of this subsection is hereby designated by Congress as the caretaker of the master plan. Any changes to the master plan recommended by the Secretary shall be submitted to such association or agency for review. Such association or agency may make such comments with respect to such recommendations and offer other recommended changes to the master plan as such association or agency deems appropriate and shall transmit such comments and other recommended changes to the Secretary. The Secretary shall transmit such recommendations along with the comments and other recommended changes of such association or agency to the Congress for approval within 90 days of the receipt of such comments or recommended changes.

(e) Program Authority

(1) Authority

(A) In general. The Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, may undertake, as identified in the master plan

(i) a program for the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement; and

(ii) implementation of a long-term resource monitoring, computerized data inventory and analysis, and applied research program, including research on water quality issues affecting the Mississippi River (including elevated nutrient levels) and the development of remediation strategies.

(B) Advisory committee. In carrying out subparagraph (A)(i), the Secretary shall establish an independent technical advisory committee to review projects, monitoring plans, and habitat and natural resource needs assessments.

(2) REPORTS. — Not later than December 31, 2004, and not later than December 31 of every sixth year thereafter, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, shall submit to Congress a report that —

(A) contains an evaluation of the programs described in paragraph (1);

(B) describes the accomplishments of each of the programs;

(C) provides updates of a systemic habitat needs assessment; and

(D) identifies any needed adjustments in the authorization of the programs.

(3) For purposes of carrying out paragraph (1)(A)(i) of this subsection, there is authorized to be appropriated to the Secretary $22,750,000 for fiscal year 1999 and each fiscal year thereafter.

(4) For purposes of carrying out paragraph (1)(A)(ii) of this subsection, there is authorized to be appropriated to the Secretary $10,420,000 for fiscal year 1999 and each fiscal year thereafter.

(5) Authorization of appropriations.—There is authorized to be appropriated to carry out paragraph (1)(B) $350,000 for each of fiscal years 1999 through 2009.

(6) Transfer of amounts.—For fiscal year 1999 and each fiscal year thereafter, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, may transfer not to exceed 20 percent of the amounts appropriated to carry out clause (i) or (ii) of paragraph (1)(A) to the amounts appropriated to carry out the other of those clauses.

(7)(A) Notwithstanding the provisions of subsection (a)(2) of this section, the costs of each project carried out pursuant to paragraph (1)(A)(i) of this subsection shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with the provisions of section 906(e) of this Act; except that the costs of operation and maintenance of projects located on Federal lands or lands owned or operated by a State or local government shall be borne by the Federal, State, or local agency that is responsible for management activities for fish and wildlife on such lands and, in the case of any project requiring non-Federal cost sharing, the non-Federal share of the cost of the project shall be 35 percent.

(B) Notwithstanding the provisions of subsection (a)(2) of this section, the cost of implementing the activities authorized by paragraph (1)(A)(ii) of this subsection shall be allocated in accordance with the provisions of section 906 of this Act, as if such activity was required to mitigate losses to fish and wildlife.

(8) None of the funds appropriated pursuant to any authorization contained in this subsection shall be considered to be chargeable to navigation.

(f) (1) The Secretary, in consultation with any agency established under subsection (d)(1) of this section, is authorized to implement a program of recreational projects for the system substantially in accordance with the recommendations of the GREAT I, GREAT II, and GRRM studies and the master plan reports. In addition, the Secretary, in consultation with any such agency, shall, at Federal expense, conduct an assessment of the economic benefits generated by recreational activities in the system. The cost of each such project shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with title I of this Act.

(2) For purposes of carrying out the program of recreational projects authorized in paragraph (1) of this subsection, there is authorized to be appropriated to the Secretary not to exceed $500,000 per fiscal year for each of the first 15 fiscal years beginning after the effective date of this section.

(g) The Secretary shall, in his budget request, identify those measures developed by the Secretary, in consultation with the Secretary of Transportation and any agency established under subsection (d)(1) of this section, to be undertaken to increase the capacity of specific locks throughout the system by employing nonstructural measures and making minor structural improvements.

(h)(1) The Secretary, in consultation with any agency established under subsection (d)(1) of this section, shall monitor traffic movements on the system for the purpose of verifying lock capacity, updating traffic projections, and refining the economic evaluation so as to verify the need for future capacity expansion of the system.

(2) Determination.

(A) In general. The Secretary in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, shall determine the need for river rehabilitation and environmental enhancement and protection based on the condition of the environment, project developments, and projected environmental impacts from implementing any proposals resulting from recommendations made under subsection (g) and paragraph (1) of this subsection.

(B) Requirements. The Secretary shall

(i) complete the ongoing habitat needs assessment conducted under this paragraph not later than September 30, 2000; and

(ii) include in each report under subsection (e)(2) the most recent habitat needs assessment conducted under this paragraph.

(3) There is authorized to be appropriated to the Secretary such sums as may be necessary to carry out this subsection.

(i) (1) The Secretary shall, as he determines feasible, dispose of dredged material from the system pursuant to the recommendations of the GREAT I, GREAT II, and GRRM studies.

(2) The Secretary shall establish and request appropriate Federal funding for a program to facilitate productive uses of dredged material. The Secretary shall work with the States which have, within their boundaries, any part of the system to identify potential users of dredged material.

(j) The Secretary is authorized to provide for the engineering, design, and construction of a second lock at locks and dam 26, Mississippi River, Alton, Illinois and Missouri, at a total cost of $220,000,000, with a first Federal cost of $220,000,000. Such second lock shall be constructed at or in the vicinity of the location of the replacement lock authorized by section 102 of Public Law 95-502. Section 102 of this Act shall apply to the project authorized by this subsection.

SEC. 906(e). COST SHARING.

(e) In those cases when the Secretary, as part of any report to Congress, recommends activities to enhance fish and wildlife resources, the first costs of such enhancement shall be a Federal cost when--

(1) such enhancement provides benefits that are determined to be national, including benefits to species that are identified by the National Marine Fisheries Service as of national economic importance, species that are subject to treaties or international convention to which the United States is a party, and anadromous fish;

(2) such enhancement is designed to benefit species that have been listed as threatened or endangered by the Secretary of the Interior under the terms of the Endangered Species Act, as amended (16 U.S.C. 1531, et seq.), or

(3) such activities are located on lands managed as a national wildlife refuge.

When benefits of enhancement do not qualify under the preceding sentence, 25 percent of such first costs of enhancement shall be provided by non-Federal interests under a schedule of reimbursement determined by the Secretary. Not more than 80 percent of the non-Federal share of such first costs may be satisfied through in-kind contributions, including facilities, supplies, and services that are necessary to carry out the enhancement project. The non-Federal share of operation, maintenance, and rehabilitation of activities to enhance fish and wildlife resources shall be 25 percent.

Appendix B

Relevant Policy

Section 107(b) of the 1992 Water Resources Development Act

SEC. 107. UPPER MISSISSIPPI RIVER PLAN.

(b) FISH AND WILDLIFE HABITAT REHABILITATION AND ENHANCEMENT PROJECTS.--Section 1103(e) of such Act is amended by striking paragraph (7)(A), as redesignated by subsection (a)(2), and inserting the following new paragraph:

> "(7)(A) Notwithstanding the provisions of subsection (a)(2) of this section, the costs of each project carried out pursuant to paragraph (1)(A) of this subsection shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with the provisions of section 906(e) of this Act; except that the costs of operation and maintenance of projects located on Federal lands or lands owned or operated by a State or local government shall be borne by the Federal, State, or local agency that is responsible for management activities for fish and wildlife on such lands."

CECW-PC (CENCD-PE-PD-PL/14 Dec 93) 3rd End MOESLEIN/272-8534/crm
SUBJECT: Upper Mississippi River System Environmental Management Program (EMP); Authority to Acquire Land

30 NOV 1994

HQ, U. S. Army Corps of Engineers, Washington, D. C. 20314-1000

FOR Commander, North Central Division, ATTN: CENCD-PE-PD-PL

1. Reference OASA(CW) memorandum dated 31 October 1994, subject: Upper Mississippi River System Environmental Management Program (EMP) - Proposed Modification of Existing Policy on Land Acquisition (copy enclosed).

2. Consistent with reference 1., above, specific guidance contained in the following paragraphs concerning the inclusion of land acquisition as a project component for proposed habitat projects of UMRS-EMP is hereby provided for immediate implementation and use.

