Upper Mississippi River Restoration

Upper Mississippi River Restoration Program Coordinating Committee Quarterly Meeting

Agenda with
Background and Supporting Materials

February 26, 2025
Virtual

Upper Mississippi River Restoration

Quarterly Meeting
Virtual

Agenda
February 26, 2025

Time	Topic	Page	Presenter
8:00 a.m.	Call to Order and Introductions		Kelly Keefe, *USACE* *Coordinating Committee Co-Chair*
8:10	Approval of Minutes of November 20, 2024 Meeting	A1-8	
8:20	Regional Management and Partnership Collaboration		Marshall Plumley, *USACE*
	— Fiscal Report	B1-4	
	— HREP Selection		
	— UMRR Strategic Planning		
9:15	UMRR Future HREP Proposals		Ryan Hupfeld, *Illinois DNR*; Bethany Hoster, *USACE*; Lauren Larson, *USFWS*; & Matt Vitello, *Missouri DNR*
	— River Team Reports (FWWWG, FWIC, RRAT Tech)		
	— Questions, Discussion, Next Steps		UMRR Coordinating Committee
10:30	Break-		
10:45	Strategic Planning Update	C1-20	Marshall Plumley, *USACE*
11:45 a.m.	Lunch		

Agenda, continued

Time	Topic	Page	Presenter
12:45	Program Reports		
	— Habitat Rehabilitation and Enhancement Projects • District Reports		Angela Deen, Julie Millhollin, and Brian Markert, *USACE*
	— Long Term Resource Monitoring and Science		
	• USACE Update • FY 2025 First Quarter Highlights		Davi Michl, *USACE* Jeff Houser, *USGS*
	• Implementation Planning Update		
	• A-Team Report		Matt O'Hara, *Illinois DNR*
2:30	Communications		
	— UMRR Communications Team		Marshall Plumley, *USACE*
	— UMRR Photo Contest Winner		
	— UMRR Brochure	D1-7	Laura Talbert, *UMRBA*
	— External Communications and Outreach Events		*All*
3:15	Other Business — Future Meeting Schedule	E1-13	Kelly Keefe, *USACE*
3:30 p.m.	Adjourn		Kelly Keefe, *USACE*

Upper Mississippi River Restoration Program Quarterly Meetings

Attachment A

UMRR Coordinating Committee Draft Minutes

Minutes of the
Upper Mississippi River Restoration Program
Coordinating Committee

November 20, 2024
Quarterly Meeting

Alton, IL

Sabrina Chandler of the U.S. Fish and Wildlife Service called the meeting to order at 8:00 a.m. on November 20, 2024. Other UMRR Coordinating Committee representatives present were Kelly Keefe (USACE), Jeff Houser (USGS), Dave Glover (Illinois DNR), Kirk Hansen (Iowa DNR), Liz Scherber (Minnesota DNR), Matt Vitello (Missouri DoC), and Vanessa Perry (Wisconsin DNR). A complete list of attendees follows these minutes.

Minutes of the August 7, 2024, Meeting

Matt Vitello moved, and Vanessa Perry seconded a motion to approve the draft minutes of the August 7, 2024, meeting. The motion carried unanimously.

Regional Management and Partnership Collaboration

Fiscal Report

The partnership that supports UMRR (federal agencies, states, and nongovernmental organizations) has experienced widespread turnover in representation. Considering that, Marshall Plumley presented a general overview of the program for new representatives to the UMRR-CC.

Plumley announced that UMRR executed 98.2 percent of its FY 2024 appropriation of $55 million appropriation as well as the funds carried over from FY 2023. Plumley acknowledged the contributions of all UMRR partners who are involved in the program's implementation.

Plumley reported that the House of Representatives and Senate Appropriations Committee have included $55 million in their respective FY 2025 energy and water appropriations measures, aligning with the President's FY 2025 budget proposal. Federal agencies are currently operating under a continuing resolution, which is set to expire in late December 2024. In the interim, the Corps is allocating funds per a $55 million planning assumption for UMRR in FY 2025.

Through draft Water Resource Development Act of 2024 bills, the Senate and House of Representatives are proposing to increase the program's annual authorized appropriation for long term resource monitoring from $15 million to $25 million.

Program Efforts Schedule

The St. Paul District has kicked off a new HREP focused on bank stabilization on the Minnesota River. In the Rock Island District, the Pool 12 Forestry HREP feasibility report is nearing completion. The St. Louis District

has postponed the start of the Meredosia Island HREP. There are 26 HREPs in progress, and the HREPs scheduled from now through 2036 will benefit 69,000 acres of habitat.

In response to a question from Bryan Hopkins, Plumley clarified that the 69,000-acre estimate includes acres that will be impacted outside of the HREP footprints. In response to the partnership expressing interest in developing standardized practices for monitoring HREPs, Plumley proposed establishing an HREP monitoring team in January 2025. Over the winter, Plumley will submit a request to the Coordinating Committee for team assignments.

Plumley presented a draft 10-year timeline of programmatic efforts. UMRR is developing a regular cadence for holding a science meeting and the UMRR habitat-focused workshop so that they do not occur in the same year. In response to a question from Matt Vitello, Plumley clarified that he anticipates that the third Habitat Needs Assessment will be initiated at some point in the next ten years. Kelly Keefe suggested that it be timed with HREP progress. In response to a question from Bryan Hopkins, Plumley stated that the third Habitat Needs Assessment will also be relevant to other federal and state programs (e.g., NESP). In response to a question from Vanessa Perry, Plumley noted that the 2025-2035 UMRR Strategic Plan will inform the priority and sequence of the various programmatic efforts, including other emerging priorities such as tribal engagement and environmental justice.

USACE Headquarters Staff Visit to the Region

Corps Headquarters representatives visited the region on October 7-10, 2024. Their visit included touring multiple HREPs, participating in an LTRM electrofishing demonstration, and engaging with UMRR partners and stakeholders. The Headquarters staff, who work in policy and budget development for the Corps, expressed strong enthusiasm for UMRR's work and the partnership that was demonstrated throughout their visit. Brian Stenquist and Sadie Neuman both commented on the success of the visit.

HREP Selection

UMRR program partners continue to work through the process of evaluating potential project opportunities and selecting a suite of projects for implementation in FYs 2026 through 2030. River teams are currently drafting fact sheets for their proposed projects. The UMRR Coordinating Committee is anticipated to review and approve fact sheets by the third quarter of FY 2025 – i.e., April 2025 through June 2025. The Corps will incorporate parametric cost data into the fact sheets ahead of the feasibility studies.

Plumley stated intentions for the UMRR Coordinating Committee to evaluate ways to incorporate environmental justice into project fact sheets. Bryan Hopkins said The Nature Conservancy is working on similar efforts and has learned the importance of flexibility. Hopkins suggested that UMRR build in flexibility for process improvements as feedback is received. Vanessa Perry suggested that the program couple this environmental justice effort with the communications work described in the new strategic plan. In response to a question from Liz Scherber, Plumley clarified that the Corps will be using Justice40 data from the census in this effort. In response to a question from Sadie Neuman on external engagement, Plumley stated that the strategic plan calls on the program to reach out to external stakeholders to seek ways to leverage existing resources, and that the Corps will work with the partnership to develop this strategy.

Strategic Planning

The UMRR Coordinating Committee and other meeting participants reviewed draft mission and vision statements and goals and objectives for the program drafted by the UMRR strategic planning team. The notes from the discussion will be shared with the strategic planning team. The team is scheduled to meet in person on December 5-6, 2024, to finalize strategies and actions for program work from 2025 to 2035. The next phase of the strategic planning process will be to initiate a public review process. The strategic plan is anticipated to be finalized in summer 2025. Checkpoints will be built into the plan's implementation schedule to allow the partnership to evaluate UMRR's progress in meeting the strategic plan's goals, objectives, strategies, and actions over the ten years.

Chrissa Waite led attendees through a strategic planning exercise. The worksheet used to facilitate the exercise is included in the meeting packet.

Communications

Communications and Outreach Team

Rachel Perrine reported on the accomplishments and ongoing activities of the UMRR Communications and Outreach Team (COT). On August 1, 2024, UMRR initiated a photo contest among UMRR partners to obtain visuals for use in UMRR's program materials and communications. Round two of judging the photo contest entries starts on November 13, 2024. Perrine anticipates that the COT will support communications of the 2022 UMRR Report to Congress, the 2025-2035 Strategic Plan, and the program's 40th anniversary. In response to a question from Jeff Houser, Perrine stated that the intention is to have photos from the contest available to the partnership for programmatic use, but a barrier is finding a central repository.

