

Upper Mississippi River Restoration Program Coordinating Committee Quarterly Meeting

August 11, 2021

Highlights and Action Items

Program Management

- **UMRR has obligated over \$25 million, or 75 percent, of its \$33.17 million FY 21 funds to-date.** The program is positioned well to allocate remaining funds.
- **The President's FY 22 budget was released on May 28, 2021 and includes \$33.17 million for UMRR.** The House and Senate Appropriations Committees have both acted on appropriations bills for FY 22 and concurred with the President's recommended amount for UMRR of \$33.17 million. The Corps' FY 22 budget submission to OMB occurred prior to the passage of WRDA 2020, so the Corps did not submit a package with the increased annual authorized appropriation. UMRR has capability up to the new authorized amount of \$55 million. The final FY 22 appropriation is not yet known.
- **The UMRR 10-year implementation plan was updated to reflect anticipated program activities from FY 21 to FY 31.** This chart continues to be helpful to understand where work is anticipated in the future. All outyears are subject to change based on funding and conditions on the river. In FY 22, Rock Island District is planning to begin the next of the newly identified HREP fact sheets, with Quincy Bay being the first that is getting underway in September. The next project has not yet been identified.
- **UMRR has identified 76,110 acres for restoration between FY 21-FY 31.** No projects were completed from FY 17 through FY 20 due to high water. The potential acres to be restored by FY 31 reflects completion of scheduled projects under current funding levels of \$33.17 million. Decreased funding levels would extend the end date for completing projects and increased appropriations could accelerate these restoration activities. The figure is an important communication tool for multiple audiences.
- **Three projects, totaling 5,590 acres, are anticipated to be completed by December 2021, increasing UMRR's total acres restored to approximately 111,000 acres through 59 completed projects.** These projects include Conway Lake, Pool 12 Overwintering, and Ted Shanks. Another four projects are anticipated to be completed in 2022 that will collectively add 9,810 acres to UMRR's total restored or improved habitat.
- **On August 6, 2021, the UMRR Coordinating Committee met to review the draft survey being developed for distribution to the UMRR partnership at-large regarding the 2015-2025 Strategic and Operational Plan.** The purpose of the survey is to seek input regarding progress achieved since 2015, priorities for the next five years, and the issue areas to include in the 2022 Report to Congress. The meeting included an overview of the strategic plan review crosswalk, which aligns the Objectives, Strategies, Needs, and Actions as outlined in the Strategic and Operational Plan with results of the Coordinating Committee's survey responses and priority actions identified at the May 2020 Strategic Plan review meeting. **The UMRR Coordinating Committee will be asked to confirm staff within their respective agency to receive the survey. The survey is anticipated to be distributed in September 2021.**

- **The kickoff meeting for the UMRR 2022 Report to Congress was held on July 19, 2021.** Plumley identified the lead authors and collaborators for each section of the report and overviewed the roles and responsibilities for lead authors, contributors, and Corps staff who will help develop the report. **Jill Bathke will be the gatekeeper of the document and is responsible for version control. Chapter templates were created and provided to authors to establish consistent text, figure, and table formatting across chapters. Authors were asked to provide additional details regarding chapter content by August 16 and the first update meeting with authors and collaborators is anticipated for mid-to-late-August. Rough drafts of report sections are to be completed by the end of September 2021. Chapters will be assembled into a draft report document and shared with partners for review from December 2020 to January 2021. Partner comments will be consolidated into one document and shared to ensure transparency in report development. The first in-progress review (IPR) with MVD and USACE HQ is anticipated for January 2022. This will provide an opportunity to engage with headquarters reviewers early in the process and allow adequate time to make any necessary modifications.**
- On August 5, 2021, an email was sent to UMRR Coordinating Committee members regarding suggested technical corrections to the version of the UMRR Joint Charter that was endorsed by the Coordinating Committee at its May 26, 2021 quarterly meeting. None of these changes represent adjustments to the roles and responsibilities of any of the groups identified in the Charter, but are related to legal clarity or some minor editorial changes. **The Coordinating Committee approved the technical changes to the Charter that will be routed for electronic signatures.**

Communications

- **The UMRR communications and outreach team finalized the draft program flyer.** The flyer is geared toward a general audience with limited knowledge of UMRR and will highlight the value of the UMRS and benefits of UMRR in the context of water, wildlife, and way of life. **After discussion, state representatives were asked to confirm by August 25 whether state seals or state department logos should be used in the flyer and future communication materials. The team also discussed developing a video series to recognize and celebrate UMRR's 35th anniversary. The themes of the first four videos are:**
 1. What is UMRR: History and Partnership
 2. Success of UMRR
 3. Science on the river
 4. Future of UMRR

Suggestions for potential interviewees for the various videos should be sent to Jill Bathke. The Communications and Outreach Team may help support the strategic rollout of the third UMRR Status and Trends Report in the coming months.

UMRR Showcase Presentations

- Molly Van Appledorn and Lucie Sawyer are planning a series of meetings to engage the partnership in discussions about modeling potential future hydrology of the UMRS. **The desired outcome from these meetings is for a detailed description of an ideal quantitative future hydrology dataset.** Three virtual meetings are planned for this fall to identify UMRR priorities for understanding climate change hydrology, potential datasets and approaches to addressing UMRR priorities as well as ideal outcomes of modeling effort, and to develop a proposal for a quantitative modeling effort. **The first two meetings will each consist of two half-day sessions and be held on September 21 and 23 and November 1 and 2.** The third meeting date has not been

determined. Participants will include members of the UMRR partnership such as A-Team members, HREP experts, LTRM scientists, UMRR technical experts, and possibly experts from the Corps' Climate Preparedness and Resiliency Community of Practice. **Workshop participants will be asked to engage with their colleagues prior to the meeting on the following questions:**

- **How would a future hydrology dataset help your agency carry out UMRR mission?**
- **Are there certain hydrologic criteria you use in your decision making or research?**
- **At what spatial and temporal scales do you use (or would like to use) hydrologic data?**

This work builds on Van Appledorn and Sawyer's efforts to determine best practices for serving historic and contemporary daily water surface elevations from USACE gaging locations for use by the UMRR partnership in support of LTMR monitoring and HREP planning.

- Kayleigh Thomas summarized progress on modernizing public facing HREP materials through the development of story maps. Old static and traditional maps were time consuming to produce and update and could quickly become out of date. The story maps can utilize data from existing authoritative datasets, are easily updated, and can be shared publicly or embedded into USACE webpages. GIS team members at the three USACE districts are working with Project Managers and Engineers to distill data from authoritative project documents such as fact sheets, feasibility reports, as built drawings, operation and maintenance manuals, and performance evaluation reports to include in the story maps. A uniform template was developed for use across all districts to keep the look and content consistent. HREP story maps include a landing page, general information about the HREP as well as the project objectives and restoration features.