3. In accordance with the provisions of Section 906 of P.L. 99-662 (i.e., the Water Resources Development Act of 1986) and within the parameters outlined below, approval to include land acquisition as an additional measure to the list of criteria for which approval authority was previously granted to the North Central Division Commander for certain habitat projects with estimated construction costs of $2 million or less (reference ASA(CW) memorandum to the Director of Civil Works, dated 2 December 1993) is hereby granted:

a. Land acquisition as a habitat project measure must be for the primary purpose of fish and wildlife preservation/enhancement/restoration. Any flood damage reduction measures that would be provided as a result of such acquisition should be recognized as ancillary benefits in the project justification document; justification should be based on the benefits to fish and wildlife.

b. Using both incremental and cost effective analysis procedures, it must be shown that land acquisition is a cost efficient alternative in comparison to other habitat enhancement techniques that could be applied on existing lands.

c. A recommended habitat project that includes a land acquisition component must have a non-Federal sponsor to acquire the land, fulfill the construction cost sharing requirements, and assume full responsibility for all project operation and maintenance activities for fish and wildlife on such land.

d. A habitat project or any portion thereof for which lands are to be acquired would be cost shared 75 percent Federal/25 percent non-Federal. These cost sharing responsibility percentages

are consistent with provisions contained in Section 906(e) of the Water Resources Development Act (WRDA) of 1986 (P.L. 99-662), as well as environmental project cost sharing provisions that were proposed for inclusion in WRDA '94.

e. Similar to the Section 1135 program, cost sharing for proposed habitat projects that include components of both land acquisition and construction of additional fish and wildlife enhancement measures would consist of a lands, easement, rights-of-way, relocation and dredged material disposal area (LERRD) credit applied to the non-Federal sponsor's portion of the 25 percent construction cost share requirement. If the value of the LERRD contribution exceeds 25 percent of the total project cost, the Federal Government would reimburse the difference to the non-Federal sponsor.

f. Since the purpose of including land acquisition as a habitat project measure of the UMRS-EMP is not to increase the holdings of the National Wildlife Refuge System, lands purchased for inclusion in a national wildlife refuge would be acquired under the existing programs and authorities of the U.S. Fish and Wildlife Service (USFWS). However, this would not preclude the construction of fish and wildlife enhancement measures for habitat projects of the UMRS-EMP if such lands are purchased separately by the USFWS.

g. Land acquisition for its own sake is not appropriate. Any land acquired must include active construction and/or operation and maintenance measures to improve the value of the fish and wildlife habitat over its value in its current condition.

h. No greater than 10 percent of the total allowable program funds for habitat projects of the UMRS-EMP would be used for land acquisition through the remainder of the authorized program (i.e., FY 1995 through FY 2002).

4. Any potential habitat project of the UMRS-EMP not clearly meeting the criteria described above is subject to ASA(CW) approval through this office.

4 Encls
3. wd
Added 1 encl

G. EDWARD DICKEY
Chief, Planning Division
Directorate of Civil Works

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, D.C. 20314-1000

ER 1165-2-501

CECW-A

Regulation
No. 1165-2-501

30 September 1999

Water Resources Policies and Authorities

CIVIL WORKS ECOSYSTEM RESTORATION POLICY

1. Purpose. This regulation provides policy on Corps of Engineers involvement in ecosystem restoration and protection through Civil Works programs and activities.

2. Applicability. This regulation is applicable to all HQUSACE elements and USACE Commands having responsibility for ecosystem restoration programs, authorities, studies and projects within the Civil Works program.

3. References.

a.. "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," 40 CFR Parts 1500-1508, Council on Environmental Quality, 29 November 1978.

b. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C.).

c. ER 200-2-2, Procedures for Implementing NEPA.

d. ER 405-1-12, Real Estate Handbook.

e. ER 1105-2-100, Guidance for Conducting Civil Works Planning Studies.

f. ER 1110-1-12, Quality Management.

g. ER1110-2-1150, Engineering and Design for Civil Works Projects.

h. ER 1110-2-8154, Water Quality and Environmental Management at Corps Civil Works Projects.

i. ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies, November 1996.

j. ER 1140-1-211, Support for Others: Reimbursable Work.

k. ER 1165-2-28, Corps of Engineers Participation in Improvements for Environmental Quality.

l. ER 1165-2-119, Modifications to Completed Projects.

m. ER 1165-2-132, Hazardous, Toxic and Radioactive Waste (HTRW) - Guidance for Civil Works Projects.

n. EP 1165-2-502, Ecosystem Restoration - Supporting Policy Information.

o. "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies," (P&G), U.S. Water Resources Council, 1983.

4. Distribution. Approved for public release; distribution unlimited.

5. Authorities. National policy concerning the protection, restoration, conservation and management of ecological resources includes compliance requirements, emphasis on protecting environmental quality, and endorsement of Federal efforts to advance environmental goals.

a. Study authorities through which the Corps can examine ecosystem restoration needs and opportunities include: 1) Congressionally authorized studies, pursued under General Investigations (i.e., new start reconnaissance and feasibility studies for single-purpose ecosystem restoration or multiple purpose projects which include ecosystem restoration as a purpose); 2) General Reevaluation Reports, and reformulation opportunities in conjunction with significant Post-Authorization Change Reports; 3) Section 216, Review of Completed Projects (River and Harbor and Flood Control Act of 1970); 4) major rehabilitation of existing projects; and 5) Section 22, Planning Assistance to States (Water Resources Development Act (WRDA) 1974, as amended).

b. Authorities through which the Corps can participate in the study, design and implementation of ecosystem restoration and protection projects include: 1) Section 1135, Project Modifications for Improvement of the Environment (Water Resources Development Act (WRDA) of 1986, as amended); 2) Section 206, Aquatic Ecosystem Restoration (WRDA 1996); 3) Section 204 Beneficial Uses of Dredged Material (WRDA 1992, as amended); and, 4) dredging of contaminated sediments under Section 312 of WRDA 1990, as amended.

c. Additional opportunities for ecosystem restoration and protection may also be pursued through existing project authorities for the management of operating projects; e.g., through water control changes, or as part of natural resources management.

6. Policy. Ecosystem Restoration is one of the primary missions of the Civil Works program. The purpose of Civil Works ecosystem restoration activities is to restore significant ecosystem function, structure, and dynamic processes that have been degraded. Ecosystem restoration efforts will involve a comprehensive examination of the problems contributing to the system degradation, and the development of alternative means for their solution. The intent of restoration is to partially or fully reestablish the attributes of a naturalistic, functioning, and self-regulating system.

a. Protection may be included as part of Civil Works ecosystem restoration initiatives, when such measures involve efforts to prevent future degradation of an ecosystem's structure and functions. Such measures are most appropriate if they require Corps engineering expertise in accomplishing the protection measure. Protection measures can also be undertaken as part of Civil Works natural resources management, water control management and environmental dredging activities.

b. Projects implemented under this guidance should address the restoration of ecosystems, i.e., ecological resources, and not restoration of cultural and historic resources, aesthetic resources, or clean up of hazardous and toxic wastes. Those restoration opportunities that are associated with wetlands, riparian and other floodplain and aquatic systems are likely to be most appropriate for Corps involvement. Proposals that consist primarily of land acquisition are not appropriate as Civil Works ecosystem restoration investments. The Corps will focus its restoration efforts on those initiatives most closely tied to Corps missions and areas of expertise. There may be instances where components of ecosystem restoration problems or opportunities are better addressed by other agencies through their missions and programs.

c. Ecosystem restoration and protection initiatives should be conceived in the context of broader watershed or regional water resources management programs and objectives, which may involve contributive actions by other Federal and non-Federal agencies and other stakeholders. Corps ecosystem restoration projects should utilize engineering and other technical solutions to water and related land resources problems, with emphasis on improving degraded ecosystem function and structure.

7. Cost Sharing. Per Section 210 of the WRDA 1996, the non-Federal share of the implementation costs for ecosystem restoration projects will be 35 percent of the project or separable ecosystem element costs, unless project authorization specifies otherwise. The non-Federal share includes pre-construction, engineering and design, and construction, or total implementation costs of a multiple purpose project allocated to ecosystem restoration. Non-Federal sponsors shall provide 100 percent of the lands, easements, rights-of-way, utility or public facility relocations, and dredged or excavated material disposal areas (LERRDs), and operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). The value of LERRD shall be included in the non-Federal 35 percent share. Where the LERRD exceeds the non-Federal sponsor's 35 percent share, the sponsor will be reimbursed for the value of LERRD which exceeds their 35 percent share. The non-Federal share of projects implemented under Section 1135 of WRDA 1986, as amended, and Section 204 of WRDA 1992, as amended will be 25 percent of the project implementation costs. Table 1 summarizes sponsor funding requirements and information about other contributions for ecosystem restoration projects.