Partner Activities

UMRR Coordinating Committee members and partners shared their respective UMRR-related communications or engagements over the last quarter that relate to UMRR, as follows:

- USFWS Sabrina Chandler and Stephen Winter were featured on an episode of Wisconsin Public Radio's Larry Meiller Show in September.
- America's Watershed Initiative toured the Mississippi Valley NWR during its September Board meeting.
- Wisconsin DNR hosted statewide DNR water quality staff in La Crosse during which Wisconsin DNR connected its agency's partnership in UMRR, and specifically in implementing LTRM.
- The U.S. House and Senate are conferencing on WRDA, which proposes to increase the annual appropriation amount for UMRR long term resource monitoring from $15 million to $25 million. UMRBA has submitted letters to Congress as WRDA was being drafted. The letters can be found on the UMRBA website.
- The Mississippi River Network hosted a webinar highlighting LTRM. The webinar received a record number of registrants.
- USGS Midcontinent Region will staff a booth at the Midwest Fish and Wildlife Conference in January 2025.
- The ribbon cutting event for the Beaver Island HREP included attendees from several local TV stations.

UMRR Showcases

Understanding Ecological Response to Physical Characteristics in Side Channels of UMRS

Kristen Bouska presented LTRM research on physical controls of side channels in the Upper Mississippi River System. The study used LTRM annual fish collection data to investigate the association between the physical attributes of side channels and their ecological roles. Bouska reported that the amount of wet forest along the shoreline was positively correlated with species richness; there was a decreased species richness with increased water depth.

Bouska mentioned that a project proposal related to this study was submitted to the UMRR partnership for consideration of funding during the most recent UMRR Science Meeting. While it wasn't selected, the research team plans to resubmit a revised proposal at the next meeting. Bouska concluded by asking that attendees send her any related side channel work.

Henry Hansen commented that the age of side channels seems to be an important variable in studies being published in Europe. In response to a question from Dave Glover on "correcting" fisheries data to include catchability, Bouska responded that the study used species richness due to being uncomfortable using catch data. Hansen noted that accounting for seasonal differences could be beneficial to future work.

Piasa and Eagles Island HREP

Jasen Brown presented on the Piasa and Eagles Island HREP that many attendees toured in conjunction with the UMRBA Quarterly Meeting on November 19, 2024. The HREP involves constructing 70 acres of island habitat and dredge over two miles of deep water. A dike was constructed between the two islands to mitigate the side channels filling in with sediment. Notching the dike structure redirects most of the sediment from entering the side channels. Stage 2 of construction was completed this quarter and the anticipated completion date for the project is in FY 2027. As a means for public engagement, UMRR hosted a contest in local grade schools to name the three islands involved in the project.

Program Reports

Long Term Resource Monitoring, Research, and Other Science

Quarterly Progress Report

Jeff Houser reported that the accomplishments of the fourth quarter of FY 2024 include the publication of the following six manuscripts that were supported by UMRR funding and the partnership infrastructure:

1) Climate, Hydrology, and Nutrients Control the Seasonality of Si Concentrations in Rivers.
2) USGS Powell Center Project: Are we experiencing a river silicon surge? Implications for nutrient stoichiometry and the global carbon cycle.
3) Upper Mississippi River System Hydrogeomorphic Change Conceptual Model and Hierarchical Classification.
4) Population structure and vital rates of Shortnose Gar Lepisosteus platostomus in a large floodplain river.
5) Spatial and Ontogenetic Patterns in the Trophic Ecology of Two Predatory Fishes in a Large River.

6) Relationships between environmental variables and fish functional groups in impounded reaches of the Upper Mississippi and Yangtze Rivers.

Houser said USGS provided several presentations about long term resource monitoring research and analysis at the American Fisheries Society 2024 Annual Meeting.

Per the UMRR implementation planning recommendations, USGS and the broader LTRM partnership are focused on evaluating floodplain vegetation change across the Upper Mississippi River System and researching the lower trophic contribution – i.e., zooplankton and phytoplankton. A program-level workshop to develop a long-term floodplain vegetation monitoring plan is scheduled to be held January 7-9, 2025, in the Quad Cities. A working group will be established to identify, assemble, and evaluate existing floodplain vegetation data sets. In the future, the group hopes to develop public online tools to facilitate data sharing and visualization of existing floodplain vegetation data. USGS has hired Shelby Weiss and Matthew Trumper to assist in this floodplain vegetation monitoring planning effort.

The LTRM management team has undertaken a tour of the six LTRM field stations. The tour will be complete tomorrow, November 21, 2024, with a visit to the La Grange Pool Field Station in Havana, IL.

Fiscal Report

In FY 2025, total budget allocation for LTRM will increase to $14.45 million: $6.5 million for base monitoring, $2 million for analysis under base, and $5.95 million for science in support of restoration and management. This increase is in recognition of increasing base monitoring costs over the past several years.

Topobathy acquisition is currently in process for the twelve awarded task orders for the Lower Pool 13 pilot and the entire Illinois River and Open River Reach 2 on the Mississippi. In response to a question from Matt Vitello, Davi Michl clarified that it is estimated that the topobathy data will be processed and usable in a year.

A-Team Report

Matt O'Hara reported that the A-Team met on October 29, 2024. In addition to programmatic updates by the Corps and USGS, Shawn Giblin presented information on the decline of the burrowing mayfly populations in the Upper Mississippi and Steve Winter presented on the habitat needs of the canvasback in the Upper Mississippi River National Wildlife and Fish Refuge. The next A-Team meeting is scheduled for April 2025, in conjunction with the Mississippi River Research Consortium.

HREP Planning and Construction

Angela Deen, Julie Millhollin, and Brian Market reported on the progress in implementing UMRR HREPs, including the following milestones:

- The St. Paul District finished the Big Lake HREP feasibility study. With an estimated construction cost of around forty million dollars, the Big Lake HREP is the largest feasibility study ever completed by the St. Paul District.
- The St. Paul District completed four GIS storymaps of UMRR HREPs this year, which can be found on their website.

— The Rock Island District completed the first two construction stages of the Steamboat Island HREP.

— MVD approved the Rock Island District's feasibility report for the Lower Pool 13 HREP. The project will now advance to design and construction.

— The St. Louis District completed a berm setback on the Clarence Cannon HREP.

— The St. Louis District completed Stage 2 of construction on the Piasa and Eagles Nest Islands HREP. The District hosted a tour of the HREP in conjunction with the UMRBA Quarterly Meeting on November 19, 2024.

Other Business

Future Meeting Schedule

— February 2025 through a virtual platform (not in-person)

- UMRBA quarterly meeting – February 25
- UMRR Coordinating Committee quarterly meeting – February 26

— May 2025 in La Crosse, Wisconsin

- UMRBA quarterly meeting – May 20
- UMRR Coordinating Committee quarterly meeting – May 21

— August 2025 in Minneapolis, Minnesota

- UMRBA quarterly meeting – August 5
- UMRR Coordinating Committee quarterly meeting – August 6

Attendance List

UMRR Coordinating Committee Members

Kelly Keefe	U.S. Army Corps of Engineers
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Jeff Houser	U.S. Geological Survey, UMESC
Dave Glover	Illinois Department of Natural Resources
Kirk Hansen	Iowa Department of Natural Resources
Liz Scherber	Minnesota Department of Natural Resources
Matt Vitello	Missouri Department of Conservation
Vanessa Perry	Wisconsin Department of Natural Resources

Others In Attendance

Brian Chewning	U.S. Army Corps of Engineers, MVD
Jim Cole	U.S. Army Corps of Engineers, MVD
LeeAnn Riggs	U.S. Army Corps of Engineers, MVD
Thatch Shepard	U.S. Army Corps of Engineers, MVD
Angela Deen	U.S. Army Corps of Engineers, MVP
Nathan Wallerstedt	U.S. Army Corps of Engineers, MVP
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Kyle Bales	U.S. Army Corps of Engineers, MVR
Davi Michl	U.S. Army Corps of Engineers, MVR
Julie Millhollin	U.S. Army Corps of Engineers, MVR
Jessie Dunton	U.S. Army Corps of Engineers, MVR
Rachel Perrine	U.S. Army Corps of Engineers, MVR
Brian Markert	U.S. Army Corps of Engineers, MVS
Jasen Brown	U.S. Army Corps of Engineers, MVS
Chrissa Waite	U.S. Army Corps of Engineers, SAC
Kraig McPeek	U.S. Fish and Wildlife Service, Ecological Services
Sara Schmuecker	U.S. Fish and Wildlife Service, Ecological Services
Jon Amberg	U.S. Geological Survey, UMESC
Kristen Bouska	U.S. Geological Survey, UMESC
Jim Fischer	U.S. Geological Survey, UMESC
JC Nelson	U.S. Geological Survey, Midcontinent Region
Matt O'Hara	Illinois Department of Natural Resources
Liz Scherber	Minnesota Department of Natural Resources
Sam Clary	Missouri Department of Conservation
Patrick Kelly	Wisconsin Department of Natural Resources
Sierra Schuchard	America's Watershed Initiative
Brent Newman	Audubon
Alicia Vasto	Audubon
Anshu Singh	Corn Belt Ports
Christine Favilla	Sierra Club
Bryan Hopkins	The Nature Conservancy
Sarah Gatzke	The Nature Conservancy
Mark Hoague	Tetra Tech, Inc
Morgan Fong	National Waterways Conference
Kirsten Wallace	Upper Mississippi River Basin Association