The GIS team has completed 36 story maps and have 66 remaining, with many in progress. The new online interface also makes it easier to find an HREP:

<https://www.mvr.usace.army.mil/Missions/Environmental-Stewardship/Upper-Mississippi-River-Restoration/Habitat-Restoration/Find-an-HREP-Project/>

Habitat Restoration

- MVP's planning priorities include Reno Bottoms and Lower Pool 10. The forest succession model is being used to re-evaluate alternatives and TSP selection is anticipated in fall 2021. A draft feasibility report for Lower Pool 10 is anticipated to be released for public review in August 2021 and a final report is anticipated to be submitted to MVD in fall 2021. The district's hopes to kick off design for Lower Pool 10 in winter 2021. MVP has four projects in construction – Harpers Slough, McGregor Lake, Bass Ponds, and Conway Lake. The contractor at Harpers Slough HREP began work to repair three islands damaged from high water. Interior lake granular placement, rock work, and berm mixing are occurring at McGregor Lake and the project is fifty percent complete. Concrete stoplog structures are finished at Bass Ponds and Refuge staff were able to do their first drawdown which showed positive vegetation response. Construction may be completed one year ahead of schedule with only miscellaneous metal work and access roads remaining and a ribbon cutting ceremony is being discussed for early October. Conway Lake is nearly complete but high water is needed to access final seeding locations. The district is planning a kick off meeting for Lower Pool 4 Big Lake feasibility work in fall 2021 and plans to complete three performance evaluation reports by the end of FY 21.
- MVR's planning priorities include Lower Pool 13, Green Island, Pool 12 Forestry, and Quincy Bay. The Lower Pool 13 PDT has determined that two separate projects are needed to effectively address problems with different spatial scales. The Green Island PDT and sponsor met onsite on July 27, 2021. The Pool 12 Forestry PDT held a virtual open house on July 16, 2021 and public comments are due August 14, 2021. A virtual kick off meeting for Quincy Bay is scheduled for August 19, 2021. MVR's design priority is Steamboat Island Stage I and the 100 percent review is scheduled for the week of September 6, 2021. MVR has six projects in construction. Pool 12 Overwintering

Stage II is complete; the PDT is wrapping up as-builts and O&M manuals and will be sending out close-out letters in early fall. The contractor at Keithsburg Division Stage 1 has mobilized to the site after eagles left their nest and the PDT finalized the modification to add an articulated concrete mattress for Stage II. Keithsburg Division Stage II proposals are due August 24, 2021. Huron Island Stage III aquatic vegetation planting was completed July 20-21 and ERDC will evaluate the plants in September 2021. The contractor at Beaver Island is working on shaping placement sites. A panel display monitor was replaced at Rice Lake on July 28, 2021. MVR is addressing sponsor comments on three fact sheets prior to submitting to MVD.

- MVS's planning priorities include West Alton Islands and Yorkinut Slough. Feasibility planning continues for West Alton Islands with two potential sponsors MDC and USFWS. Yorkinut Slough has complex hydrologic issues for the PDT to consider and hydraulic modeling is in progress. MVS's design priorities include Piasa & Eagles Nest, Crains Island, and Oakwood Bottoms. Plans and specs for Piasa & Eagles Nest Phase II and Crains Island Phase II are both anticipated to be completed in fall 2021. Oakwood Bottoms received assistance from Memphis and Savanna Districts regarding well pump testing and the project is anticipated to be ready for advertising in the first half of FY 22. Earth work and pile removal is ongoing at Crains Island. Construction on a rock structure at Piasa & Eagles Nest is anticipated to begin in August 2021. The pump station and berm setback are underway at Clarence Cannon. Reforestation work was completed at Ted Shanks and the invoice is being prepared to close the project out. The Sterling Island fact sheet was sent to MVD for approval and the district is awaiting comments from MVD on the Open River fact sheet. The last recommended fact sheet is being coordinated with IDNR/TNC as sponsors and will be sent to MVD for approval later this year.

Long Term Resource Monitoring and Science

- Accomplishments of the third quarter of FY 21 include publication of the manuscript "Floodplain forest structure and the recent decline of *Carya illinoensis* (Wangenh.) K. Koch (northern pecan) at its northern latitudinal range margin, Upper Mississippi River System, USA" in the journal Forest Ecology and Management. Researchers used dendrochronology to characterize the floodplain forest composition, structure and dynamics and examined annual- to decadal-scale growth responses of northern pecan trees to disturbance events. Observed decline in northern pecan may be due to altered flooding regimes, drought frequency, masting phenology, fire suppression, and warming temperatures. Persistence of pecan trees in much of the UMR floodplain will require direct forest restoration actions.
- **The Status and Trends Report 3rd Edition is being reviewed by USGS' Science Publishing Network (SPN) to produce a final version of the report by mid-November 2021. A small group is planning for a strategic rollout for the UMRR Status and Trends Report.**
- Eighteen UMRR "science in support of restoration" funded projects are in-progress.
- LTRM staff will assist in developing chapters for the UMRR 2022 Report to Congress.
- Planning for the 2022 LTRM Science Meeting is anticipated to begin in the next few weeks.
- UMRR's LTRM FY 22 budget allocation will follow FY 21 allocations if the program receives \$33.17 million in funding. That is, \$6.3 million (\$5.0 million for base monitoring and \$1.3 million for analysis under base) with an additional \$2.5 million available for Science in Support of Restoration and Management. Consistent funding at this level in recent years has contributed to the advancement of many science priorities.

- The *ad hoc* LTRM Implementation Planning Team met on July 15, 2021 to select a facilitator(s) from four identified potential facilitators and to review a draft LTRM implementation planning guidance document. **The group identified Max Post van der Burg and Dave Smith from USGS as the best fit for the needs identified in the implementation guidance document and the materials provided by the potential facilitators.** The draft guidance document outlines the purpose, desired outcomes, and initial process guidelines for discussion with the facilitators. The purpose of LTRM implementation planning is to identify and prioritize specific information needs not currently being met for the UMRS and specific actions to take to address those needs if additional funds are appropriated for UMRR LTRM. **The next steps in the process will be to incorporate any feedback from the Coordinating Committee into a revised draft guidance document and discuss with the facilitators an appropriate sequence of meetings, timeline, and list of participants for implementation planning.**
- The A-Team met via webinar on July 20, 2021. Topics discussed include UMRR updates, recent LTRM science publications, Molly Van Appledorn’s future hydrology meeting series, macroinvertebrate sampling and research needs, vegetation community analysis by Kristen Bouska, continued impacts of COVID-19 on agency policies and potential impacts to the 2021 field/work season, and an introduction to staff at the Great River Field Station. **The A-Team’s next meeting is anticipated to be scheduled for early November 2021.**

Navigation and Ecosystem Sustainability Program (NESP) Update

- **An update regarding NESP is anticipated at future UMRR Coordinating Committee meetings until such a time that a formal NESP coordinating body is established.** The focus for NESP during FY 21 has been to advance projects to construction readiness. Navigation and ecosystem projects that will be construction ready for FY 22 include:

Navigation (Total \$12.5M)

- Lock 25 Lockwall Modifications
- Lock 14 Mooring Cell
- Moore’s Towhead Systemic Mitigation

Ecosystem (Total \$10M)

- Pool 2 Wingdam Notching
- Twin Islands Island Protection
- Alton Pool Side Channel and Island Protection
- Starved Rock Habitat Restoration and Enhancement

- The District-based River Teams were asked to identify additional ecosystem projects for implementation under NESP by July 30, 2021. Twenty-nine projects across three districts have been identified as priority projects. **Ten to twelve projects will be selected for fact sheet development and be sent to MVD for approval. River teams identified some larger, multi-pool efforts that would fit well under NESP such as systemic shoreline protection or forest restoration.**
- **Fish Passage at Lock and Dam 22 underwent public review and approval of that report is anticipated by the end of the calendar year 2021.**

Other Business

Upcoming quarterly meetings are as follows:

- **November 2021 – TBD**

- UMRBA quarterly meeting – November 16
- **UMRR Coordinating Committee quarterly meeting – November 17**
- **February 2022 – TBD**
 - UMRBA quarterly meeting – February 22
 - **UMRR Coordinating Committee quarterly meeting – February 23**
- **May 2022 – TBD**
 - UMRBA quarterly meeting – May 24
 - **UMRR Coordinating Committee quarterly meeting – May 25**

UMRR COORDINATING COMMITTEE - REGIONAL MANAGEMENT AND PARTNERSHIP COLLABORATION

Marshall Plumley
Regional Program Manager
St. Paul District
Rock Island District
St. Louis District