Table 1. Summary of Sponsor Funding Requirements and Other Contributions for Ecosystem Restoration Projects *

Item	Congressionally Authorized Projects[1]	Section 1135	Section 206	Section 204 and 207
Non-Federal Cost Share	50% - Feasibility study 35% - Implementation costs[2]	25% - Total project costs	35% -Total project costs	25% - Total cost of increment over baseline project
Sponsor Work in-kind [3]	50% of non-Federal share of feasibility study costs (i.e. 25% of feasibility study costs); no work-in-kind for post-feasibility phase design, plans and specifications, materials, or project construction.	No more than 80% of the non-Federal share of total project costs; can include plans and specifications, materials, and project construction.	The entire sponsor share maybe work-in-kind, including plans and specifications, materials, and project construction.	None.
Sponsor provided LERRDs[4]	100%	100% of those not available from existing project.	100%	100% of those not available from existing project.
OMRR&R	100%	100%[5]	100%	100%
Federal Funding Limit per Project	As stated in authorization and subject to Sec. 902 WRDA 86 cap.	$5M	$5M	None
Contributions from Other Federal Agencies	Funds from another Federal agency shall not be used by the non-Federal sponsor to meet its share for the project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute[6] .			
Voluntary contributions[7]	Applied toward total project costs to reduce both Federal and sponsor shares.			

***Specific requirements for each project will be detailed in the PCA decision documents.**

LERRDS: lands, easements, rights-of-way, relocations and disposal; OMRR&R: operations, maintenance, repair, rehabilitation, and replacement.

[1] For ecosystem restoration projects or separable elements, or an environmental part of a multiple purpose project.

[2] *Implementation Costs*: LERRDs, post-feasibility phase design, including plans and specifications, materials, and project construction.

[3] *Work-in-kind* may not result in reimbursement of sponsor when combined with LERRDs for Section 1135 and Section 206. The PCA must be executed before initiation of the work-in- kind for Section 1135 and Section 206. The dollar value of the work-in-kind will be established prior to the initiation of the in-kind effort.

[4] If *LERRDs* are greater than the required non-Federal share, the sponsor may be reimbursed for the increment over its required share.

[5] Where the project is on Corps project lands, there may be instances in which it may be appropriate for the Corps to perform the OMRR&R as part of the current OMRR&R.

[6] Per consultation with the Department of Interior, funds from the following may not be used by states as the non-Federal share: Federal Aid in Wildlife Restoration Act (Pittman-Robertson), Federal Aid in Sport Fisheries Restoration Act (Dingel-Johnson), and North American Wetlands Conservation Act (Mitchell Bill) funds.

[7] Per Section 203 of WRDA 92, *voluntary contributions* of cash, funds, materials, and services may be accepted from sources, including governmental entities, but excluding the project sponsor. Any cash or funds received per this provision are to be deposited into the account in the U.S. Treasury entitled "Contributions and Advances, Rivers and Harbors, Corps of Engineers (8662) and shall be available until expended to carry out the ecosystem restoration project.

a. Section 906 of WRDA 1986. The cost sharing provisions for ecosystem restoration established by Section 210 of WRDA 1996 include the qualification that nothing in the provisions shall affect or limit the applicability of Section 906 of WRDA 1986. Section 906 primarily concerns fish and wildlife mitigation which is not impacted by Section 210, since ecosystem restoration and protection projects are not intended to be in lieu of mitigation. Section 906(e) of WRDA 1986 provides applicable cost sharing for activities recommended to Congress to enhance fish and wildlife resources. Projects for ecosystem restoration and protection are not enhancement projects as per 906(e).

8. Federal Objectives. The general guidance in the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G), applies to ecosystem restoration activities and will be used in formulating and evaluating ecosystem restoration projects. Consistent with the analytical framework established by the P&G, plans to address ecosystem restoration should be formulated and recommended, based on their monetary and non-monetary benefits. These measures do not need to exhibit net national economic development (NED) benefits and should be viewed on the basis of non-monetary outputs compatible with the P&G selection criteria. Multipurpose plans can also be developed and recommended with recommendations containing positive net contributions to both economic and environmental benefits. Guidance on formulation for ecosystem restoration is provided in ER 1105-2-100.

9. Environmental Compliance/Consistency. Ecosystem restoration studies and projects must be in compliance with all applicable Federal environmental statutes and regulations and with applicable state statutes. Guidance on plan formulation and evaluation, including Section 404 (Clean Water Act) and other environmental compliance considerations and requirements, is provided in the Principles and Guidelines and ER 1105-2-100.

a. National Environmental Policy Act (NEPA) compliance will be accomplished in accordance with ER 200-2-2, and the Council on Environmental Quality regulations (40 CFR Parts 1500-1508). The documentation and other requirements of NEPA apply to ecosystem restoration initiatives as they would to other water resources development initiatives.

b. Mitigation. Guidance on mitigation of fish and wildlife damages is found in ER 1105-2-100. Projects implemented using restoration authorities may not be used as wetland banks or mitigation credit for the non-Federal sponsor. However, feasibility studies may consider joint ecosystem restoration and mitigation banking projects, as long as the Corps' financial participation in the project is limited to the ecosystem restoration element. Additional information on environmental compliance and consistency is provided in EP 1165-2-502.

10. Quality Control and Assurance. Quality control (QC) and Quality Assurance (QA) are integral to restoration project development. To ensure compliance with all technical and policy requirements, a QC plan will be prepared by the district for every project, with division oversight provided through the QA program.

11. Cooperation with Others and Public Involvement. Cooperation with other Federal and state agencies, tribes and private groups in pursuit of ecosystem restoration is encouraged. Guidance on public involvement in Civil Works studies is provided in ER 1105-2-100. To the extent possible, restoration projects should support the goals and objectives established as part of ongoing regional or watershed planning and management efforts. More detailed information on cooperation with others is provided in EP 1165-2-502.

12. Water Quality. Civil Works restoration and protection projects may involve cost effective solutions involving measures to improve water quality parameters as important components of ecosystem structure and function. Consideration should be given to whether the water quality improvements will accomplish restoration of the system as other ecosystem components may also require attention. The Corps will not propose, for Civil Works implementation, restoration projects or activities that would principally result in treating or otherwise abating pollution problems caused by other parties where they have, or are likely to have, a legal responsibility for remediation or other compliance responsibility.

13. Recreation. Recreation included as part of ecosystem restoration projects must be compatible with the ecosystem restoration purpose of the project, and appropriate in scope and scale to the opportunity provided by ecosystem restoration projects. Recreation development should not require additional lands, and should be ancillary to restoration benefits. Recreation facilities may be added to take advantage of the education and recreation potential of the ecosystem project if the separable costs of such facilities are justifiable by the recreation opportunities, but the project cannot be specifically formulated for a recreation purpose. The recreation proposed should not diminish the ecosystem restoration purpose, or, if there is a reduction in ecosystem restoration outputs, the remaining ecosystem restoration benefits must still be sufficient to justify the ecosystem restoration costs of the project. Whenever conflicts occur between the ecosystem restoration purpose and recreation, ecosystem restoration shall have priority. Where appropriate, recreation at ecosystem restoration projects should be designed for day use only, and plans should seek to optimize public use in harmony with the objectives of the restoration project. The level of financial participation in recreation development by the Corps at an otherwise justifiable project may not increase the Federal cost of the ecosystem restoration project by more than ten percent without prior approval of the Assistant Secretary of the Army (Civil Works). This limit should be viewed as an upper limit on Federal cost sharing and not as a goal for expenditures. Information regarding the inclusion of recreation as part of ecosystem restoration projects, including a checklist of recreation facilities which may be cost shared at new ecosystem restoration projects is provided in EP 1165-2-502.

14. Major Rehabilitation. Ecosystem restoration opportunities may be included as part of major rehabilitation program under the following circumstances: 1) if an existing environmental feature is experiencing a reliability problem, or if an efficiency improvement will enhance the environmental feature; 2) if there is a long recognized environmental problem that may most efficiently be addressed as part of the rehabilitation measure; or 3) where concurrent construction of a rehabilitation measure and an independent restoration measure may provide economic efficiencies. Proposed changes must be justified and, like any other feature of the project, will compete with

other new start projects. In the examination of restoration needs and opportunities, priority should be given to problems with longstanding recognition. Additional information on including ecosystem restoration as part of major rehabilitation is provided in EP 1165-2-502.