Brian Stenquist	Upper Mississippi River Basin Association
Mark Ellis	Upper Mississippi River Basin Association
Henry Hansen	Upper Mississippi River Basin Association
Sam Hund	Upper Mississippi River Basin Association
Natalie Lenzen	Upper Mississippi River Basin Association
Sadie Neuman	Upper Mississippi River Basin Association
Ken Petersen	Upper Mississippi River Basin Association
Lauren Salvato	Upper Mississippi River Basin Association
Laura Talbert	Upper Mississippi River Basin Association

Upper Mississippi River Restoration Program Quarterly Meetings

Attachment B

Regional Management and Partnership Collaboration

Habitat Rehabilitation and Enhancement Projects	FY 24 October 2023 - September 2024	FY 25 October 2024 - September 2025	FY 26 October 2025 - September 2026	FY 27 October 2026 - September 2027	FY 28 October 2027 - September 2028	FY 29 October 2028 - September 2029	FY 30 October 2029 - September 2030	FY 31 October 2030 - September 2031	FY 32 October 2031 - September 2032	FY 33 October 2032 - September 2033	FY 34 October 2033 - September 2034
St. Paul District											
McGregor Lake, WI											
Lower Pool 10 Islands, IA, Stage I, II, & III											
Reno Bottoms, MN/IA											
Lower Pool 4, Big Lake, WI Stage I											
Robinson Lake, MN											
Bank Stabilization, Minnesota River, MN											
TBD MVP											
Rock Island District											
Keithsburg Division, IL											
Steamboat Island, IA											
Beaver Island Stage I & II, IA											
Lower Pool 13, IA											
Green Island, IA											
Pool 12 Forestry, IL											
Quincy Bay, IL											
Lower Pool 13 Phase II, IA											
Pool 18 Forestry, IA											
Lower Pool 11, WI											
TBD MVR											
St. Louis District											
Clarence Cannon NWR, MO											
Piasa and Eagles Nest, IL											
Crains Islands, IL											
Harlow, MO											
Oakwood Bottoms, IL											
Yorkinut Slough, IL											
Swan Lake Flood Damage Rehabilitation, IL											
West Alton, MO Islands											
Gilead Slough, IL											
Reds Landing, IL											
Meredosia Island, IL											
TBD MVS											
HREP Feasibility Phase	Feasibility Completion = 5	Feasibility Completion = 2	Feasibility Completion = 5	Feasibility Completion = 1	Feasibility Completion = 2	Feasibility Completion = 2	Feasibility Completion = 0	Feasibility Completion = 0	Feasibility Completion = 0	Feasibility Completion = 0	Feasibility Completion = 0
HREP P&S Phase	Design Completion = 1	Design Completion = 4	Design Completion = 4	Design Completion = 4	Design Completion = 5	Design Completion = 1	Design Completion = 2	Design Completion = 1	Design Completion = 1	Design Completion = 0	Design Completion = 0
HREP Construction Phase	Construction Completion = 1	Construction Completion = 0	Construction Completion = 1	Construction Completion = 2	Construction Completion = 1	Construction Completion = 4	Construction Completion = 2	Construction Completion = 6	Construction Completion = 2	Construction Completion = 2	Construction Completion = 4
HREP M&AM/Sponsor O&M Phase(2)											

(2) Physical features are turned over to the sponsor at construction completion for Operation & Maintenance. Monitoring & Adaptive Management activities will begin (WRDA 2039; as amended) and per the Feasibility Report.

UMRR Quarterly Budget Report: St. Paul District

FY2025 Q1; Report Date: Fri Jan 10 2025

Habitat Projects

Project Name	Cost Estimates			FY2025 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Lower Pool 10 Island and Backwater Complex	-	$32,428,000	$32,428,000	$101,078	$6,000,000	$6,101,078	$125,800
Lower Pool 4, Big Lake	-	$39,500,000	$39,500,000	$34,918	$450,000	$484,918	$86,749
Lower Pool 4, Robinson Lake, MN	-	$39,500,000	$39,500,000	$49,954	$550,000	$599,954	$149,703
MN Bank Stablization	-	-	-	-	-	-	$38,640
McGregor Lake	-	$20,336,695	$20,336,695	$20,200	$350,000	$370,200	$27,184
Reno Bottoms	-	$38,965,000	$38,965,000	$20,683	$2,000,000	$2,020,683	$111,661
Total	-	$170,729,695	$170,729,695	$226,834	$9,900,000	$10,126,834	$539,737

Habitat Rehabilitation

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	-	$99,309
Total	-	-	-	$99,309

Regional Program Administration

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
Habitat Eval/Monitoring	-	$425,000	$425,000	$70,181
Total	-	$425,000	$425,000	$70,181

	Carry In	Allocation	Funds Available	Actual Obligations
St. Paul Total	$226,834	$10,325,000	$10,551,834	$709,227

UMRR Quarterly Budget Report: Rock Island District

FY2025 Q1; Report Date: Fri Jan 10 2025

Habitat Projects

Project Name	Cost Estimates			FY2025 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Beaver Island	-	$25,288,000	$25,288,000	$33,444	-	$33,444	$34,370
Green Island, IA	-	$16,600,000	$16,600,000	$48,315	$600,000	$648,315	$11,405
Keithsburg Division	-	$29,643,000	$29,643,000	$27,554	$4,800,000	$4,827,554	$113,337
Lower Pool 13	-	$26,083,000	$26,083,000	$22,531	$600,000	$622,531	$131,821
Lower Pool 13 Phase II	-	$20,000,000	$20,000,000	$139,433	$600,000	$739,433	$91,724
Pool 11, WI	-	$25,000,000	$25,000,000	$31,650	$600,000	$631,650	$176,067
Pool 12 (Forestry)	-	$9,000,000	$9,000,000	$85,367	$550,000	$635,367	$22,550
Pool 18 Forestry	-	$20,000,000	$20,000,000	$90,287	$600,000	$690,287	$107,496
Quincy Bay, IL	-	$25,000,000	$25,000,000	$27,088	$1,450,000	$1,477,088	$83,745
Steamboat Island	-	$41,977,000	$41,977,000	$34,483	$4,075,000	$4,109,483	$142,844
Total	-	$238,591,000	$238,591,000	$540,151	$13,925,000	$14,465,151	$915,359

Habitat Rehabilitation

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	-	$43,243
Total	-	-	-	$43,243

Regional Program Administration

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
Adaptive Management	-	$200,000	$200,000	$18,212
Habitat Eval/Monitoring	$119,582	$425,000	$544,582	$68,456
Model Certification/Regional HREP	-	$100,000	$100,000	$6,560
Public Outreach	$344	$100,000	$100,344	$52,431
Regional Program Management	$108,311	$2,000,000	$2,108,311	$360,942
Regional Project Sequencing	-	$125,000	$125,000	$1,021
Total	$228,237	$2,950,000	$3,178,237	$507,622

Regional Science and Monitoring

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
Long Term Resource Monitoring	-	$6,500,000	$6,500,000	$4,733,834
Science in Support of Restoration/Management	$16,800	$7,950,000	$7,966,800	$19,290
Total	$16,800	$14,450,000	$14,466,800	$4,753,124

	Carry In	Allocation	Funds Available	Actual Obligations
Rock Island Total	$785,188	$31,325,000	$32,110,188	$6,219,348