11 August 2021

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US Army Corps of Engineers

REGIONAL MANAGEMENT AND PARTNERSHIP COLLABORATION

- FY 2021 Fiscal Update and FY 22 Outlook
- 2015-2025 Strategic and Operation Plan Review
- 2022 Report to Congress
- UMRR Joint Charter Review

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USGS science for a changing world

US Army Corps of Engineers

USDA

UMRR Ecosystem Health

Partnership Engage Collaborate

Resilient Vision

PUBLIC UMRBA NGOs

FINANCIAL REPORTING

UMRR Quarterly Budget Report: St. Paul District
FY2021 Q3 Report Date: Wed Jul 21 2021

Habitat Projects

Project Name	Cost Estimates			FY2021 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Basin Ponds, Marsh, and Wetland	\$4,300,000	\$6,300,000	\$10,600,000	-	\$300,000	\$300,000	\$735,337
Conroy Lake	\$7,413,000	\$7,413,000	\$14,826,000	\$39,645	\$300,000	\$339,645	\$179,879
Morgans Slough	\$1,847,000	\$1,847,000	\$3,694,000	-	-	-	\$2,365,187
Lower Pool 10 Island and Backwater Complex	\$17,000,000	\$17,000,000	\$34,000,000	\$12,700	\$350,000	\$362,700	\$256,906
Madigan Lake	\$23,550,000	\$23,550,000	\$47,100,000	\$5,875,000	\$5,875,000	\$11,750,000	\$961,233
Reno Bottoms	\$10,000,000	\$10,000,000	\$20,000,000	\$105,337	\$450,000	\$555,337	\$111,279
Total	\$77,938,000	\$77,938,000	\$155,876,000	\$187,482	\$1,775,000	\$1,962,482	\$4,904,813

Habitat Rehabilitation

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	\$507,734	\$507,734
Total	-	-	\$507,734	\$507,734

Regional Program Administration

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
Habitat Eval/Monitoring	-	-	\$229,137	\$229,137
Total	-	-	\$229,137	\$229,137

	Carry In	Allocation	Funds Available	Actual Obligations
St. Paul Total	\$157,683	\$7,275,000	\$7,432,683	\$5,541,702

FINANCIAL REPORTING

UMRR Quarterly Budget Report: Rock Island District
FY2021 Q3 Report Date: Wed Jul 21 2021

Habitat Projects

Project Name	Cost Estimates			FY2021 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Basin Ponds, Marsh, and Wetland	\$4,300,000	\$6,300,000	\$10,600,000	-	\$300,000	\$300,000	\$735,337
Conroy Lake	\$7,413,000	\$7,413,000	\$14,826,000	\$39,645	\$300,000	\$339,645	\$179,879
Morgans Slough	\$1,847,000	\$1,847,000	\$3,694,000	-	-	-	\$2,365,187
Lower Pool 10 Island and Backwater Complex	\$17,000,000	\$17,000,000	\$34,000,000	\$12,700	\$350,000	\$362,700	\$256,906
Madigan Lake	\$23,550,000	\$23,550,000	\$47,100,000	\$5,875,000	\$5,875,000	\$11,750,000	\$961,233
Reno Bottoms	\$10,000,000	\$10,000,000	\$20,000,000	\$105,337	\$450,000	\$555,337	\$111,279
Total	\$77,938,000	\$77,938,000	\$155,876,000	\$187,482	\$1,775,000	\$1,962,482	\$4,904,813

Habitat Rehabilitation

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	\$507,734	\$507,734
Total	-	-	\$507,734	\$507,734

Regional Program Administration

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
Habitat Eval/Monitoring	-	-	\$229,137	\$229,137
Total	-	-	\$229,137	\$229,137

	Carry In	Allocation	Funds Available	Actual Obligations
Rock Island Total	\$157,683	\$7,275,000	\$7,432,683	\$5,541,702

FINANCIAL REPORTING

UMRR Quarterly Budget Report: St. Louis District
FY2021 Q3 Report Date: Wed Jul 21 2021

Habitat Projects

Project Name	Cost Estimates			FY2021 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Basin Ponds, Marsh, and Wetland	\$4,300,000	\$6,300,000	\$10,600,000	-	\$300,000	\$300,000	\$735,337
Conroy Lake	\$7,413,000	\$7,413,000	\$14,826,000	\$39,645	\$300,000	\$339,645	\$179,879
Morgans Slough	\$1,847,000	\$1,847,000	\$3,694,000	-	-	-	\$2,365,187
Lower Pool 10 Island and Backwater Complex	\$17,000,000	\$17,000,000	\$34,000,000	\$12,700	\$350,000	\$362,700	\$256,906
Madigan Lake	\$23,550,000	\$23,550,000	\$47,100,000	\$5,875,000	\$5,875,000	\$11,750,000	\$961,233
Reno Bottoms	\$10,000,000	\$10,000,000	\$20,000,000	\$105,337	\$450,000	\$555,337	\$111,279
Total	\$77,938,000	\$77,938,000	\$155,876,000	\$187,482	\$1,775,000	\$1,962,482	\$4,904,813

Habitat Rehabilitation

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	\$507,734	\$507,734
Total	-	-	\$507,734	\$507,734

Regional Program Administration

Subcategory	FY2021 Financials			
	Carry In	Allocation	Funds Available	Obligations
Habitat Eval/Monitoring	-	-	\$229,137	\$229,137
Total	-	-	\$229,137	\$229,137

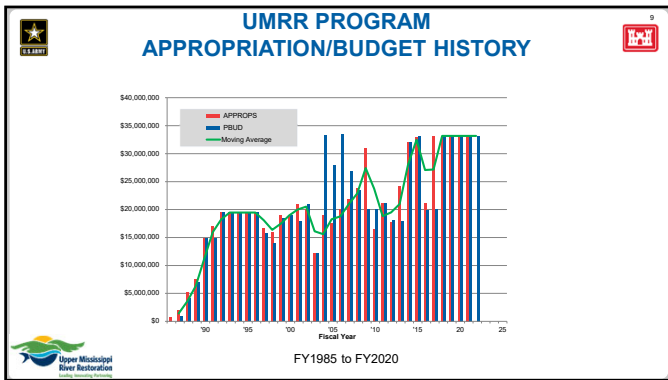
	Carry In	Allocation	Funds Available	Actual Obligations
St. Louis Total	\$157,683	\$7,275,000	\$7,432,683	\$5,541,702

FY21 PLAN OF WORK

	Budget	Obligations 3rd Qrt.
TOTAL FY21 Program	\$33,170,000	\$22,837,324
Regional Administration and Program Efforts	\$ 1,250,000	\$872,056
Regional Management	\$ 1,000,000	
Program Database	\$ 100,000	
Program Support Contract (UMRBA)	\$ 100,000	
Public Outreach	\$ 50,000	
Regional Science and Monitoring	\$10,400,000	\$ 9,241,355
LTRM (Base Monitoring)	\$ 5,000,000	
UMRR Regional Science In Support Rehabilitation/Mgmt. (MIPR's, Contracts, and Labor)	\$ 3,800,000	
UMRR Regional (Integration, Adapt. Mgmt.)	\$ 200,000	
Habitat Evaluation (split between MVS,MVR,MVP)	\$ 1,125,000	
Report to Congress	\$ 275,000	
District Habitat Rehabilitation Efforts (Planning and Construction)	\$21,520,000	\$ 12,723,913
Rock Island District	\$ 7,020,000	
St. Louis District	\$ 7,125,000	
St. Paul District	\$ 7,275,000	
Model Cert.	\$ 100,000	68.9%