15. Remediation and Ecosystem Restoration. Guidance on hazardous, toxic and radioactive waste (HTRW) associated with Civil Works projects and facilities is provided in ER 1165-2-132. Remediation differs from ecosystem restoration in terms of goals and decision frameworks. Remediation, or site cleanup of hazardous, toxic and radioactive waste (HTRW), is typically for the purpose of meeting some target criteria for contaminants or regulatory condition related to human health and safety, rather than for ecosystem quality. After remediation, sites may be used for a variety of purposes depending on the goals of the land owners. More detailed information on remediation in conjunction with ecosystem restoration is provided in EP 1165-2-502.

a. In instances where future site use includes restoration of ecological resources and maintenance of environmental benefits, it may be possible to pursue ecosystem restoration through Civil Works authorities and cost-shared projects after the clean up (e.g., for Formerly Utilized Sites Remedial Action Plan (FUSRAP) sites).

b. Brownfields. Brownfields are abandoned, idled, or under-utilized industrial or commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination. Clean up and redevelopment of these sites is typically intended to foster increased property values, stimulate tax revenues, create job opportunities and revitalize inner-city neighborhoods. The Corps has not been authorized or funded to address Brownfield redevelopment needs, however, there may be opportunities for the Corps to contribute to, or participate in Brownfields initiatives where site assessment and clean up are integral to an ecosystem restoration project, or to solving water resources problems related to other Civil Works water resources mission areas and existing authorities. There may also be opportunities to participate on a reimbursable basis as Support for Others. Corps participation in cost-shared clean up as part of water resources development is limited to situations where such participation will not result in the Corps being liable under the Comprehensive Environmental Response, Compensation and Liability Act, (CERCLA) (42 U.S.C. 9607(a)), or require its involvement with the Resource Conservation and Recovery Act (RCRA) hazardous waste as defined in 42 U.S.C. 6903(a). Detailed guidance on HTRW consideration for Civil Works projects is contained in ER 1165-2-132.

16. Regulatory Program and Ecosystem Restoration. Coordination with the Corps Regulatory program personnel is essential to ecosystem restoration planning in order to preclude conflicting actions and to ultimately improve recommendations. The Corps' Regulatory program encourages development of watershed management plans that protect and restore important elements of aquatic ecosystems. Ecosystem restoration planning utilizes broad water resources development and management perspectives which may be useful in regulatory decision making. Additional information on coordinating ecosystem restoration and Corps regulatory responsibilities is provided in EP 1165-2-502.

17. Real Estate Considerations. The analysis of the nature and extent of real estate requirements should be conducted by a district study team that includes Real Estate, Project Management, Planning, Engineering, and other involved offices as necessary and with appropriate non-Federal sponsor personnel. The analysis must be conducted in accordance with Chapter 12 of ER 405-1-12, including consideration and identification of the specific interests, estates, and acreage required. After coordination and consultation with the non-Federal sponsor, the government will determine the lands, easements, rights-of-way, utility or public facility relocations, and dredged or excavated material disposal areas (LERRD) required for the implementation, operation, and maintenance of the project. More detailed guidance on determining the real estate requirements for ecosystem restoration projects is provided in EP 1165-2-502.

a. Value and Credit. For crediting and total project cost calculation purposes, the value for LERRD to be provided or performed by the non-Federal sponsor for the ecosystem restoration project shall be determined in accordance with the terms of the Project Cooperation Agreement (PCA) for the project, Section VII of Chapter 12 of ER 405-1-12.

b. Operation and Maintenance. For ecosystem restoration projects that include existing project lands owned by the United States and managed by the Corps, and where the non-Federal sponsor is responsible for the operation and maintenance of the restoration project, an appropriate real estate outgrant must be issued to the non-Federal sponsor. If the area is currently under outgrant, appropriate steps must be taken to allow the new use which includes amendment of the existing outgrant and possible cost-sharing agreement.

FOR THE COMMANDER:

RUSSELL L. FUHRMAN
Major General, USA
Chief of Staff

Excerpt of UMRR-EMP 1999 WRDA Implementation Guidance re Delegated Authority

11. **Proposal**: "*to gain additional project implementation efficiencies, the U.S. Army Corps of Engineers, Headquarters should delegate approval authority for those projects with an estimated construction cost of $5 million or less to the Division level.*" (Partnership Report, page 7-5)

Analysis: Authority to approve the construction of proposed HREPs with an estimated construction cost of $2,000,000 or less was delegated to the CENCD and CEMVD Commanders in a 07Dec93 memorandum from CECW-P as approved by ASA(CW) on O2Dec93 memorandum. The delegation of approval, which is still in effect, applies to proposals that clearly fall within policy parameters established in previous decisions. It also applies only to specific types of justified, in-water work. Any potential project not clearly meeting these criteria required approval by ASA(CW). An annual status review summary was required for submittal to ASA(CW).

CEMVD has also recommended that the delegated authority be increased to $5,000,000. This would include fact sheet and Definite Project Report approvals. CEMVD stated that it is experienced with EMP projects, is responsible for developing and managing the EMP budget, and would work within budgetary constraints to provide a program that efficiently uses available funds and addresses the region's habitat needs. Projects within the delegated authority would include features that clearly fit within current policy. Innovative or demonstration type work would still be approved by HQUSACE. CEMVD stated it is capable of recognizing policy issues that need consultation with higher authority.

Basing the cost limit on the Federal cost share rather than the total cost is consistent with the management of the Continuing Authorities Program, which was used as a model for the EMP, and may provide a minor enticement for non-Federal cost sharing.

Implementation Guidance: The Commander, CEMVD, may approve the construction of HREPs with an estimated Federal cost of less than $5 million. The various requirements cited in the 07Dec93 memorandum remain in effect.

12. **Proposal**: "to reduce habitat project review and approval time and therefore implementation costs, the U. S. Army Corps of Engineers, Mississippi Valley Division should delegate approval authority for those projects with an estimated construction cost of $1 million or less to the District level.' (Partnership Report, page 7-5)

Analysis: CEMVD also recommended that construction approval authority be delegated to Districts for projects with estimated construction costs less than $1,000,000. There is no current delegation of approval authority for EMP projects to the Districts. CEMVD stated that projects under $1,000,000 are typically routine and not controversial and that District staffs are very familiar and experienced with these projects. Funding implications would continue to be coordinated with CEMVD. Typical projects in this category include backwater and side-channel dredging and erosion protection.

Project recommendations to initiate planning and to construct a particular plan, regardless of cost, should be reviewed and approved at least one command level higher than the implementing office to ensure that the action is appropriate under law, policy and current administration priorities. This provides a check and balance to prevent potential waste, fraud and abuse. However, if the plan developed for construction has essentially the same features, scale, and outputs as the plan described in the approved fact sheet, then further review by higher authority would be arguably redundant and unnecessary. Implementation Guidance: The Commander, CEMVD, may delegate the authority to approve construction of any EMP HREPs with an estimated construction cost of $1,000,000 or less to the District Commander provided that the plan to be constructed has essentially the same features, scale, and outputs as the plan described in an approved fact sheet.

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, D.C. 20314-1000

ER-1165-2-502

CECW-P

Regulation
No. 1165-2-502

31 March 2007

Resources Policies and Authorities
DELEGATION OF REVIEW AND APPROVAL AUTHORITY FOR
POST-AUTHORIZATION DECISION DOCUMENTS

1. Purpose. This regulation provides guidance on the delegated review and approval of Post-Authorization Decision Documents. A post-authorization decision document is a report on a previously authorized project that would serve as the basis for construction funding, or in the case of congressional adds, the report to support the PCA.

2. Applicability. This regulation applies to all HQUSACE elements, Major Subordinate Commands (MSC) and district commands having Civil Works responsibility. It does not apply to the Continuing Authorities Program, which has its delegation authority described under separate regulation. This ER does not rescind existing delegations of specific projects or programs previously provided by HQUSACE that allow District Commanders to approve certain post-authorization decision documents. Additionally, the guidance provided under those existing delegations is not affected by this ER. Further, the delegation described in this regulation is contingent upon MSC Commanders demonstrating that the MSC office has adequate resources, qualified planning and engineering staffing, applicable written procedures, and documented adherence to those procedures. This capability is subject to periodic assessment as described herein, and the authority delegated to the MSC can be rescinded at any time at the discretion of the Director of Civil Works.

3. Background. This regulation reflects the Corps responsibility and accountability to produce high quality products that adhere to Civil Works policy. Delegation of approval authority requires the direct oversight of MSC Commanders to ensure resources are available to provide an accountable process that will facilitate the Commander's approval of actions under this delegation. This guidance employs checklists (see ER 1105-2-100, Appendix H, Exhibit H-2) which the PDT will use to ensure a process in policy and legal compliance. In all cases, the checklists are designed to assure early vertical team coordination as issues arise. The responsibilities of delegated approval authority require active participation by senior MSC management to review and understand what they are signing.

4. Distribution. Approved for public release; distribution is unlimited.

This regulation supersedes ER 1165-2-502, Resources Policies and Authorities Delegation of Review and Approval Authority for Post-Authorization Decision Documents, 19 December 2006.

5. References.

a. ER 5-1-11, subject: U.S. Army Corps of Engineers Project Management Business Process.

b. ER 405-1-12, subject: Real Estate Handbook

c. ER 1105-2-100, subject: Planning Guidance Notebook.

d. ER 1110-2-1150, subject: Engineering Design for Civil Works

e. ER 1110-2-1302, subject: Civil Works Cost Engineering

f. Memorandum, CECW-ZA, dated 19 December 2002, subject: Proposed Delegation of the Approval of Post-Authorization Decision Documents and Project Cooperation Agreements (PCAs).

g. Memorandum, CECW-ZA, dated 24 March 1999, subject: Delegation of Approval Authority for Post-Authorization Decision Documents (rescinded, see paragraph 6. below).

h. Memorandum, CECW-L/CECW-E, dated 17 November 1992, subject: Development and Approval Process for Project Cooperation Agreements.

i. Memorandum, CECW-A/CECW-B, dated 27 May 1997, subject: Decision Document and Project Cooperation Agreements for Congressional Adds for Specifically Authorized Projects.