UMRR Quarterly Budget Report: St. Louis District

FY2025 Q1; Report Date: Fri Jan 10 2025

Habitat Projects

Project Name	Cost Estimates			FY2025 Financials			
	Non-Federal	Federal	Total	Carry In	Allocation	Funds Available	Actual Obligations
Clarence Cannon	-	$29,800,000	$29,800,000	-	$650,000	$650,000	$22,425
Crains Island	-	$36,562,000	$36,562,000	-	$3,925,000	$3,925,000	$59,924
Gilead Slough	-	$20,000,000	$20,000,000	$13,273	$550,000	$563,273	$92,620
Harlow Island	-	$37,971,000	$37,971,000	-	$3,100,000	$3,100,000	$68,355
Meredosia Island	-	-	-	-	$100,000	$100,000	-
Oakwood Bottoms	-	$34,200,000	$34,200,000	-	$500,000	$500,000	$997
Piasa - Eagle's Nest Islands	-	$26,746,000	$26,746,000	-	$2,025,000	$2,025,000	$480,611
Red's Landing Wetlands	-	$16,573,680	$16,573,680	-	$575,000	$575,000	$75,766
West Alton Missouri Islands	-	$14,500,000	$14,500,000	$126,372	$800,000	$926,372	$10,237
Yorkinut Slough, IL	-	$15,500,000	$15,500,000	$14,076	$700,000	$714,076	$137,687
Total	-	$239,265,680	$239,265,680	$153,913	$12,925,000	$13,078,913	$948,622

Habitat Rehabilitation

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
District Program Management	-	-	-	$189,455
Total	-	-	-	$189,455

Regional Program Administration

Subcategory	FY2025 Financials			
	Carry In	Allocation	Funds Available	Obligations
Habitat Eval/Monitoring	-	$425,000	$425,000	$103,134
Total	-	$425,000	$425,000	$103,134

	Carry In	Allocation	Funds Available	Actual Obligations
St. Louis Total	$153,913	$13,350,000	$13,503,913	$1,241,211

Upper Mississippi River Restoration Program
Quarterly Meetings

Attachment C

Strategic Planning

UMRR Strategic Plan – Goal 1: Improve understanding of the structure and function of the Upper Mississippi River ecosystem for better management.

Objective 1.1: Deepen understanding of the ecosystem by maintaining and enhancing monitoring and research efforts

Strategy 1.1.1: LTRM continues regular monitoring activities to assess ecosystem health and resilience. (i.e Annual monitoring of components data, cyclical Topobathy and LCLU acquisition, & data analyses)

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 1.1.1.a: Continued support and communication with the field stations to inform status and trends.

Continuation of Ongoing Effort

Action 1.1.1.b: Maintain data integrity through continued periodic meetings across field stations and UMESC to maintain consistent methods.

Continuation of Ongoing Effort

Action 1.1.1.c: All-hands LTRM meting every 2 years. Link w. UMRCC or UMRR workshop?

Objective 1.1: Deepen understanding of the ecosystem by maintaining and enhancing monitoring and research efforts

Strategy 1.1.2: Target research and data collection to deepen understanding of the ecosystem.

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 1.1.2.a: Continue regular science meetings as a venue for proposal development and funding.

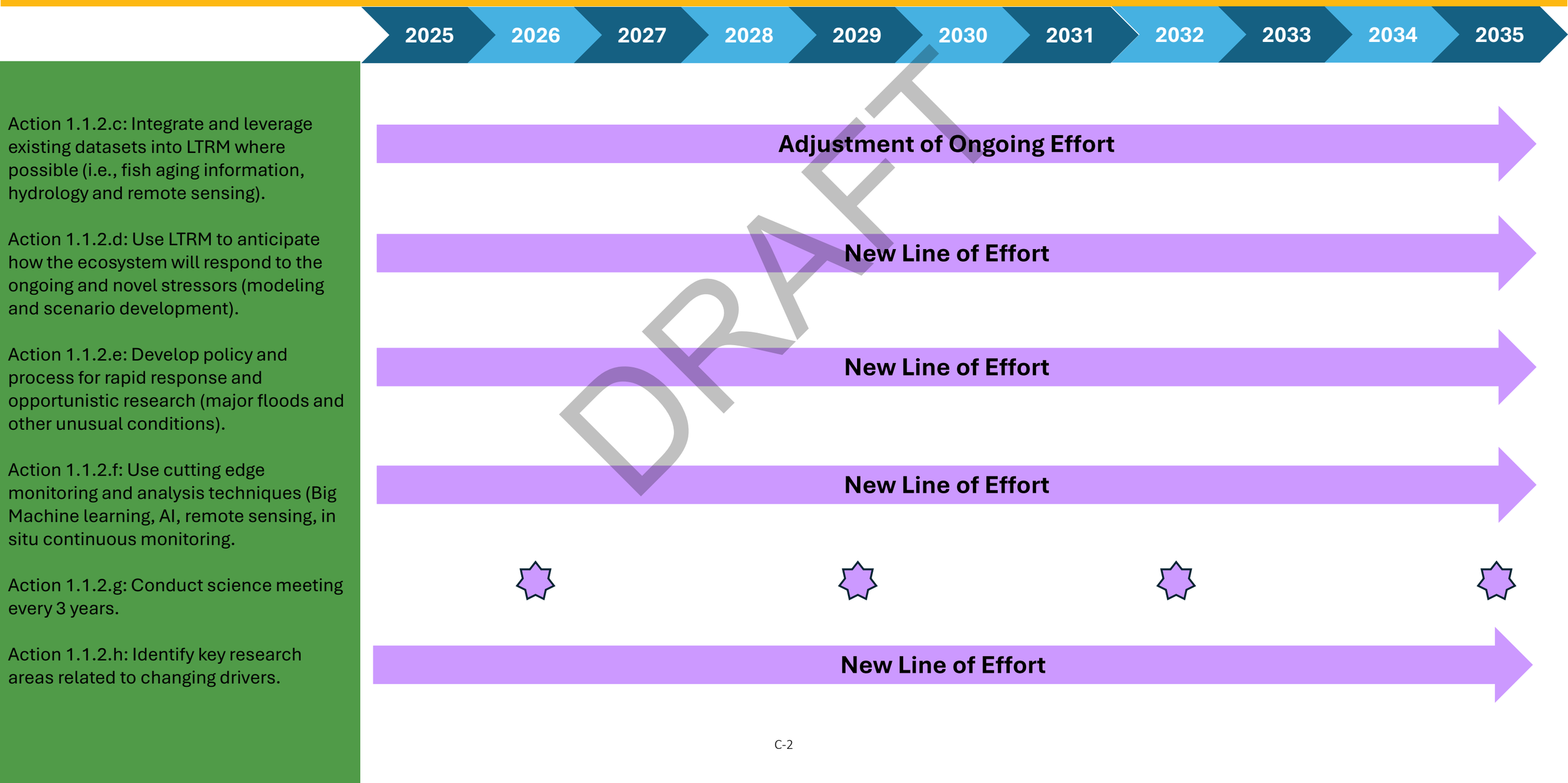
Continuation of Ongoing Effort

Action 1.1.2.b: Determine how to utilize traditional knowledge, academic, NGO and agency partner expertise to support and expand LTRM.

New Line of Effort

UMRR Strategic Plan – Goal 1: Improve understanding of the structure and function of the Upper Mississippi River ecosystem for better management.