FY21 PLAN OF WORK

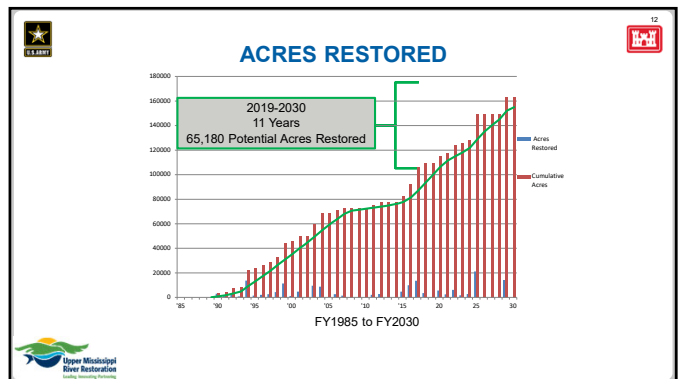
week	Budget	As of 30 July
TOTAL FY21 Program	\$33,170,000	\$25,063,695
Regional Administration and Program Efforts	\$ 1,250,000	\$ 950,041
Regional Management	\$ 1,000,000	
Program Database	\$ 100,000	
Program Support Contract (UMRBA)	\$ 100,000	
Public Outreach	\$ 50,000	
Regional Science and Monitoring	\$10,400,000	\$ 9,359,511
LTRM (Base Monitoring)	\$ 5,000,000	
UMRR Regional Science In Support Rehabilitation/Mgmt. (MIPR's, Contracts, and Labor)	\$ 3,800,000	
UMRR Regional (Integration, Adapt. Mgmt.)	\$ 200,000	
Habitat Evaluation (split between MVS,MVR,MVP)	\$ 1,125,000	
Report to Congress	\$ 275,000	
District Habitat Rehabilitation Efforts (Planning and Construction)	\$21,520,000	\$ 14,754,143
Rock Island District	\$ 7,020,000	
St. Louis District	\$ 7,125,000	
St. Paul District	\$ 7,275,000	75.6%
Model Cert.	\$ 100,000	

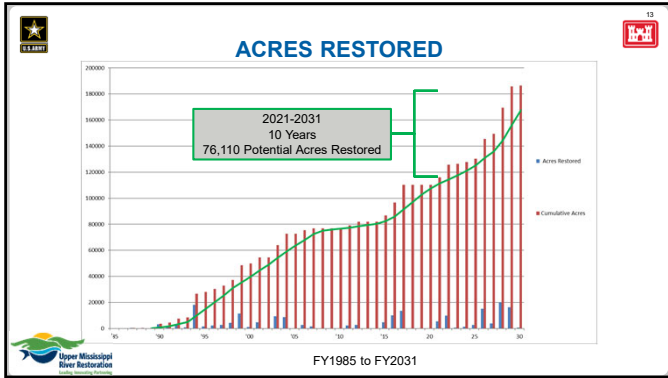


FY 22 APPROPRIATIONS

President's Budget	33,170,000
House	33,170,000
Senate	33,170,000
FINAL APPROPRIATION	?

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
District Rehabilitation and Enhancement Efforts	October 2018 - September 2019	October 2019 - September 2020	October 2020 - September 2021	October 2021 - September 2022	October 2022 - September 2023	October 2023 - September 2024	October 2024 - September 2025	October 2025 - September 2026	October 2026 - September 2027	October 2027 - September 2028	October 2028 - September 2029	October 2029 - September 2030	October 2030 - September 2031	October 2031 - September 2032
Rock Island District														
St. Louis District														
St. Paul District														
Model Cert.														
Regional Science and Monitoring														
LTRM (Base Monitoring)														
UMRR Regional Science In Support Rehabilitation/Mgmt. (MIPR's, Contracts, and Labor)														
UMRR Regional (Integration, Adapt. Mgmt.)														
Habitat Evaluation (split between MVS,MVR,MVP)														
Report to Congress														
District Habitat Rehabilitation Efforts (Planning and Construction)														
Rock Island District														
St. Louis District														
St. Paul District														
Model Cert.														
Regional Program Efforts														
Regional Management														
Program Database														
Program Support Contract (UMRBA)														
Public Outreach														





UMRR HREP POTENTIAL CONSTRUCTION COMPLETIONS

	2021		2022
Conway Lake (MVP)	1,170	Bass Ponds (MVP)	2,090
Pool12 Overwintering (MVR)	1,280	Harpers Slough (MVP)	1,680
Ted Shanks (MVS)	3,140	Beaver Island (MVR)	3,510
		Huron Island (MVR)	2,530
Total Acres	5,590	Total Acres	9,810

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- ### 2015 - 2025 STRATEGIC AND OPERATIONAL PLAN REVIEW
- Partnership Survey
 - Draft partnership survey distributed to ad hoc review team 22 July
 - Survey organized by the Strategic Plan's four goals.
 - Items related to the specific success criteria for that goal outlined in the strategic plan. Note: Success criteria that referenced multiple actions or metrics were parsed into multiple questions.
 - Potential actions to support the respective goal raised during the May 6-7, 2020 meeting and preceding survey completed by the Coordinating Committee and other program leaders.
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- ### 2015 - 2025 STRATEGIC AND OPERATIONAL PLAN REVIEW
- Strategic Plan Review Crosswalk
 - Read ahead (B-5 to B-10)
 - The crosswalk aligns the Objectives, Strategies, Needs, and Actions outlined in the Strategic and Operational Plan with results of the pre-meeting survey and priority actions that were identified at the May 2020 review meeting.
 - This information was used to inform items to include in the broad partnership survey that will also identify needs and actions to prioritize over the remainder of the planning horizon (2021-2025).
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- ### 2015 - 2025 STRATEGIC AND OPERATIONAL PLAN REVIEW
- Ad hoc Review Team meeting 6 August
 - Discussion
 - Demographics: additional choices, more specificity related to geographic areas, participation in various program initiatives.
 - Habitat restoration as a driver for research and inquiry, clarity between habitat models for projects and those for systemic application, additional open-ended question for information on agreed/disagree items as well as conceptual models, movement of certain questions to more appropriate sections.
 - Distribution list.
 - Next Steps: Provide revision and finalize distribution. September timeframe for survey.
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2022 REPORT TO CONGRESS

- Completed**
 - Habitat Needs Assessment II
 - Statements of Significance
- In Progress**
 - Strategic Plan Review (2021)
 - Status and Trends Report (2021)
- Future efforts**
 - Desired Future Condition (2021)
 - Recommendations (early 2022)
- Ongoing**
 - HREPs (early 2022)
 - LTRM (early 2022)

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PURPOSE

- Tell a concise and compelling story to Congress and the public that expresses the value of the UMR ecosystem.
- Explain how UMRR has improved understanding of system dynamics and enhanced habitat and ecological conditions through targeted, science-based restoration.
- Outline how UMRR is uniquely positioned to protect and improve the river's ecological integrity given known and unknown degrading influences.
- Showcase successes and accomplishments through vibrant examples and case studies.