6. Reference 5.g. has been rescinded. Effective 31 March 2004, review and approval authority of post-authorization decision documents that are in accordance with law and policy are delegated to the MSCs with the exception of dam safety reports and any reports requiring action by the Chief of Engineers, Secretary of the Army (acting through the Assistant Secretary of the Army for Civil Works (ASA(CW)) or specific congressional modification. This approval authority would include any decision document that has all policy issues resolved through coordination with the vertical team, which includes OASA(CW) (Project Planning & Review). Further delegation by the MSC is not authorized.

7. The District Commanders are responsible for technical, policy and legal compliance, and for assuring that all public safety aspects of the project's functions have been fully considered and communicated to stakeholders. District Commanders will ensure that decision documents will be prepared with full multidisciplinary involvement in accordance with the Project Management Business Process (PMBP). The District Commanders are responsible for the preparation of decision documents utilizing the procedures and policies set forth in the references. The key to success is full compliance with all applicable laws, policies and

regulations. It is critical that all policy and legal issues be identified, addressed and resolved early-on during the development of the decision document. District personnel must be knowledgeable of Civil Works policies and will prepare the Project Study Issue Checklist (see ER 1105-2-100, Appendix H, Exhibit H-2) early in the project development phase. Preparation of the Project Study Issue Checklist at the earliest stages in decision document development will facilitate identification and resolution of technical, policy and legal issues with the MSC and the vertical team (i.e. District, MSC, HQUSACE RIT, and OASA(CW)). When the decision document is ready to be forwarded for approval it will include the Post-Authorization Decision Document Checklist (see Appendix A). MSCs will ensure that the decision document addresses all items required by the Decision Document Checklist. Once all policy and legal issues have been identified through the use of the Project Study Issue Checklist and coordinated and resolved through the vertical team, the MSC Commander is authorized to approve the post-authorization decision document. If unresolved issues remain, the report must be forwarded to HQUSACE for further action. The district/MSC Planning leaders are responsible for documenting policy quality control and quality assurance, respectively, for ensuring the resolution of all public safety issues of the project's functions with the district/MSC Dam Safety Officers and for ensuring the resolution of all policy and technical issues. District and MSC Counsel will be involved in documenting and ensuring legal sufficiency of decision documents.

8. The District Commanders are responsible for fully documenting technical, policy, and legal reviews and compliance of the decision document, as coordinated throughout the study development process. Delegated decision documents will be forwarded to the MSC for review and approval. Non-delegated decision documents will be forwarded through the MSC to HQUSACE for review and approval by HQUSACE, ASA(CW) or Congress, as appropriate. The transmittal to the MSC will include a completed Project Study Issue Checklist and Decision Document Checklist. The transmittal documentation will include the District Counsel's legal opinion documenting the authority for all post authorization changes as well as the District Counsel's written certification that the report is legally sufficient.

9. Division Commanders are responsible for ensuring technical, policy and legal compliance and approving delegated decision documents. Division Commanders will provide on-going technical, policy and legal compliance support. The MSC will establish decision document review procedures and processes that ensure high quality decision documents in accordance with technical, policy and legal requirements. Non-delegated decision documents will be forwarded to HQUSACE with the District Commander's documentation of technical, policy, and legal compliance and the MSC Commander's recommendations in fulfilling their Quality Control and Quality Assurance responsibilities, respectively. The QC/QA process should be integrated throughout the report development process, and does not constitute a separate policy review from that administered by HQUSACE. Division Counsel will review the District Counsel legal opinion and certification and, as appropriate, provide written concurrence with the opinion and certification or provide direction on actions necessary to bring the report into legal compliance. A report with unresolved legal issues cannot be approved by the MSC under the delegation and must be forwarded to the HQUSACE for further action.

10. Procedure.

a. District Responsibilities. The district will:

(1) Prepare and forward the Project Study Issue Checklist through the MSC to HQUSACE during the early study phase (i.e., within the first 3 months of initiation to identify potential technical, policy, or legal issues and when the tentatively selected plan is identified) or similar project development phase. The district will forward the Project Study Issue Checklist through the MSC to HQUSACE to ensure upward reporting of potential policy sensitive issues for resolution through the vertical team: MSC, HQUSACE, and OASA(CW).

(2) Based on vertical team assistance facilitated through preparation of the Project Study Issue Checklist, develop and finalize the decision document and the Decision Document Checklist.

(3) Forward the decision document and the final Decision Document Checklist to the MSC with the request for approval of the decision document. The District's request for approval will include the District Commander's documentation of technical, policy and legal compliance of the report, including the Independent Technical Review (ITR) documentation showing resolution of all issues, in the transmittal to the MSC Commander.

b. MSC Responsibilities. The MSC will:

(1) Review and approve/certify the Project Study Issue Checklist from the district and facilitate resolution of outstanding issues with HQUSACE and OASA(CW), as appropriate.

(2) Review the Decision Document Checklist and delegated decision documents. In the approval of the delegated decision document, the MSC Commander will certify that the project report meets technical, policy and legal compliance with an affirmative statement. The entire district and MSC documentation record will be placed in the MSC files for audit purposes. Please note that if ASA(CW) is to sign a PCA based upon a MSC approved delegated decision document, then a copy of the approved Decision Document, together with the Decision Document Checklist, must accompany the PCA.

(3) Forward non-delegated decision documents to HQUSACE for review and ASA(CW) approval as appropriate. The transmittal will include the District Commander's documentation of technical, policy and legal compliance, ITR and peer review documentation, all appropriate checklists, and MSC Commander's recommendations from a quality assurance perspective. These QC/QA roles neither duplicate nor substitute for HQUSACE level policy review.

11. Accountability. Each MSC will institute internal audit procedures for delegated approval of post-authorization decision documents, and submit these procedures to CECW-P. Spot inspections will be conducted in conjunction with other HQUSACE staff visits.

a. Capability. The MSC office must maintain fully functional planning and engineering staffs to fulfill the requirements under this delegated authority. At a minimum, as part of the broader planning team, the staff will include a GS-15 Planning Community of Practice Leader qualified in planning and policy, and additional GS-14 or higher staff positions in each of the following areas: Plan Formulation, Economics and Environmental.[1] As part of the broader engineering team, the staff will include (at a minimum) a GS-15 Engineering Community of Practice Leader and appropriate GS-14 or higher staff members who are qualified in water resources engineering (including risks to public safety) and civil works policy. The MSC must also assure that there are appropriately qualified District study teams involved in preparing, reviewing, and recommending the products. Fundamental to this process is a requirement that MSC Commanders ensure that the individual performance standards for officials involved in the review and approval process, at both the district and MSC levels, reflect the corporate responsibility we have to adhere to policy, law and providing public safety.

b. Checklists. The Project Study Issue Checklist and Decision Document Checklist are required and must be completed and signed on every Project before the Post-authorization Decision Document can be approved. Until all the issues in the checklist have been resolved, the MSC cannot approve the Decision Document. In such instances where there are unresolved issues, the Decision Document must be submitted for HQUSACE and/or OASA(CW) approval as appropriate. Checklists are also required for Post-authorization Decision Documents requiring action by HQUSACE, OASA(CW), or Congress.

c. Internal Audits. Each MSC has an on-going oversight role in addition to their approval role for delegated decision documents. On a fiscal year basis, each MSC Commander will report to HQUSACE each Post-authorization Decision Document approved under delegated authority the previous year and perform a compliance assessment of use of delegated authority to approve Post-authorization Decision Documents. The report will identify any Post-authorization Decision Documents intended for delegated authority approval which did not qualify and the reason delegated authority approval was not appropriate. The assessment should address lessons learned and any corrective actions needed in order to foster intra-MSC and HQUSACE process improvements, nationwide. The report and the results of these audits will be reported to HQUSACE within 60 days of the end of the Fiscal year. HQUSACE will forward the report to OASA(CW).

d. OASA(CW) Audits. Based on the results of the annual Corps audit, OASA(CW) may identify a selected number of projects and ask that the entire approval package (i.e., the decision document, ITR, review documentation, legal certification, checklists, and all approvals) be forwarded to OASA(CW) for a review to ensure the appropriate use of the delegation authority.

e. List/Records.