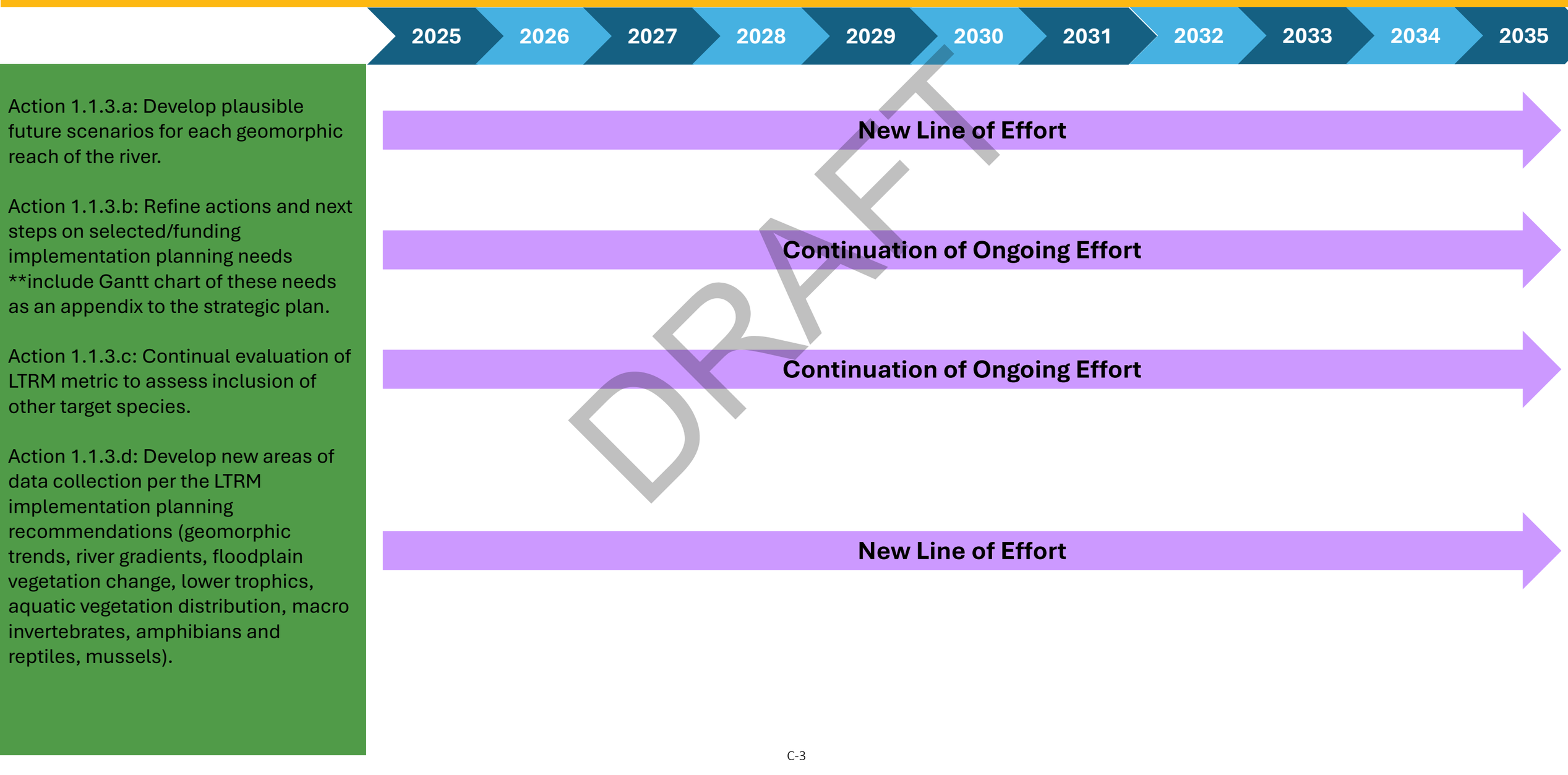
Objective 1.1: Deepen understanding of the ecosystem by maintaining and enhancing monitoring and research efforts
Strategy 1.1.2: Target research and data collection to deepen understanding of the ecosystem.



UMRR Strategic Plan – Goal 1: Improve understanding of the structure and function of the Upper Mississippi River ecosystem for better management.

Objective 1.1: Deepen understanding of the ecosystem by maintaining and enhancing monitoring and research efforts

Strategy 1.1.3: Operationalize LTRM implementation planning to identify priority science and restoration information needs.



UMRR Strategic Plan – Goal 1: Improve understanding of the structure and function of the Upper Mississippi River ecosystem for better management.

Objective 1.2: Make knowledge accessible to scientists, managers and the public.
Strategy 1.2.1: Continue and build on current reporting methodologies. *See Goal 3, Objectives for interactions between data sharing and reporting best practices*

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

Action 1.2.1.a: Produce the 4th Status and Trends Report.

Action 1.2.1.b: Produce Status and Trends Snapshot Summaries.

Action 1.2.1.c: Continue presenting technical results across formats and audiences (science publications, presentation at partner, regional and national science meetings, [part]? and other workshops).

New Line of Effort

Continuation of Ongoing Effort

Continuation of Ongoing Effort

Objective 1.2: Make knowledge accessible to scientists, managers and the public.
Strategy 1.2.2: Generate clear and concise summaries of scientific findings *See Goal 4 for interactions between science and habitat-related implementing partners*

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

Action 1.2.2.a: Conduct analyses on data and summarize to use in engagement and storytelling.

Action 1.2.2.b: Modernize website and data interface.

New Line of Effort

New Line of Effort

UMRR Strategic Plan – Goal 2: Restore at least 60,000 acres of habitat within the river ecosystem in the face of ongoing stressors and human-caused alterations

Objective 2.1: Strategically plan, design and construct habitat projects to best address the defined objective

Strategy 2.1.1: Identify key ecosystems, habitats, species, and other benefits to guide priorities

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 2.1.1.a: Prioritize key ecological needs using Habitat Needs Assessment II Update

Continuation of Ongoing Effort

Action 2.1.1.b: Utilize existing plans that identify priority resources to inform restoration needs

Continuation of Ongoing Effort

Action 2.1.1.c: Create repository and process to catalog historical, current and future prioritization efforts. Res. Web design and infrastructure

Continuation of Ongoing Effort

Action 2.1.1.d: complete scoping for HNA III by 2030

New Line of Effort

Objective 2.1: Strategically plan, design and construct habitat projects to best address the defined objective.

Strategy 2.1.2: Design and implement science based, restoration-informed priorities and needs to restore ecosystem form and function.

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 2.1.2.a: incorporate ongoing and new stressors and resilience planning into restoration projects

Continuation of Ongoing Effort

UMRR Strategic Plan – Goal 2: Restore at least 60,000 acres of habitat within the river ecosystem in the face of ongoing stressors and human-caused alterations

Objective 2.1: Strategically plan, design and construct habitat projects to best address the defined objectives

Strategy 2.1.2: Design and implement science based, restoration-informed priorities and needs to restore ecosystem form and function

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Action 2.1.2.b: Ensure planning, design and construction of restoration projects includes best available science, program data and integration of LTRM	**Adjustment of Ongoing Effort**										
Action 2.1.2.c: Develop new ecological community- based HSI models	**New Line of Effort**										

Objective 2.2: Optimize restoration activities to increase ecosystem health and resilience

Strategy 2.2.1: Practice continuous improvement

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Action 2.2.1.a: Document baseline conditions	**Adjustment of Ongoing Effort**										
Action 2.2.1.b: Conduct assessments and learn from previous novel techniques/methods, where applicable	**Adjustment of Ongoing Effort**										
Action 2.2.1.c: Embrace change management, culture change, learning & skill development	**New Line of Effort**										
Action 2.2.1.d: Conduct updates to design handbook and launch	**New Line of Effort**										

UMRR Strategic Plan – Goal 2: Restore at least 60,000 acres of habitat within the river ecosystem in the face of ongoing stressors and human-caused alterations

<u>Objective 2.2:</u> Optimize restoration activities to increase ecosystem health and resilience

<u>Strategy 2.2.1:</u> Practice continuous improvement

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

Action 2.2.1.e: Identify and learn from areas of natural resilience to emulate in restoration design

New Line of Effort

Action 2.2.1.f: Identify a team of SME to evaluate effectiveness and administer AARs where results are suboptimal

New Line of Effort

Action 2.2.1.g: Complete AARs and adapt lessons learned

Continuation of Ongoing Effort

<u>Objective 2.2:</u> Optimize restoration activities to increase ecosystem health and resilience

<u>Strategy 2.2.2:</u> Establish and implement evaluation framework

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

Action 2.2.2.a: Evaluation workshop or taskforce

New Line of Effort

Action 2.2.2.b: Measure success criteria and report results as identified in feasibility reports

Continuation of Ongoing Effort

Action 2.2.2.c: Complete Performance Evaluation Reports at regular intervals

Action 2.2.2.d: More rigorously monitor and assess response where novel/innovative techniques are

Adjustment of Ongoing Effort

UMRR Strategic Plan – Goal 2: Restore at least 60,000 acres of habitat within the river ecosystem in the face of ongoing stressors and human-caused alterations

Objective 2.2: Optimize restoration activities to increase ecosystem health and resilience

Strategy 2.2.2: Establish and implement evaluation framework

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Action 2.2.2.e: At the project level, monitor biological response of target species	Continuation of Ongoing Effort										

Objective 2.2: Optimize restoration activities to increase ecosystem health and resilience

Strategy 2.2.3: Explore new restoration techniques

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Action 2.2.3.a: Implement new restoration techniques utilizing a risk management framework	New Line of Effort										
Action 2.2.3.b: Conduct or attend workshops to learn about or brainstorm novel techniques in an interdisciplinary way	New Line of Effort										
Action 2.2.3.c: Implement recommendations that arise from Goal 3	New Line of Effort										
Action 2.2.3.d: Corps community of practice - share information, best practices, new techniques, models	New Line of Effort										
Action 2.2.3.e: Identify new/strategic partnership opportunities to implement novel techniques	New Line of Effort										