ROLES AND RESPONSIBILITIES




UMRR 2022 Report to Congress		
Report Outline Section	Lead Author(s)	Collaboration
Forward	Marshall Plumley, Jill Bathke	UMRBA
Executive Summary	Marshall Plumley, Jill Bathke	UMRBA
History and Background	Marshall Plumley, Jill Bathke	UMRBA, UMRB Partners
A. Origins and Authorization		
B. Evolution of the Program's Maturity		Angela Deen, Julie Millhollin, Brian Markert, Karen Hagerly, Jennie Sauer, Jeff Houser
C. Robust and Stable Funding	Marshall Plumley, Jill Bathke	UMRBA
Chapter 1. Strategic Partnership and Vision	Marshall Plumley, Jill Bathke	UMRBA
A. Strong, Integrated Partnership	UMRBA	Marshall Plumley, Jill Bathke, UMRB Partners
B. Strategic Implementation	Marshall Plumley, Jill Bathke, UMRBA	Karen Hagerly, Kat McCain, Sara Schmeucker & Nate Delager
C. Bridge Building Initiatives	Marshall Plumley, Jill Bathke, Jeff Houser	
D. Engaging and Collaborating with Others Within the Watershed & Beyond	UMRBA	Marshall Plumley, Jeff Houser, Jennie Sauer
E. Future Strategic Direction	Marshall Plumley, Jill Bathke	UMRBA, Jeff Houser
Chapter 2. Enhancing Habitat	Marshall Plumley	MVP, MVR, MVS, USGS, USFWS, States
A. Addressing Key Ecological Needs		
B. Applying Adaptive Management Principles to Address Risk and Uncertainty		
Chapter 3. Advancing Knowledge	Jeff Houser	Karen Hagerly, Jennie Sauer, Field Stations
A. Assessing and Detecting Changes in UMR Ecosystems		
B. Providing Critical Insights and Understanding to Improve Restoration		
Chapter 4. Implementation Issues	Marshall Plumley, Jill Bathke	UMRBA, UMRB Partners, District HREP Managers
Chapter 5. Conclusions and Recommendations	Marshall Plumley, Jill Bathke, Brian Chavalla	UMRBA

ROLES AND RESPONSIBILITIES

Lead Authors




- Responsible for the coordination and development of content for assigned chapters and sections of the RTC
- Scheduling and hosting small group discussions with collaborators as needed
- Maintaining working drafts of assigned chapters/sections
- Participate in future check in meetings (approx. monthly)
- Provide completed chapter/section drafts, per the schedule and using the templates provided to Jill Bathke, Emily Chavolla, Mary Rodkey, & Marshall Plumley

ROLES AND RESPONSIBILITIES

Contributors

- Responsible for providing content for assigned chapters and sections of the RTC
- Participate in small group discussions with lead authors as needed
- Participate in future check in meetings (approx. monthly)

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- (309) 794-5499




Emily Chavolla – Visual Design

- Emily.M.Chavolla@usace.army.mil
- (651) 290-5681


2022 UMRR Report to Congress

Start Date	Finish Date	Activity
	Nov 2018	HMA #1 Complete
	3 Jun 2020	RTC Planning Mtg #1
	29 Sep 2020	RTC Planning Mtg #2
	3 Nov 2020	RTC Scoping Team Mtg #1
	15 Dec 2020	RTC Scoping Team Mtg #2
	16 Feb 2021	RTC Scoping Team Mtg #3
	14 April	RTC Scoping Team Mtg #4
Nov 2020	Feb 2021	Report Outline Complete
	April 2021	Statements of Significance Complete
	Fall 2021	Status & Trends Complete
	Dec 2021	Desired Future Conditions Complete
	Aug 2020	2015-2022 Strategic Plan Review Complete
Mar 2021	Sep 2021	Draft #1 RTC Sections
Sep 2021	Nov 2021	Draft #2 RTC
Dec 2021	Jan 2022	RTC Editing/UMRR Partner Review #1
Jan 2022	Jan 2022	In Progress Review (PR) #1 w/ USACE vertical team
Mar 2022	Feb 2022	Draft #3 RTC Complete
	Apr 2022	UMRR Partner Review #2
	Apr 2022	Letters of Support
May 2022	Jun 2022	Mississippi Valley Division Review
June 2022	Jun 2022	In Progress Review (PR) #2 w/ USACE vertical team
Jun 2022	Jul 2022	HQ/ASA(CW) Draft Report Review
	Aug 2022	Final Draft RTC Complete
Aug 2022	Sep 2022	Mississippi Valley Division Review
Oct 2022	Nov 2022	HQ/ASA (CW) Final Review & Approval
Nov 20 2022	Nov 30 2022	Final delivery of RTC



DOCUMENTS

- Chapter Templates
- Writing Guidelines and Literature Cited
- Report Progress Tracking



2022 REPORT TO CONGRESS

- August 23 Report Writing Team Meeting
- September 30 1st Draft Sections





2021 UMRR JOINT CHARTER SIGNING

- Technical Corrections

Introduction

The Upper Mississippi River Restoration (UMRR) program is authorized under the [Upper Mississippi River Management Act of 1986](#), Section 1103 of the [Water Resources Development Act* of 1986](#) (33 U.S.C. 652), and as amended in [WRDA 1990](#) (P.L. 101-640 §409), 1992 (P.L. 102-580, §107), 1999 (P.L. 106-53 §509 and the [Water Resources Development Technical Corrections of 1999](#), P.L. 106-109, §2), 2007 (P.L. 110-114, §3177), and 2020 (P.L. 116-260, §307), to ensure the coordinated development and enhancement of the Upper Mississippi River system. Congress recognized the system as a nationally significant ecosystem and a nationally significant commercial navigation system that provides a diversity of opportunities and experiences and should be administered and regulated in recognition of its several purposes. The program was established for the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement and 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.




2021 UMRR JOINT CHARTER SIGNING

- Technical Corrections

Authority

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

*[Note: The program was named the Environmental Management Program in [Section 1103\(c\) of WRDA 1986](#) ~~the authorization~~. In 2006, the Office of Management and Budget and Congress began referring to the program as UMRR in its budgeting and appropriations documents.]



2021 UMRR JOINT CHARTER SIGNING


- Technical Corrections

Upper Mississippi River Restoration Coordinating Committee

Purpose:
The Upper Mississippi River Restoration Coordinating Committee (UMRR CC) is the over-arching body for coordinating issues related to all aspects of the Upper Mississippi River Restoration program (UMRR) and was established to ensure the congressionally directed consultation with state and federal partners. In this role, the UMRR CC provides the U.S. Army Corps of Engineers (Corps) with the partner agencies' perspectives on UMRR policy, budget, and implementation.

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

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



2021 UMRR JOINT CHARTER SIGNING


- Technical Corrections

TO: [\[Name of Nonprofit or Community/County\]](#)

FROM: [\[River Team Chair/Co-Chair\]](#)

We understand that your organization may be interested and eligible to serve as a cost-share sponsor of an Upper Mississippi River Restoration (UMRR*) Habitat Rehabilitation and Enhancement Project (HREP) on lands that it owns. On behalf of the UMRR Partnership, we are pleased to extend an invitation to you to provide your organization's proposal for sponsoring habitat restoration projects on lands it [owns/manages](#).

Additionally, UMRR is implemented through the U.S. Army Corps of Engineers and, therefore, the program's non-federal project sponsors are subject to the agency's [cost-share partnership](#) policies [including cost sharing](#). Enclosed are the relevant policies for your reference.




2021 UMRR JOINT CHARTER SIGNING

- Technical Corrections


Noller Herbert Verlon Barnes, UMRR-CC Representative Matt Vitello, UMRR CC Representative
 Acting Regional Conservationist – Central Region Missouri Department of Conservation
 U.S. Department of Agriculture

Cheryl Newton Ken Westlake, UMRR-CC Representative James Fischer, UMRR CC Representative
 Acting Regional Administrator – Region 5 Wisconsin Department of Natural Resources
 U.S. Environmental Protection Agency



2021 UMRR JOINT CHARTER SIGNING

- Discussion
- Motion to approve technical corrections
- Routing for signatures



DISCUSSION




UMRR COMMUNICATION AND OUTREACH TEAM Update




Rachel Perrine, USACE-RPEDN-PD-F @ MVR






Communication and Outreach Team Goal

Develop, organize, and implement clear and updated communication materials to support the success of the UMRR program

Communication and Outreach Team Progress

- February-May 2021:** Refined and completed updated Program Flyer
- April 2021-present:** Discussions and planning for UMRR 35th Anniversary





For over 35 years, the Upper Mississippi River Restoration program partnership has implemented innovative and sustainable restoration, research, and monitoring techniques for a healthier Upper Mississippi River System.