(1) List of Post-authorization Decision Documents to be approved. Each MSC will provide to the appropriate HQUSACE RIT and OASA(CW) a list of Post-authorization Decision Documents each district anticipates to be approved under delegated authority during

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[1] The grade structure in Pacific Ocean Division may be lower due to the size of the Civil Works program in that MSC.

the FY within 60 days of the issuance of the Conference Report. This list will specifically identify the Post-authorization Decision Document that each district intends to approve under delegated authority during that fiscal year. This list will include the date of the approval of the original decision document, who approved (MSC, Chief, ASA(CW) or Congress) the document and the date it was approved, and the proposed date of approval of the Post-authorization Decision Document.

(2) Records. The division will maintain a file on each Post-authorization Decision Document approved under delegated authority. This file will document all actions and contain all component items supporting the Post-authorization Decision Document package including signed approvals of the Post-authorization Decision Document, and the original decision document the Post-authorization Decision Document is based upon. This includes all accompanying documentation relevant to the decision including the District Commander's documentation of technical, policy and legal compliance, ITR and peer review documentation, all appropriate checklists, and MSC Commander's recommendations from a quality assurance perspective.

f. An Audit Team of CECW personnel will perform audits of MSC files on Post-authorization Decision Documents approved under delegated authority during staff visits to the MSC.

g. The Engineer Inspector General may be requested to conduct periodic, independent spot checks of MSC activities under the delegated authority procedures.

FOR THE COMMANDER:

YVONNE J. PRETTYMAN-BECK
Colonel, Corps of Engineers
Chief of Staff

Excerpt of Engineering Circular 1165-2-209: USACE Civil Works Review Policy

10. Independent External Peer Review.

a. Independent External Peer Review (IEPR) is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. Any work product, report, evaluation, or assessment that undergoes DQC and ATR also **MAY** be required to undergo IEPR under certain circumstances. A risk-informed decision, as described in paragraph 15 below, will be made as to whether IEPR is appropriate for that product.

b. Review Teams and Panels. IEPR panels will be made up of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. Panel members will be selected using the National Academies of Science (NAS) policy for selecting reviewers.

c. IEPR teams are not expected to be knowledgeable of Army and administration policies, nor are they expected to address such concerns. However, an IEPR team should be given the flexibility to bring important issues to the attention of decision makers.

d. The Water Resources Development Act of 2007 included two separate requirements for review by external experts. The first, Section 2034, required independent peer review of project studies under certain conditions. The second, Section 2035, required a Safety Assurance Review (SAR) of "the design and construction activities for hurricane and storm damage reduction and flood damage reduction projects." USACE policy extends this to all projects with life safety issues. These statutory requirements, as well as the USACE existing requirements for review of work products are the basis for this circular. Sections 2034 and 2035, besides having different foci, also differ significantly in legislative language. This necessitates some variation in the scope and procedures for IEPR, depending on the phase and purposes of the project under review. For clarity, IEPR is divided into two types, Type 1 is generally for decision documents and Type II is generally for implementation documents. The differing criteria for conducting the two types of IEPR can result in work products being required to have Type I IEPR only, Type II IEPR only, both Type I and Type II IEPR, or no IEPR.

11. Type I IEPR**.**

a. Type I IEPR is conducted on project studies. It is of critical importance for those decision documents and supporting work products where there are public safety concerns, significant controversy, a high level of complexity, or significant economic, environmental and social effects to the nation. However, it is not limited to only those cases and most studies should undergo Type I IEPR.

b. The requirement for Type I IEPR is based upon Section 2034 of WRDA 2007, the OMB Peer Review Bulletin and other USACE policy considerations.

c. Type I IEPR reviews are managed outside the USACE, panel members will be selected by an Outside Eligible Organization (OEO -see Glossary) using the National Academies of Science (NAS) policy for selecting reviewers. Although the NAS is frequently cited for the type of IEPR process the

USACE should follow, actual reviews by the NAS are expected to be rare. Decisions to approach NAS must be made by the Director of Civil Works (DCW) based on the recommendation of the appropriate Regional Integration Team (RIT) at HQUSACE in coordination with appropriate Community of Practice (CoP), generally the Planning and Policy CoP. The panels will conduct reviews that cover the entire project concurrent with the product development.

d. In keeping with the principle that IEPR should be scalable to the work product being reviewed, there may be cases that warrant a project study or decision document, which would otherwise be required to undergo a Type I IEPR, being excluded from the Type I process. For IEPR on decision documents, the RMO will be the appropriate PCX or, in the case of dam or levee safety modification reports, the USACE RMC in close coordination with the appropriate PCX. The vertical team (involving district, MSC, PCX, RMC, and HQ members) will advise the MSC Commander as to whether Type I IEPR is appropriate or whether sufficient rationale exists to support a request for an exclusion. Requests seeking an exclusion from Type I IEPR shall comply with Paragraph 15, Risk-Informed Decisions on Appropriate Reviews, below. The conditions determining whether Type I IEPR will be undertaken are as follows:

(1) Type I IEPR is mandatory if any of the following are true:

(a) Significant threat to human life. The decision document phase is the initial concept design phase of a project. Therefore, when life safety issues exist, a Type I IEPR that includes a Safety Assurance Review is required;

(b) Where the estimated total cost of the project, including mitigation costs, is greater than $45 million based on a reasonable estimate at the end of the reconnaissance phase. If a project has a cost estimate of less than $45 million at the end of the reconnaissance phase, but the estimated costs subsequently increase to more than $45 million, a determination will be made by HQUSACE whether a Type I IEPR is required. There is a potential, albeit an extremely limited one, for projects costing over $45 Million to be excluded from Type I IEPR. This potential only exists when no other mandatory conditions listed in this section are met, the project does not include an EIS, the various aspects of the problems or opportunities being addressed are not complex, and there is no controversy surrounding the study. An exclusion from Type I IEPR for a project costing more than $45 Million can only be granted by the Chief of Engineers;

(c) Where the Governor of an affected State requests a peer review by independent experts; or

(d) Where the DCW or the Chief of Engineers determines that the project study is controversial due to significant public dispute over either the size, nature, or effects of the project or the economic or environmental costs or benefits of the project.

(2) Type I IEPR is discretionary where the head of a Federal or state agency charged with reviewing the project study determines that the project is likely to have a significant adverse impact on environmental, cultural, or other resources under the jurisdiction of the agency after implementation of proposed mitigation plans and he/she requests an IEPR.

(a) A decision whether to conduct IEPR must be made within 21 days of the date of receipt of the request by the head of the Federal or State agency.

(b) If the Chief of Engineers decides not to conduct an IEPR following such a request the Chief shall make publicly available the reasons for not conducting the IEPR.

(c) If the Chief of Engineers decides not to conduct an IEPR following such a request, it may be appealed to the Chairman of the Council on Environmental Quality within 30-days of the Chief's decision and the Chairman shall decide the appeal within 30 days of the date of the appeal.

(3) Section 2034 permits project studies to be excluded from independent peer review under certain circumstances. However, the Conference Report for WRDA 2007 describes a "very limited number of project studies" being excluded from independent peer review, which are "so limited in scope or impact that they would not significantly benefit from an independent peer review." In most cases, requests for exclusions will be decided by the DCW. As noted in Paragraph 11.d.(2)(b), requests for exclusions for projects costing over $45 million will be routed through the Deputy Commanding General for Civil and Emergency Operations with the decision made by the Chief of Engineers. A project study may be excluded from Type I IEPR in cases where none of the above mandatory triggers (with the limited exception noted in Paragraph 11.d.(2)(b)) are met and:

(a) It does not include an EIS, and the DCW or the Chief determines that the project:

- Is not controversial; and
- Has no more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources;
- Has no substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures; and
- Has, before implementation of mitigation measures, no more than a negligible adverse impact on a species listed as endangered or threatened species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the critical habitat of such species designated under such Act;

OR

(b) If the project study

- Involves only the rehabilitation or replacement of existing hydropower turbines, lock structures, or flood control gates within the same footprint and for the same purpose as an existing water resources project; or
- Is for an activity for which there is ample experience within the USACE and industry to treat the activity as being routine; AND
- Has minimal life safety risk;

OR

(c) If the project study does not include an EIS and is a project study pursued under the CAP Program.

e. Type I IEPRs are exempted by law from the Federal Advisory Committee Act (FACA). Additional discussion on Type I IEPR is in Appendix D.

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 EMP-CC:
  - Measures of how well the project meets system needs as identified in the HNA, Long Term Resource Monitoring 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, results of public involvement or background information as needed.

<u>Stage III - Program Planning</u>:

- 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.

Section 2(c)(1) of the 1973 Endangered Species Act as Amended

(c) POLICY — (1) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

APR - 5 2012

MEMORANDUM FOR THE DIRECTOR OF CIVIL WORKS

SUBJECT: Implementation Guidance for Section 2003(b) of the Water Resources Development Act of 2007 – Definition of Non-Federal Interest

1. Section 2003(b) of WRDA 2007 amends Section 221(b) of the Flood Control Act of 1970 (hereinafter "Section 221") (42 U.S.C. 1962d-5b(b)) to expand the definition of non-Federal interests eligible to act as the sponsor for a water resources project agreement to include Federally recognized Indian tribes and nonprofit entities with the consent of the affected local government. A copy of Section 221(b) as amended by Section 2003(b) of WRDA 2007 is attached.