UMRR Strategic Plan – Goal 3: Support efficient, effective, and innovative habitat restoration through strengthened collaboration between restoration practitioners and scientists

Objective 3.1: Increase capacity of personnel and knowledge for better integrated project planning and decision making

Strategy 3.1.1: Expand cross element exchange and relationship building (eg - UMRR Science Meeting and UMRR Workshop)

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035

Action 3.1.1.a: Provide trainings internal to the partnership on program elements

Action 3.3.1.b: Add a component to the Science Meeting to study the outcomes of HREPS and identify new research needs

Action 3.1.1.c: LTRM staff continue to participate in HREP PDT meetings as needed

Action 3.1.1.d: Assign staff (mustard/binding) to be devoted to working at the interface between program elements

Note connection to Goal 4, incorporating local and traditional ecological knowledge

Continuation of Ongoing Effort

New Line of Effort

Continuation of Ongoing Effort

New Line of Effort

UMRR Strategic Plan – Goal 3: Support efficient, effective, and innovative habitat restoration through strengthened collaboration between restoration practitioners and scientists

Objective 3.2: Collaboratively develop a science vision for restoration-associated research

Strategy 3.2.1: Develop a research framework

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.2.1.a: Develop cross element adhoc team to identify opportunities

Action 3.2.1.b: Identify criteria/approach for identifying HREPS (or other actions) that are especially good learning opportunities; apply lessons learned

Action 3.2.1.c: Outline priority questions/hypotheses to be addressed by restoration project monitoring, analysis of existing project data, etc

Action 3.2.1.d: Periodic evaluation to assess inclusion of other target species and research needs

New Line of Effort

New Line of Effort

Continuation of Ongoing Effort

Adjustment of Ongoing Effort

Objective 3.3: Apply lessons learned from long-term research more effectively throughout the restoration process

Strategy 3.3.1: Standardize how HREP monitoring data s collected, stored and shared

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.3.1.a: Develop guidance for standardized monitoring approaches and HREP metrics of success

New Line of Effort

UMRR Strategic Plan – Goal 3: Support efficient, effective, and innovative habitat restoration through strengthened collaboration between restoration practitioners and scientists

Objective 3.3: Apply lessons learned from long-term research more effectively throughout the restoration process

Strategy 3.3.1: Standardize how HREP monitoring data s collected, stored and shared

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.3.1.b: Create unified database and harmonize data fields/add metadata to support research at restoration and program scale

New Line of Effort

Action 3.3.1.c: Evaluate previously collected data and PERS to inform standardized procedures

Continuation of Ongoing Effort

Action 3.3.1.d: Integrate best practices from other major river systems internationally

Continuation of Ongoing Effort

Objective 3.3: Apply lessons learned from long-term research more effectively throughout the restoration process

Strategy 3.3.2: Ensure LTRM data is more accessible and usable to HREP using best practices

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.3.2.a: Understand the needs of the HREP teams

Continuation of Ongoing Effort

Action 3.3.2.b: Build user-friendly tools/reports

Continuation of Ongoing Effort

UMRR Strategic Plan – Goal 3: Support efficient, effective, and innovative habitat restoration through strengthened collaboration between restoration practitioners and scientists

Objective 3.3: Apply lessons learned from long-term research more effectively throughout the restoration process

Strategy 3.3.2: Ensure LTRM data is more accessible and usable to HREP using best practices

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.3.2.c: Provide regular standardized summaries of key reaches using LTRM data

New Line of Effort

Action 3.3.2.d: Evaluate opportunities for data-driven approaches to project selection

Continuation of Ongoing Effort

Action 3.3.2.e: Communicate timeline and results to Goal 1 for web redesign

New Line of Effort

Objective 3.4: Integrate climate change into restoration and monitoring

Strategy 3.4.1: Develop UMRR climate action plan

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 3.4.1.a: Assess state of science of climate change for UMRR

New Line of Effort

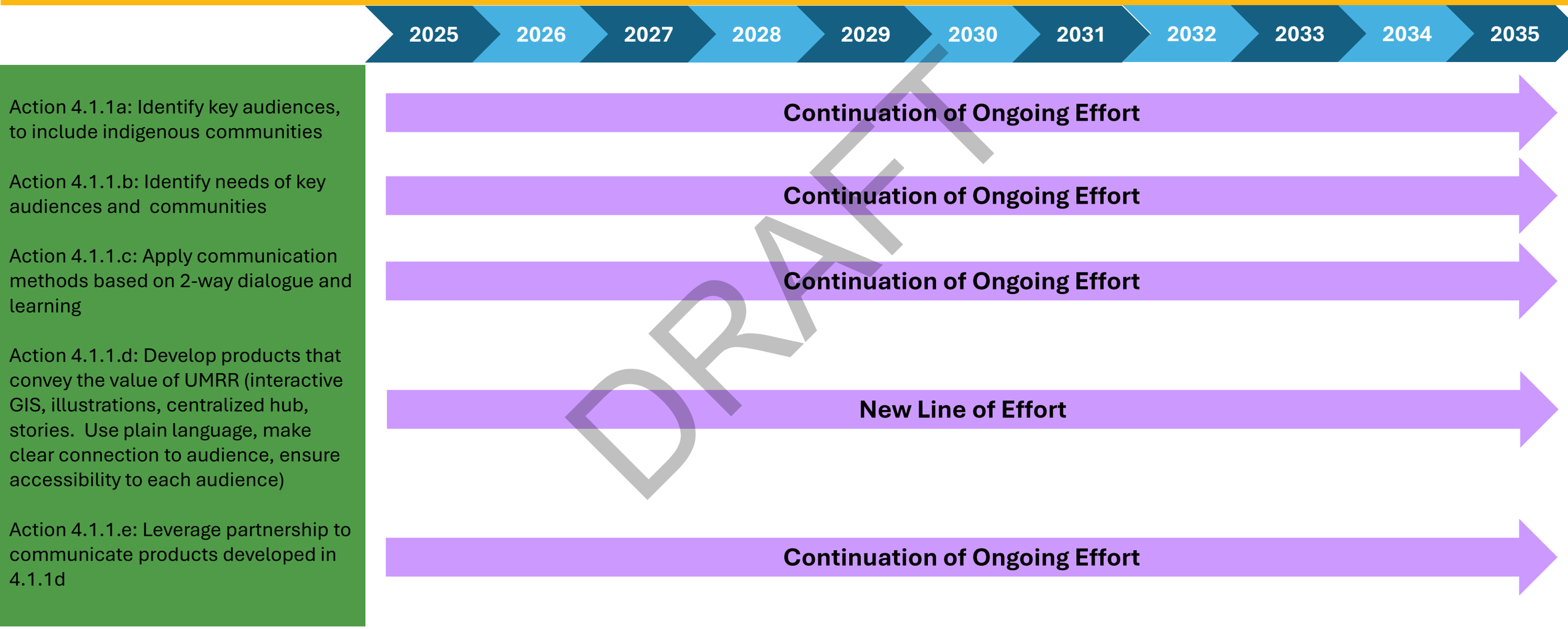
Action 3.4.1.b: Develop metrics to measure success of climate resilience planning

New Line of Effort

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.1: Enhance external communication and relationships

Strategy 4.1.1: Develop Communication Plan



UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.1: Enhance external communication and relationships