Program Flyer

USACE-printed copies and/or digital version

Coordinate within your agency to determine type and number of flyers send orders* and POC for order to Jill.C.Bathe@usace.army.mil and Rachel.E.Perrine@usace.army.mil

*print-ready file also available!

UMRR 35th Anniversary Communications

Key Message: UMRR Program has 35 years of success
Audience: Agency/Organization Leadership & Lawmakers

- 1. Program Flyer**
Request copies or print your own
Pull down banner complete late 2021 → Question about logos (recognizable) vs. state seals (signatories)
- 2. Video Series**
Clear & concise, ≤ 3 mins
First Video Themes
1. What is UMRR? History & Partnership
2. Success of UMRR
3. Science on the River
4. Future of UMRR
- 3. Simple Talking Points**
Expand on flyer, keeping messages short, concise, & ecosystem-services based







Next Steps



7

FUTURE GOALS

- Support to UMRR CC for Status & Trends Report
- Finalize Communication & Outreach Materials Inventory
- Communication & Outreach Material Needs
- HREP/ LTRM Signage
- Revisit Communication & Outreach Plan
- Refine Lower Illinois River Pilot Project



UMRR Communication and Outreach Team




8

Points of Contact:

Jill Bathke
USACE-RPEDN-PD-F @ MVP
Jill.C.Bathke@usace.army.mil


Rachel Perrine
USACE-RPEDN-PD-F @ MVR
Rachel.E.Perrine@usace.army.mil






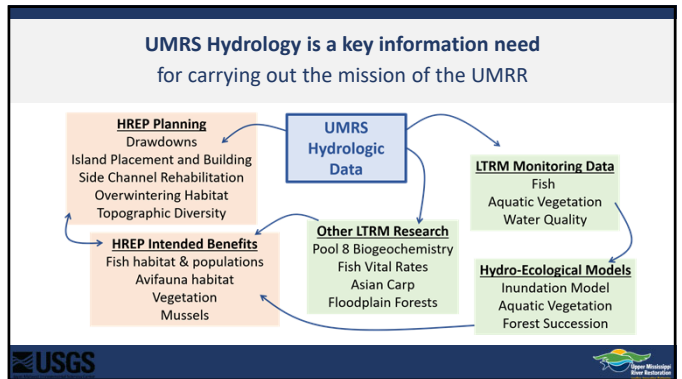
UMRS Future Hydrology Meeting Series

Blueprinting a climate changed hydrologic modeling effort for the UMRR



Lucie Sawyer (USACE MVR)
Molly Van Appledorn (USGS UMESC)
 Upper Mississippi River Restoration – Coordinating Committee
 Virtual Meeting, 11 August 2021

U.S. Department of the Interior
 U.S. Geological Survey

UMRS Hydrology is a key information need for carrying out the mission of the UMRR

“What is the contemporary hydrologic regime?”
“What is the relationship between X and Y based on what we observe?”



Proposal Part 1: Database

- Historic and contemporary daily water surface elevations from USACE gaging locations
- Serve data for UMRR partnership use

“What might the river look like in the future?”
“How might we expect X to respond to potential future changes in Y?”


Proposal Part 2: Meeting Series

- Scope a blueprint for modelling potential future hydrology
- Meaningfully engage UMRR partnership





UMRS Future Hydrology Meeting Series

Pis: Molly Van Appledorn (USGS UMESC) & Lucie Sawyer (USACE MVR)
 Funding source: Upper Mississippi River Restoration Program - Science in Support of Restoration
 Meeting series facilitator: Rebecca Seal-Soileau (USACE)




Event	Dates	Format	Attendees	Purpose	Outcomes
Meeting #1	Sept 21 & 23	Virtual Webinar and Discussion (2 half-day sessions)	UMRR Partnership	Identify UMRR priorities for understanding climate changed hydrology	Prioritized list of program needs




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Meeting #2	Nov. 1 & 2	Virtual Webinar and Discussion (2 half-day sessions)	UMRR Partnership and Technical experts	Identify potential datasets and approaches to addressing UMRR priorities; Identify ideal outcomes of modeling effort	Description of ideal quantitative future hydrology dataset; ID Meeting 3 participants




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Meeting #2	Nov. 1 & 2	Virtual Webinar and Discussion (2 half-day sessions)	UMRR Partnership and Technical experts	Identify potential datasets and approaches to addressing UMRR priorities; Identify ideal outcomes of modeling effort	Description of ideal quantitative future hydrology dataset; ID Meeting 3 participants
Meeting #3	FY22 - TBD	Workshop Hybrid? Virtual? (16 hours)	UMRR partnership representatives and Technical experts	Develop a proposal for a quantitative modeling effort	Proposal for a quantitative modeling effort



Participants

Goal: To balance broad participation while maintaining an effective size for engaging conversations

		Meeting #1	Meeting #2	Meeting #3 / Workshop
UMRR Partnership	HREP Experts: 1 Biologist and 1 Engineer from each USACE District	Y	Y	?
	LTRM Scientists	Y	Y	M
	UMRBA	Y	Y	?
	UMRR Technical Experts	Y	Y	M
Technical Experts	Other Technical Experts	Some	Y	M

Timeline

- **Distribute Briefing Book & Homework** – August 23 (target date)
- **Homework Due** – September 8 (target date)
- **Meeting #1** – September 21 & 23, 12-4pm CST
- **Meeting #2** – November 1 & 2, 12-4pm CST
- **Meeting #3/Workshop** – January or February '22, 16 hours
- **Proposal Complete** – circa 2022 Science Meeting?

What can I do?

If you are a participant:

- Read the Briefing Book
- Complete the homework
- Engage your colleagues
 - How would a future hydrology dataset help your agency carry out UMRR mission?
 - Are there certain hydrologic criteria you use in your decision making or research?
 - At what spatial and temporal scales do you use (or would like to use) hydrologic data?
- Come to the meetings ready to fully participate!

If you are interested :

- Help your colleagues complete the homework – we want to hear from you!
- Engage with participants before and after the meetings
- Get in touch with Lucie or Molly:
 - mvanappledorn@usgs.gov
 - lucie.m.sawyer@usace.army.mil

MODERNIZING PUBLIC FACING MAPS HABITAT REHABILITATION AND ENHANCEMENT PROJECTS

Kayleigh Thomas
Geographer
Rock Island District, USACE

US Army Corps of Engineers
Upper Mississippi River Restoration
Quality. Learning. Partnering.

REPLACING STATIC MAPS WITH MODERN WEB MAPS

Problem: Old static/traditional maps were time consuming to produce and update.

- Static maps
 - Take more time to produce
 - Become out of date quickly
 - Are not dynamic
- Interactive Web maps
 - Can utilize data from services published from our authoritative dataset
 - Data can be republished to update data
 - Opportunity to standardize look of maps across districts
 - Able to be shared publicly and embedded into USACE webpages

US Army Corps of Engineers
Upper Mississippi River Restoration
Quality. Learning. Partnering.