2. Federally Recognized Indian Tribe. To be eligible to act as a sponsor, the tribe must be a Federally recognized Indian tribe; that is, any Indian or Alaska Native Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 479a).

3. Nonprofit Entity.

a. Organization. To be eligible to act as a sponsor, the nonprofit entity must be an organization incorporated under the applicable laws of the State in which it operates as a nonprofit organization, exempt from paying Federal income taxes under section 501 of the Internal Revenue Code (26 U.S.C. 501), and whose purposes include and are directly related to the purpose of the project.

b. Consent of Affected Local Government. In addition, the affected local government must consent, in writing, to the nonprofit entity acting as sponsor for the study, design, or construction of the project. During the Reconnaissance Phase (for projects that will be specifically authorized) or the 100 percent Federally funded portion of the Feasibility Phase (for projects implemented under the Continuing Authority Program (CAP) and regional authorities), the district must identify, and coordinate with, the affected local government. Typically, the affected local government will be the smallest unit of government that has jurisdiction over the area impacted by the potential project. For larger or more complex projects, multiple jurisdictions may be involved and written consent must be obtained from the affected local government in each jurisdiction. The written consent must be received prior to processing the applicable agreement (Feasibility Cost Share Agreement, Design Agreement, or Project Partnership Agreement) for approval, with the date of the written consent(s) included in a Whereas clause in such applicable agreement.

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SUBJECT: Implementation Guidance for Section 2003(b) of the Water Resources Development Act of 2007 – Definition of Non-Federal Interest

c. Sponsorship by a Nonprofit Entity.

(1) A nonprofit entity is eligible to act as the sole sponsor for study, design, and construction of an ecosystem restoration project - such as specifically authorized ecosystem restoration projects; projects implemented under the CAP Sections 206, 1135, and 204 (those that provide ecosystem restoration benefits); Estuary Restoration Act projects; and any other regional authorities for implementation of critical restoration or ecosystem restoration projects.

(2) For study, design, and construction of projects involving any purpose other than ecosystem restoration, a nonprofit entity is eligible to act as a sponsor as long as a legally constituted public body (which includes a Federally recognized Indian tribe) also will act as a sponsor for the project. Where a nonprofit entity is one of the sponsors, the agreement must make clear that both sponsors are jointly and severally responsible and liable for the Hold and Save obligations. In addition, the agreement will require in all cases that the public body (alone or jointly with the nonprofit entity) is responsible for operation, maintenance, repair, rehabilitation, and replacement (OMRR&R) of the project.

d. Sponsor Responsibilities. As with a legally constituted public body, any nonprofit entity that proposes to act as a sponsor must be able to demonstrate that it has the full legal and financial authority and capability to perform the terms of the agreement and to pay damages, if necessary, in the event of failure to perform. For agreements addressing construction of a project, the nonprofit entity must demonstrate the capability to satisfy a sponsor's responsibilities under the agreement, including payment of its required share of project costs; provision or performance of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas for the project, as applicable; and performance, in perpetuity, of any non-Federal OMRR&R. In evaluating the nonprofit entity's authority and capability, the District should analyze the nonprofit entity's Articles of Incorporation and by-laws and, commensurate with the magnitude of the nonprofit entity's responsibilities for, and the nature of, the project, review any other documents and consider relevant factors bearing upon the nonprofit entity's ability to act successfully as a sponsor.

Jo-Ellen Darcy

Attch

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

WRDA 2007 LANGUAGE

SEC. 221 (b) of the Flood Control Act of 1970, as amended by Section 2003 (b) of WRDA 2007, WRITTEN AGREEMENT REQUIREMENT FOR WATER RESOURCES PROJECTS.

(b) DEFINITION OF NON-FEDERAL INTEREST. - The term 'non-Federal interest' means –

(1) a legally constituted public body (including a federally recognized Indian tribe); or

(2) a nonprofit entity with the consent of the affected local government,

that has full authority and capability to perform the terms of its agreement and to pay damages, if necessary, in the event of failure to perform.

Section 221 of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b)

SEC. 221. WRITTEN AGREEMENT REQUIREMENT FOR WATER RESOURCES PROJECTS.

(a) COOPERATION OF NON-FEDERAL INTEREST.-

(1) IN GENERAL. - After December 31, 1970, the construction of any water resources project, or an acceptable separable element thereof, by the Secretary of the Army, acting through the Chief of Engineers, or by a non-Federal interest where such interest will be reimbursed for such construction under any provision of law, shall not be commenced until each non-Federal interest has entered into a written partnership agreement with the Secretary (or, where appropriate, the district engineer for the district in which the project will be carried out) under which each party agrees to carry out its responsibilities and requirements for implementation or construction of the project or the appropriate element of the project, as the case may be; except that no such agreement shall be required if the Secretary determines that the administrative costs associated with negotiating, executing, or administering the agreement would exceed the amount of the contribution required from the non-Federal interest and are less than $25,000.

(2) LIQUIDATED DAMAGES. - A partnership agreement described in paragraph (1) may include a provision for liquidated damages in the event of a failure of one or more parties to perform.

(3) OBLIGATION OF FUTURE APPROPRIATIONS. - In any partnership agreement described in paragraph (1) and entered into by a State, or a body politic of the State which derives its powers from the State constitution, or a governmental entity created by the State legislature, the agreement may reflect that it does not obligate future appropriations for such performance and payment when obligating future appropriations would be inconsistent with constitutional or statutory limitations of the State or a political subdivision of the State.

(4) CREDIT FOR IN-KIND CONTRIBUTIONS. -

(A) IN GENERAL. - A partnership agreement described in paragraph (1) may provide with respect to a project that the Secretary shall credit toward the non-Federal share of the cost of the project, including a project implemented without specific authorization in law, the value of in-kind contributions made by the non-Federal interest, including -

(i) the costs of planning (including data collection), design, management, mitigation, construction, and construction services that are provided by the non-Federal interest for implementation of the project;

(ii) the value of materials or services provided before execution of the partnership agreement, including efforts on constructed elements incorporated into the project; and

(iii) the value of materials and services provided after execution of the partnership agreement.

(B) CONDITION. - The Secretary may credit an in-kind contribution under subparagraph (A) only if the Secretary determines that the material or service provided as an in-kind contribution is integral to the project.

(C) WORK PERFORMED BEFORE PARTNERSHIP AGREEMENT. - In any case in which the non-Federal interest is to receive credit under subparagraph (A)(ii) for the cost of work carried out by the non-Federal interest and such work has not been carried out as of the date of enactment of this subparagraph [enacted Nov. 8, 2007], the Secretary and the non-Federal interest shall enter into an agreement under which the non-Federal interest shall carry out such work, and only work carried out following the execution of the agreement shall be eligible for credit.

(D) LIMITATIONS.—Credit authorized under this paragraph for a project -

(i) shall not exceed the non-Federal share of the cost of the project;

(ii) shall not alter any other requirement that a non-Federal interest provide lands, easements, relocations, rights-of-way, or areas for disposal of dredged material for the project;

(iii) shall not alter any requirement that a non-Federal interest pay a portion of the costs of construction of the project under sections 101 and 103 of the Water Resources Development Act of 1986 (33 U.S.C. 2211; 33 U.S.C. 2213); and

(iv) shall not exceed the actual and reasonable costs of the materials, services, or other things provided by the non-Federal interest, as determined by the Secretary.

(E) APPLICABILITY. -

(i) IN GENERAL. - This paragraph shall apply to water resources projects authorized after November 16, 1986, including projects initiated after November 16, 1986, without specific authorization in law.

(ii) LIMITATION. - In any case in which a specific provision of law provides for a non-Federal interest to receive credit toward the non-Federal share of the cost of a study for, or construction or operation and maintenance of, a water resources project, the specific provision of law shall apply instead of this paragraph.

(b) DEFINITION OF NON-FEDERAL INTEREST. - The term 'non-Federal interest' means -

(1) a legally constituted public body (including a federally recognized Indian tribe); or

(2) a nonprofit entity with the consent of the affected local government, that has full authority and capability to perform the terms of its agreement and to pay damages, if necessary, in the event of failure to perform.

(c) ENFORCEMENT; JURISDICTION. - Every agreement entered into pursuant to this section shall be enforcible in the appropriate district court of the United States.

(d) NONPERFORMANCE OF TERMS OF AGREEMENT BY NON-FEDERAL INTEREST; NOTICE; REASONABLE OPPORTUNITY FOR PERFORMANCE; PERFORMANCE BY CHIEF OF ENGINEERS. - After commencement of construction of a project, the Chief of Engineers may undertake performance of those items of cooperation necessary to the functioning of the project for its purposes, if he has first notified the non-Federal interest of its failure to perform the terms of its agreement and has given such interest a reasonable time after such notification to so perform.