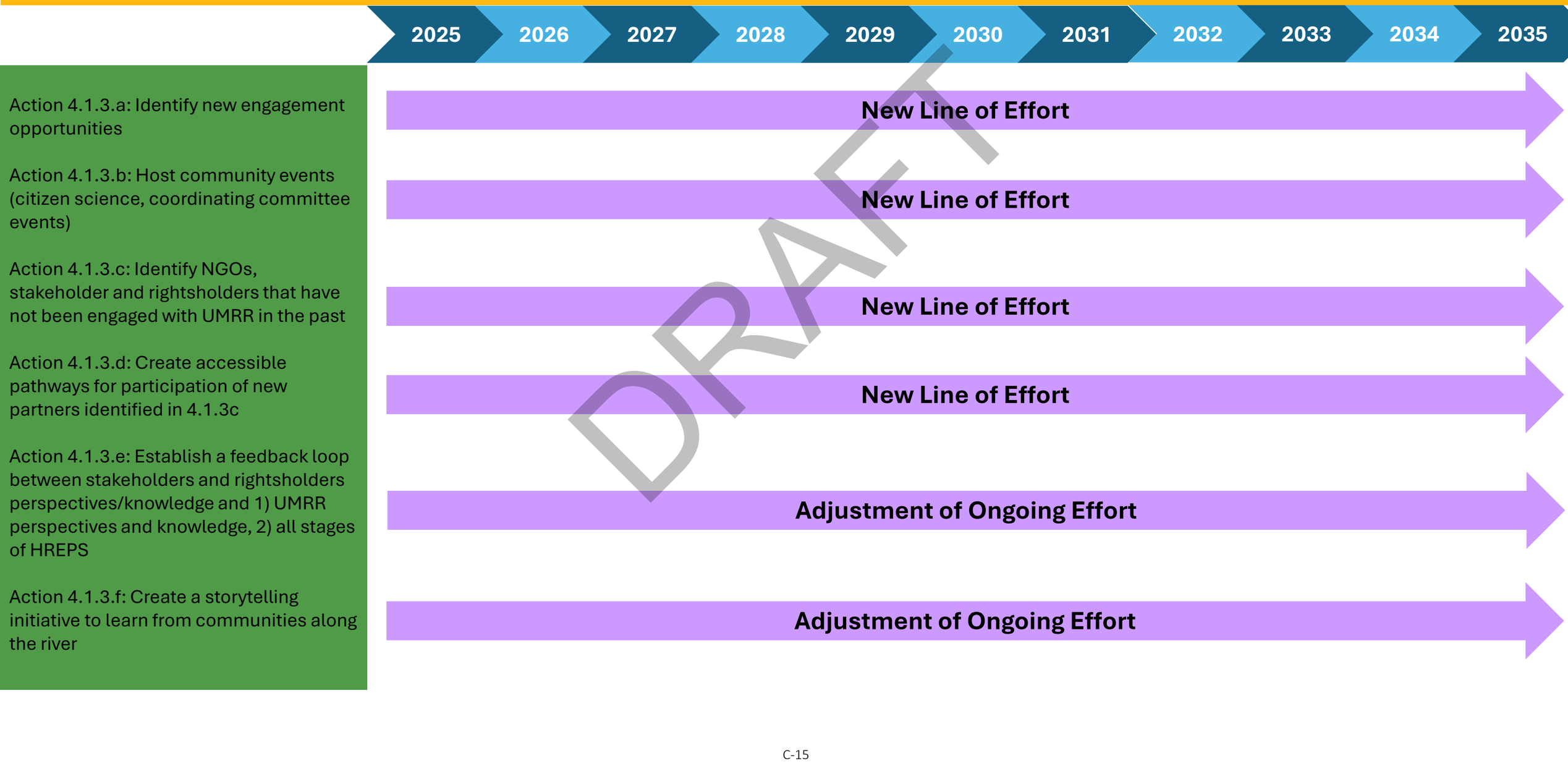
Strategy 4.1.2: Apply social science to enhance engagement, understanding and learning, internally and externally

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Action 4.1.2.a: Conduct internal gap analysis of social science knowledge	Continuation of Ongoing Effort										
Action 4.1.2.b: Develop COT training on relevant social science methods and knowledge	New Line of Effort										
Action 4.1.2.c: Collaborate with expert social scientists to enhance communications, engagement and outreach	Continuation of Ongoing Effort										
Action 4.1.2.d: Collaborate with organizations that use social science in their work	New Line of Effort										
Action 4.1.2.e: Stay up to date on social science methods (attend social science conferences)	Continuation of Ongoing Effort										
Action 4.1.2.f: Build relationships between UMRR and social science communities of practice	Continuation of Ongoing Effort										
Action 4.1.2.g: Apply social science to strategies 4.1.1 and 4.1.3.	Continuation of Ongoing Effort										

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.1: Enhance external communication and relationships

Strategy 4.1.3: Develop engagement and outreach plan



UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.1: Enhance external communication and relationships

Strategy 4.1.4: Further develop COT to support communication, engagement and outreach

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 4.1.4.a: Clarify roles and responsibilities in COT in UMRR program

Action 4.1.4.b: Strategically align COT activities with UMRR priorities

Action 4.1.4.c: Identify and address barriers to COT participation in partnership

Adjustment of Ongoing Effort

Adjustment of Ongoing Effort

New Line of Effort

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.1: Address partner capacity issues to ensure ongoing program support

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 4.2.1.a: Identify and highlight key projects with environmental importance, regardless of PPA/agreement requirements, then seek to overcome barriers to implement

Action 4.2.1.b: Identify new non federal sponsors for future projects

New Line of Effort

Adjustment of Ongoing Effort

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.1: Address partner capacity issues to ensure ongoing program support

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 4.2.1.c: Identify limitations to partner support to meet changing needs (financial, staff, or physical resources)

Adjustment of Ongoing Effort

Action 4.2.1.d: Clarify what is expected of partners at each level of involvement

Adjustment of Ongoing Effort

Action 4.2.1.e: Understand what partners need from UMRR and desired engagement (type, resources, needed)

New Line of Effort

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.2: Build, maintain, and strengthen trust within the current and expanded partnership

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 4.2.2.a: Formalize NGO and community input on HREP (beyond public review)

Adjustment of Ongoing Effort

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.2: Build, maintain, and strengthen trust within the current and expanded partnership

Action 4.2.2.b: Maintain robust engagement opportunities to continue supporting professional and personal relationships and recognize the value and work necessary to support partnership

Action 4.2.2.c: Increase open communication to increase trust across partners

Action 4.2.2.d: Ensure a balance of valuing knowledge of people with longevity of experience and outside knowledge from newcomers to the program

Continuation of Ongoing Effort

Continuation of Ongoing Effort

New Line of Effort

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.3: Ensure smooth operations of the UMRR partnership

Action 4.2.3.a: Maintain and increase effectiveness of virtual and in person meetings

Continuation of Ongoing Effort

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.3: Ensure smooth operations of the UMRR partnership

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

Action 4.2.3.c: Develop protocols and process for institutional knowledge transfer and accessibility, including organized/historical and current documents, accessible materials, and directed info or overlap/transition of staff

New Line of Effort

Action 4.2.3.d: Establish common communication platforms

Adjustment of Ongoing Effort

Action 4.2.3.e: UMRR 101 to onboard new partners/staff

New Line of Effort

Action 4.2.3.f: Incorporate partnership values into program documents

New Line of Effort

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.4: Partner with other projects and programs to leverage knowledge and resources

2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035

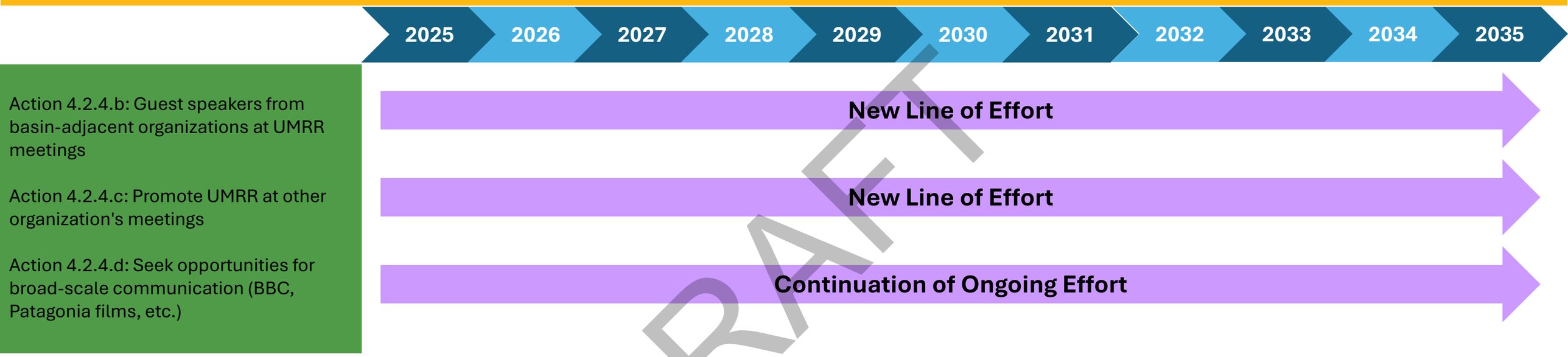
Action 4.2.4.a: Annual meetings with basin-adjacent organizations

Continuation of Ongoing Effort

UMRR Strategic Plan – Goal 4: Foster strong relationships among UMRR partners and stakeholders

Objective 4.2: UMRR partners work together, according to the charter to advance the mission and vision of the program

Strategy 4.2.4: Partner with other projects and programs to leverage knowledge and resources



Upper Mississippi River Restoration Program
Quarterly Meetings

Attachment D

Communications

Upper Mississippi River Restoration Program

Upper Mississippi River Restoration

Upper Mississippi River Restoration Program

The Upper Mississippi River ecosystem is healthier and more resilient because of the Upper Mississippi River Restoration Program (UMRR)

- UMRR is a premier example of multi-purpose river management, underscoring the value of integrating ecological, economic, and social interests in large river management.
- UMRR restores large complexes of fish and wildlife habitat, providing protection, nesting, and feeding areas for a diverse set of fish, birds, mussels, mammals, reptiles, and amphibians, including a number of rare and endangered species.
- UMRR supports jobs and economic growth through the Upper Mississippi River System.
- UMRR depends on, and is driven by, a truly unique and remarkable partnership network. The ongoing commitments from all partners are essential to the program's success.