DATA SOURCES

- GIS team members at the three USACE districts work with Project Managers and Engineers to distill data from authoritative project documents
 - Fact Sheets
 - Feasibility Reports
 - As-builts
 - Operation & Maintenance Manuals
 - As Built Drawings (DGN/PDF)
 - Performance Evaluation Reports
- Data is stored in a database then "Published" out to ArcGIS Online

US Army Corps of Engineers
Upper Mississippi River Restoration
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DATA SOURCES

- GIS team developed template to be used for all HREP Story Maps using ESRI "Story Maps" on ArcGIS online
 - Dynamic and interactive user interface
 - Easily updatable feature services allows straight forward publishing of updated data
 - Less static maps with out-of-date data
 - Consistent look and content across all HREP projects

US Army Corps of Engineers
Upper Mississippi River Restoration
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FIND AN HREP

New way to find projects

<https://www.mvr.usace.army.mil/Missions/Environmental-Stewardship/Upper-Mississippi-River-Restoration/Habitat-Restoration/Find-an-HREP-Project/>

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FIND AN HREP

- View Lists of projects by Status
- Search for Project Name or a location/address
- Click on project for quick facts
- Zoom In/Out of map to explore areas
- Click hyperlink to go to project

<https://www.mvr.usace.army.mil/Missions/Environmental-Stewardship/Upper-Mississippi-River-Restoration/Habitat-Restoration/Find-an-HREP-Project/>

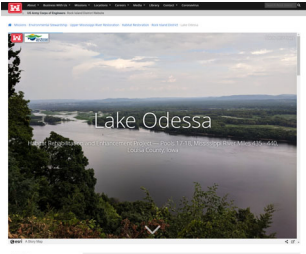
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HREP STORY MAPS

Composed of multiple elements

- Landing page
- About HREP
- Objectives
- Restoration Features

Embedded into USACE page




For more on storymaps: <https://storymaps.arcgis.com/>

ABOUT HREP

Project Partners: U.S. Fish and Wildlife Service

Project Information Overview

- The Polander Lake Habitat Restoration and Enhancement Project was created to restore natural and increase habitat diversity in Lake Polander. This is a 70-year project for the construction of levees and dikes in the area to protect the lake from the effects of drought, flooding, and wind water. After construction, increased water levels allowed wetland areas to be restored to their original state and habitat diversity was increased. This project was the first of its kind in the area and is a model for other projects.
- Levees and dikes were built in the middle of the lake to restore natural habitat and provide a refuge for wild and waterfowl. This project was the first of its kind in the area and is a model for other projects.
- Wetland vegetation was planted in the area to provide a refuge for wild and waterfowl. This project was the first of its kind in the area and is a model for other projects.
- The project was able to restore nearly 1,000 acres of habitat. This project was the first of its kind in the area and is a model for other projects.



Interactive web map

OBJECTIVES

Polander Lake Objectives

- Compiled from authoritative project documents




Scroll through for more information

RESTORATION FEATURES

- Interactive "walkthrough" of project features
- Zooms to location of features
- Geospatial data publish from one source

Scroll through project features



Interactive map allows exploration of project area

ADDITIONAL BENEFITS

- Data is published regularly as rest services to ArcGIS Online (project boundaries, restoration features) and can be used by those outside USACE in maps and other products

PROGRESS

- 36 Story Maps Completed
- 66 Remaining (many in progress)



QUESTIONS?




13

Kayleigh.A.Thomas@usace.army.mil



PROGRAM REPORTS

- Habitat Restoration
 - District Reports



ST. PAUL DISTRICT (MVP)

PLANNING

- Reno Bottoms HREP – Pool 9, MN/IA
 - Continue feasibility planning
 - Initial habitat modeling underway
- Lower Pool 10 HREP – Pool 10, IA
 - Reviews - District Quality Control
 - Release for Public Review (Aug)
 - Final Report (Fall 2021)

DESIGN


- Lower Pool 10 HREP – Pool 10, IA
 - Fall/Winter kick-off

CONSTRUCTION

- Harpers Slough HREP – Pool 9, IA
 - Contract Awarded (19 May)
 - Construction underway (July)
- McGregor Lake HREP – Pool 9, WI
 - 50% Complete
 - Granular placement, rock work, berm mixing
- Bass Ponds, Marsh & Wetland HREP – MN River
 - 74% Complete
 - Concrete stoplog structures complete
 - Remaining: Misc metals & access roads
- Conway Lake HREP – Pool 9, IA
 - 90% Complete
 - Final grading & seeding

Other Activities

- Fall 2021: Lower Pool 4, Big Lake (MN/WI)
- Performance Evaluation Reports




ST. PAUL DISTRICT PHOTOS

Construction -

Conway Lake HREP

McGregor Lake HREP

Harpers Slough HREP Repair

ROCK ISLAND DISTRICT (MVR)

PLANNING

- Lower Pool 13 – Pool 13, IA/IL
 - PDT has decided two separate projects are needed to effectively address problems with different spatial scale.
- Green Island – Pool 13, IA
 - PDT and Sponsor had a site visit on 27 Jul
- Pool 12 Forestry – Pool 12, IA/IL/WI
 - Virtual open house was post on 16 Jul comments are due 14 Aug
 - DQC review of Chapters 1-3 is scheduled for 1 Sep
 - Measures workshop is scheduled for 16 Sep
- Quincy Bay – Pool 21, IL
 - Virtual kickoff meeting with the Sponsor is scheduled for 19 Aug

DESIGN


- Steamboat Island Stage I – Pool 14, IA/IL
 - 100% review is scheduled for the week of 6 Sep

CONSTRUCTION

- Pool 12 Overwintering, Pool 12, IL
 - Stage II – Construction working on closeout
- Keithsburg Division Stage I, Pool 18, IL
 - Eagles have left the nest. Contractor is mob to site
 - Finalized the modification to add additional ACM for Stage II.
- Keithsburg Division Stage IIa, Pool 18, IL
 - Proposals are due 24 Aug
- Huron Island, Pool 18, IA
 - Stage III – Planted 400 plants on 20-21 Jul. ERDC will be back in Sep to evaluate the plants. (photos)
- Beaver Island Stage IB, Pool 14, IL
 - Contractor working on shaping placement sites
- Rice Lake, LaGrange Pool, IL
 - Contractor replaced the panel display monitor on Pump #1 on 28 Jul

FACTSHEETS

- Addressing sponsor comments (Geneva & Hershey Island, Upper Pool 13, and Multi Pool Habitat Protection)



ROCK ISLAND DISTRICT PHOTOS

Huron Island - July Plantings




ST. LOUIS DISTRICT (MVS)

PLANNING –

- West Alton Islands, MO, HREP (Pool 26)
 - Continue Feasibility Planning
- Yorkinut Slough, IL HREP (IL River)
 - Continue Feasibility Planning
 - Developing Measures

DESIGN –


- Piasa & Eagles Nest, IL HREP (Pool 26)
 - Finalize Phase II P&S 4th Qtr FY21
 - future award pending funding availability
 - Finalize Phase II P&S 4th Qtr FY21
 - future award pending funding availability
- Oakwood Bottoms, IL, HREP (Open River)
 - Continue 4 P&S packages
 - Pump Station, Well Pumps,
 - North Unit & South Unit

CONSTRUCTION –

- Crains Island, IL HREP (Open River)
 - Earthwork & Pile Removal
- Piasa & Eagles Nest, IL HREP (Pool 26)
 - Rock Structure Construction (August start) FY21
- Clarence Cannon Refuge, MO (Pool 25)
 - Pump Station
 - Exterior Berm Setback
- Ted Shanks, MO HREP (Pool 24)
 - Reforestation nearing completion
 - Warranty Work Completed May 2021
 - Closeout 4th Qtr FY21

New Fact Sheets

- Finalize MDC, FS, & INDR/TNC new fact sheets
- Sponsor Review
- Submit to MVD for Approval





ST. LOUIS DISTRICT



Clarence Cannon HREP
Berm Setback



Crains Island
HREP Earthwork



Ted Shanks HREP
Reforestation





Publication: Floodplain forest structure and the recent decline of *Carya illinoensis* (Wangenh.) K. Koch (northern pecan) at its northern latitudinal range margin, Upper Mississippi River System, USA. Forest Ecology and Management.