(e) DELEGATION OF AUTHORITY. - Not later than June 30, 2008, the Secretary shall issue policies and guidelines for partnership agreements that delegate to the district engineers, at a minimum-

(1) the authority to approve any policy in a partnership agreement that has appeared in an agreement previously approved by the Secretary;

(2) the authority to approve any policy in a partnership agreement the specific terms of which are dictated by law or by a final feasibility study, final environmental impact statement, or other final decision document for a water resources project;

(3) the authority to approve any partnership agreement that complies with the policies and guidelines issued by the Secretary; and

(4) the authority to sign any partnership agreement for any water resources project unless, within 30 days of the date of authorization of the project, the Secretary notifies the district engineer in which the project will be carried out that the Secretary wishes to retain the prerogative to sign the partnership agreement for that project.

(f) REPORT TO CONGRESS. - Not later than 2 years after the date of enactment of this subsection, and every year thereafter, the Secretary shall submit to Congress a report detailing the following:

(1) The number of partnership agreements signed by district engineers and the number of partnership agreements signed by the Secretary.

(2) For any partnership agreement signed by the Secretary, an explanation of why delegation to the district engineer was not appropriate.

(g) PUBLIC AVAILABILITY. - Not later than 120 days after the date of enactment of this subsection, the Chief of Engineers shall -

(1) ensure that each district engineer has made available to the public, including on the Internet, all partnership agreements entered into under this section within the preceding 10 years and all partnership agreements for water resources projects currently being carried out in that district; and

(2) make each partnership agreement entered into after such date of enactment available to the public, including on the Internet, not later than 7 days after the date on which such agreement is entered into.

(h) EFFECTIVE DATE. - This section shall not apply to any project the construction of which was commenced before January 1, 1972, or to the assurances for future demands required by the Water Supply Act of 1958, as amended [43 U.S.C. 390b].

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
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CECW-PB

31 AUG 2009

MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: Implementation Guidance for Section 2039 of the Water Resources Development Act of 2007 (WRDA 2007) – Monitoring Ecosystem Restoration

1. Section 2039 of WRDA 2007 directs the Secretary to ensure that when conducting a feasibility study for a project (or component of a project) for ecosystem restoration that the recommended project includes a plan for monitoring the success of the ecosystem restoration. The monitoring plan shall include a description of the monitoring activities, the criteria for success, and the estimated cost and duration of the monitoring as well as specify that monitoring will continue until such time as the Secretary determines that the success criteria have been met. Within a period of ten years from completion of construction of an ecosystem restoration project, monitoring shall be a cost-shared project cost. Any additional monitoring required beyond ten years will be a non-Federal responsibility. A copy of Section 2039 is enclosed.

2. Applicability. This guidance applies to specifically authorized projects or components of projects as well as to those ecosystem restoration projects initiated under the Continuing Authority Program (CAP) or other programmatic authorities.

3. Guidance.

a. Monitoring includes the systematic collection and analysis of data that provides information useful for assessing project performance, determining whether ecological success has been achieved, or whether adaptive management may be needed to attain project benefits. Development of a monitoring plan will be initiated during the plan formulation process for ecosystem restoration projects or component of a project and should focus on key indicators of project performance.

b. The monitoring plan must be described in the decision document and must include the rationale for monitoring, including key project specific parameters to be measured and how the parameters relate to achieving the desired outcomes or making a decision about the next phase of the project, the intended use(s) of the information obtained and the nature of the monitoring including duration and/or periodicity, and the disposition of the information and analysis as well as the cost of the monitoring plan, the party responsible for carrying out the monitoring plan and a project closeout plan. Monitoring plans need not be complex but the scope and duration should include the minimum monitoring actions necessary to evaluate success. The appropriateness of a monitoring plan will be reviewed as part of the decision document review including agency technical review (ATR) and independent external peer review (IEPR), as necessary. The estimated cost of the proposed monitoring program will be included in the project cost estimate and cost-shared accordingly.

c. Upon completion of the construction of the ecosystem restoration project (or component of a project), monitoring for ecological success will be initiated. Monitoring will be continued until ecological success is determined. Once ecological success has been documented by the District Engineer in consultation with the Federal and State resources agencies, and a determination has been made by the Division Commander that ecological success has been achieved (may be less than ten years), no further monitoring will be required. Ecological success will be documented through an evaluation of the predicted outcomes as measured against the actual results. The law allows for but does not require a 10 year cost shared monitoring plan. Necessary monitoring for a period not to exceed 10 years will be considered a project cost and will be cost shared as a project construction cost and funded under Construction. Costs for monitoring beyond a 10 year period will be a non-Federal responsibility. Financial and implementation responsibilities for the monitoring plan will be identified in the Project Partnership Agreement. For CAP projects, or for those projects that may be authorized with an explicit dollar cap, any cost shared monitoring costs cannot increase the Federal cost beyond the authorized project limit of the CAP or other authority under which the project is being considered.

d. Contingency Plan (Adaptive Management). An adaptive management plan (i.e., a contingency plan) will be developed for all ecosystem restoration projects. The adaptive management plan must be appropriately scoped to the scale of the project. If the need for a specified adjustment is anticipated due to high uncertainty in achieving the desired outputs/results, the nature and cost of such actions should be explicitly described in the decision document for the project. The reasonableness and the cost of the adaptive management plan will be reviewed as part of the decision document. Costly adaptive management plans may indicate the need to reevaluate the formulation of the ecosystem restoration project. The information generated by the monitoring plan will be used by the District in consultation with the Federal and State resources agencies and the MSC to guide decisions on operational or structural changes (adaptive management) that may be needed to ensure that the ecosystem restoration project meets the success criteria. The adaptive management plan cost should be shown in the 06 feature code of the cost estimate.

If the results of the monitoring program support the need for physical modifications to the project, the cost of the changes will be cost shared with the non-Federal sponsor and must be concurred in by the non-Federal sponsor. The appropriate HQUSACE RIT should be advised at such time that it is determined a modification to a project is required. Any changes to the adaptive management plan approved in the decision document must be coordinated with HQUSACE at the earliest possible opportunity. If a needed change is not part of the approved adaptive management plan and is determined by HQUSACE to be a deficiency correction the annual budget guidance to initiate a study for such corrections should be followed. Significant changes to the project required to achieve ecological success and which cannot be appropriately

addressed through operational changes or through the approved adaptive management plan may need to be examined under other authorities, such as Section 216, River and Harbor and Flood Control Act of 1970.

4. This guidance is effective immediately and will be incorporated into ER 1105-2-100 upon the next revision.

FOR THE COMMANDER:

Encl

THEODORE BROWN, P.E.
Chief, Planning and Policy Division
Directorate of Civil Works

DISTRIBUTION:
COMMANDER, GREAT LAKES AND OHIO RIVER DIVISION
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CECW-SAD
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CECW-SPD
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SEC. 2039. MONITORING ECOSYSTEM RESTORATION.

(a) In General- In conducting a feasibility study for a project (or a component of a project) for ecosystem restoration, the Secretary shall ensure that the recommended project includes, as an integral part of the project, a plan for monitoring the success of the ecosystem restoration.

(b) Monitoring Plan- The monitoring plan shall--

(1) include a description of the monitoring activities to be carried out, the criteria for ecosystem restoration success, and the estimated cost and duration of the monitoring; and

(2) specify that the monitoring shall continue until such time as the Secretary determines that the criteria for ecosystem restoration success will be met.

(c) Cost Share- For a period of 10 years from completion of construction of a project (or a component of a project) for ecosystem restoration, the Secretary shall consider the cost of carrying out the monitoring as a project cost. If the monitoring plan under subsection (b) requires monitoring beyond the 10-year period, the cost of monitoring shall be a non-Federal responsibility.

Appendix C

Acronyms

Acronyms

A-Team — Analysis Team

DPR — Definite Project Report

HREP — Habitat Rehabilitation and Enhancement Project

IIA — Implementation Issues Assessment

LERRD — Lands, Easements, Rights-of-way, Relocations and Dredged Material Disposal

LiDAR — Light Detection and Ranging

LTRMP — Long Term Resource Monitoring Program

MVD — Mississippi Valley Division

MOU — Memorandum of Understanding

O&M — Operation and Maintenance

PDT — Project Delivery Team

RIT — Regional Integration Team

RTC — Report to Congress

T&E — Threatened and Endangered

UMR — Upper Mississippi River

UMRR-EMP — Upper Mississippi River Restoration – Environmental Management Program

USACE — U.S. Army Corps of Engineers

USFWS — U.S. Fish and Wildlife Service

USGS — U.S. Geological Survey