Daniel J. King, Grant L. Harley, Justin T. Maxwell, Karen J. Heeter, Benjamin J. Vandermyde, Robert J. Cosgriff

- Result of UMRR Science in Support of Restoration funded proposal:
 - "Using dendrochronology to understand historical forest growth, stand development, and gap dynamics."
- Forested floodplains are ecologically important
- Used dendrochronology to:
 - Characterize the floodplain forest composition, structure and dynamics
 - Examine annual- to decadal-scale growth responses of northern pecan trees to disturbance events

first year growth
rainy season
dry season
scar from forest fire

Image reproduced from Maricopa.edu.

Publication: Floodplain forest structure and the recent decline of *Carya illinoensis* (Wangenh.) K. Koch (northern pecan) at its northern latitudinal range margin, Upper Mississippi River System, USA. Forest Ecology and Management.

Daniel J. King, Grant L. Harley, Justin T. Maxwell, Karen J. Heeter, Benjamin J. Vandermyde, Robert J. Cosgriff

- Northern pecan:
 - Consistent establishment pattern 1860s – 1950s.
 - Regeneration failure over last ~50 yrs.
- Contributors to the observed decline in Northern pecan and increase in maple, hackberry and elm likely include:
 - altered flooding regimes
 - drought frequency
 - masting phenology
 - fire suppression
 - increased warming during the 20th century
- Conclude that the continued persistence of pecan trees in much of the UMR floodplain will require direct forest restoration

Graph A: Tree No. vs Diameter Class (cm) for various species. Graph B: Tree No. vs Decade of Establishment (1860-2020).

Species: Acer, Carya, Fraxinus, Morus, Ulmus, Celtis, Gynmnocladus.

$R^2 = 0.79$

Ongoing and upcoming work

- Status and Trends 3rd edition
 - Working with USGS publishing office to finalize report
 - Tentative publication date is mid-November
- 18 UMRR Science in support of restoration funded projects are in-progress
- Resilience assessment
- LTRM Implementation planning
- 2022 UMRR Report to Congress
- Planning for the 2022 Science Meeting

UMRR MONITORING AND SCIENCE UPDATE

Karen Hagerty
Rock Island District
11 August 2021

The views, opinions and findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.

UMRR MONITORING & SCIENCE FY21

2 SOWs in FY21
 SOW for LTRM base monitoring **\$5.0M**
 SOW for science in support (analysis under base) **\$1.3M**
 Both SOWs together are equivalent to a fully funded UMRR LTRM element **\$6.3M**

Additional funding for Science **\$2.5M**
TOTAL: \$8.8M

UMRR MONITORING & SCIENCE FY22

2 SOWs in FY22
 SOW for LTRM base monitoring **\$5.0M**
 SOW for science in support (analysis under base) **\$1.3M**
 Both SOWs together are equivalent to a fully funded UMRR LTRM element **\$6.3M**

Additional funding for Science **\$2.5M**
TOTAL: \$8.8M



LTRM Implementation Planning

UMRR Coordinating Committee Quarterly Meeting
August 11, 2021

Previous UMRR Coordinating Committee Discussions

- October 2020 – First indication of potential increase to UMRR authorization in House WRDA 2020 measure
 - UMRR Coordinating Committee identified need for programmatic discussion and planning should additional funds be appropriated to UMRR.
 - WRDA 2020 passed on December 9, 2020
- February 2021 - Coordinating Committee tasked a small group to develop a process for implementation planning. Issues to be discussed included:
 - Using a facilitated planning approach with neutral facilitator,
 - Identifying participants to ensure vertical representation of the program,
 - The timeline for implementation planning.
- May 2021– Small group reported on initial meeting. Next steps identified included:
 - Developing guidance document for the effort
 - Identifying potential facilitators
 - Drafting a timeline



Background

- The Water Resources Development Act of 2020 (WRDA 2020)
 - Increased authorization for both the HREP and LTRM elements of UMRR.
 - Authorization for the LTRM element increased from \$10.42M to \$15M.
- Potential opportunity to expand our understanding of the UMRS and better inform restoration and management
- To prepare, an Implementation Plan for LTRM will be developed



Purpose of LTRM Implementation Planning

- Identify and prioritize
 - Specific information needs not currently being met for the UMRS
 - Specific actions to take to address those needs if additional funds are appropriated for UMRR LTRM.



The planning process should

- Be structured to create the time and space needed to think deeply about challenging questions
- Allow decisions to be made through a fair, participatory, and transparent process
- Allow/encourage participants to step away from their usual talking points and:
 - Identify what information their agencies need to improve their management and restoration of the UMRS
 - Describe how that information will be used
- Work within existing planning frameworks (e.g., 2015-2025 UMRR Strategic and Operational Plan)
- Use facilitator(s) with skills and experience in a formal method to guide representatives from partner agencies through a structured process



Desired Outcomes

- Specific information needs not currently being met are identified and prioritized.
- Specific actions that need to be taken to meet those information needs are identified and prioritized.



Additional points to consider

- Data do not equal actionable information
 - Data collection, data analysis, communication of those results (presentations, papers, reports), and public access to the data are needed
- Discussion of which actions to take should follow the identification of priority information needs, not precede, or mix in with that discussion.



Facilitators

- Four well-qualified facilitators considered
- Selected:
 - Max Post van der Burg, USGS (Northern Prairie Wildlife Research Center, North Dakota)
 - Background in quantitative ecology and decision analysis
 - 14 years experience leading multi-agency groups through decision-making using qualitative and quantitative methods
 - Dave Smith, USGS (Leetown Science Center, West Virginia)
 - Background in applied ecology and decision analysis
 - Extensive experience coaching multi-agency groups through decision making processes
 - Select examples:
 - Using decision analysis to guide restoration efforts of Herring River Estuary
 - Developing a landscape scale, multi-species and cost-effective conservation strategy for imperiled aquatic species of the Upper Tennessee River Basin



Max Post van der Burg, USGS



Dave Smith, USGS

Next Steps

- Meet with facilitators to:
 - Review implementation guidance document (revised as needed based on UMRR CC feedback)
 - Outline the sequence of meetings needed to develop the implementation plan
 - Develop list of invited participants that provides effective representation of views of each agency within the UMRR partnership
 - Develop timeline for LTRM Implementation planning



Questions?

UMRR LTRM Implementation planning team

- Marshall Plumley (USACE)
- Karen Hagerty (USACE)
- Mark Gaiowski (USGS)
- Jennifer Sauer (USGS)
- Jeff Houser (USGS)
- Nick Schlesser (MN DNR)
- Jim Fischer (WI DNR)
- Matt Vitello (MDC)
- Kirsten Wallace (UMRBA)
- Andrew Stephenson(UMRBA)

NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

UMRR-CC Meeting
11 August 2021





NESP CONSTRUCTION READINESS

- **Navigation (Total \$12.5M)**
 - Lock 25 Lockwall Modifications
 - Lock 14 Mooring Cell
 - Moore's Towhead Systemic Mitigation
- **Ecosystem (Total \$10M)**
 - Pool 2 Wingdam Notching
 - Twin Islands Island Protection
 - Alton Pool Side Channel and Island Protection
 - Starved Rock Habitat Restoration and Enhancement

ECOSYSTEM PROJECT SELECTION PROCESS

- **Strategy developed in May 2021:**
 1. NESP ecosystem leads develop a reference document for potential projects based on NESP's priorities.
 2. Existing river teams each develop a list.
 3. Each river team provides concurrence for the list and an approval memo to the NESP Program Manager (30 July).
 4. The project lists are narrowed down to 10-12 total based on NESP's highest priorities.
 5. The 10-12 projects have fact sheets developed and approved by 1 October.

RIVER TEAM RECOMMENDATIONS

Project Type	#of Projects
Side Channel Restoration	6
Multi-Pool Projects (Forestry, water level management, shoreline protection)	6
Island Construction	5
Backwater Restoration	5
Floodplain Restoration	3
Island and Shoreline Protection	2
Habitat Improvement	1
Dike Alterations	1
Total	29

QUESTIONS?