Partners' Message to Congress

High Level Accomplishments 2017-2022

- UMRR constructed **seven habitat restoration and enhancement projects**, collectively improving the ecological conditions of **over 15,000 acres** in the Upper Mississippi River System.
- UMRR has in total constructed 63 habitat projects spanning 121,400 acres of floodplain.
- UMRR **published its second habitat needs assessment,** which provides consensus- based guidance for improving ecological conditions through UMRR's habitat projects.
- UMRR **published a 30-year status and trends analysis,** providing a clear and quantitative assessment of what we know about the Upper Mississippi River ecosystem's condition, how we know it, and why it matters.
- UMRR **published 76 peer reviewed studies** and **59 research papers.**
- UMRR **implemented long term resource monitoring,** collecting fisheries, water quality, and vegetation data in six study reaches spanning the entire Upper Mississippi River System. The longstanding uninterrupted dataset allows for understanding how and why the river is changing.
- The **partnership collectively implemented the 2015-2025 UMRR Strategic Plan,** which propelled important collaborations centered around integrating investments in habitat planning and restoration with long term monitoring.

Investing in restoring the Upper Mississippi River System benefits the economy and people. Every **$10 million** spent on habitat project construction creates more than **300 jobs** in sectors like manufacturing, agriculture, recreation, and transportation.

Congress provides consistency in UMRR implementation and increases opportunities for habitat restoration.

The UMRR partnership applauds Congress' continued investment in the program through annual appropriations and enhancements to the program's authorization. Congress has provided UMRR with consistent appropriations annually of $35 million through FY 2023 and then $55 million in FYs 2024 and 2025.

This allows UMRR to:

- Implement habitat projects efficiently and cost effectively.
- Maintain long term resource monitoring and carry forward substantial scientific advancements.
- Maintain dedicated, in-kind engagement of federal and state agencies and nongovernmental organizations in UMRR's implementation.

UMRR partners will continue to coordinate with Congress about the challenges to non-federal sponsors in executing cost-share agreements.

Upper Mississippi River Ecosystem: Status and Trends of its Health and Resilience

The river is changing for a variety of reasons, but mostly because of changing hydrology and invasive species. The Upper Mississippi River System is a large and diverse ecosystem with many regional differences. The changes in the river are occurring differently and at different rates within the Upper Mississippi River System.

- There is **more water in the river more of the time**. High flows are lasting longer and occurring more frequently throughout the system. This is important because water flow is the primary driver affecting the quality and quantity of habitat.
- **Floodplain forest loss has occurred in nearly all study areas** except south of the locked portion of the river. The forests may be responding to changes like increased flood inundation and invasive species.
- In most of the river system, **water in main channel has become clearer and aquatic plants have become more abundant,** improving habitat for some fish and wildlife. Increased water clarity in the river allows sunlight to reach deeper into the water and promotes plant growth. These plants slow water flow and anchor the sediment, which further improves water clarity and triggers more plant growth.
- **Concentration of nutrients, notably nitrogen and phosphorus, remain high,** exceeding U.S. Environmental Protection Agency benchmarks. However, total phosphorus concentrations have declined in many of the studied reach areas.
- **The river continues to support diverse and abundant fishes.** Recreational fishes have increased in parts of the system. However, there have been substantial declines in forage fish, an important food source for larger fishes and animals, throughout the river network. Invasive carps have substantially affected the river ecosystem where they have become common.

For 30 years UMRR's long term resource monitoring has captured trends in nutrient concentrations, plant community changes, forest loss across the system, and the impacts from invasive carp expansion to the abundance and diversity of native fishes.

UMRR plans to advance the following initiatives through 2028, pending continued appropriations:

- Implement habitat projects at a steady pace, proactively ensuring a strategic flow of projects through the planning, design, construction, and evaluation phases.
- Integrate knowledge of ecological resilience into habitat project planning, design, and evaluation.
- Track biological responses to UMRR's habitat projects and implement adaptive management approaches in more deliberative ways.
- Assess and detect changes in the health and resilience of the Upper Mississippi River System.
- Foster and strengthen existing and new partnerships.

This information is available in greater detail in the following scientific publications:

2022 Ecological Status and Trends of the Upper Mississippi and Illinois Rivers

2018 UMRR Habitat Need Assessment II

Restoring Complexes of Habitat: Portfolio of Projects in 2017 - 2022

Habitat Rehabilitation and Enhancement Projects

- UMRR has constructed seven habitat restoration and enhancement projects (HREPs) since 2017.
- These seven projects have **improved 15,400 acres of habitat** which provides protection, nesting, and feeding areas for fish, birds, mammals, reptiles and amphibians.
- This brings the **total program investment to 63 constructed habitat projects** spanning 121,400 acres of aquatic floodplain as of December 2024.

HREPs Constructed 2017-2022

1. Bass Ponds (MN-2)
2. Conway Lake (IA-1, WI-3)
3. Harpers Slough (IA-1, WI-3)
4. Pool 12 Overwintering (IA-1, IL-17)
5. Beaver Island (IA-1, IL-17)
6. Huron Island (IA-1, IL-15)
7. Ted Shanks Conservation Area (MO-6, IL-15)

HREPs in Planning, Design, Feasibility

There are 26 habitat projects currently in feasibility, planning, and design as of December 2024.

- 5 in feasibility
- 8 in planning
- 13 in design

Technique	Objectives
Dredge backwaters	• Alter flow patterns and velocity • Improve floodplain structural diversity • Increase deep-water fish habitat for overwintering • Provide access for fish movement
Manage water levels	• Restore more natural hydrologic cycles in project area • Promote growth of aquatic plants as food for waterfowl • Reduce backwater sediment loads • Consolidate bottom sediments • Control rough fish
Build islands	• Decrease wind and wave action • Alter flow patterns and sediment transport • Improve aquatic plant growth • Improve floodplain structural diversity • Provide nesting and loafing habitat for waterfowl and turtles • Promote growth of woody vegetation

Restoring for Purpose

UMRR's habitat restoration and enhancement projects create and protect mosaics of different habitat types.

Floodplain Reconnection and Restoration. Hundreds of thousands of acres of floodplain habitat have been cut-off from the Upper Mississippi River by levees. Reconnecting some of this land would increase flood storage capacity, improve water quality, and provide valuable habitat for fish and wildlife.

Water Level Management. Much of the flora and fauna native to the Upper Mississippi River region is adapted to the wide variations in water levels that characterized the river prior to establishment of the lock and dam system. Since the implementation of the nine-foot channel, however, these variations have been truncated, with the low river stage portion of the hydrograph increased to support commercial navigation. Restoring natural water variability at UMRR habitat projects encourages plant growth that is important for food and refuge.

Backwater Restoration is an important component of HREPs because of the widespread loss of backwater and secondary channel depth and depth diversity. The loss of depth and depth diversity are due to the high rates of sediment deposition in the UMRS. Restoring water depth and diversity creates important habitat for fish, especially in winter, when backwaters provide refuge from harsh conditions in main channel areas. Backwater dredging often complements other project components, such as island or levee construction.

Island Restoration and Construction. Prior to impoundment, the Upper Mississippi River had a braided island form along much of its length. Many of the islands were inundated when the lock and dam system was established, and others were lost subsequently to increased wind-wave erosion. Restoring these islands protects the shoreline from wave and wind action while providing important habitat for fish, wildlife, and plants.

Working in Partnership

The UMRR program is a product of regional collaboration and operates through a truly unique and remarkable partnership infrastructure. The ongoing commitments from all partners have been vital to UMRR's effective habitat restoration and knowledge-building efforts on the Upper Mississippi River System.

This information was developed by the partnership in the **2022 Report to Congress**, available here:

US Army Corps of Engineers ®

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

CONSERVATION DEPARTMENT MISSOURI

DEPARTMENT OF NATURAL RESOURCES

U.S. FISH & WILDLIFE SERVICE

USGS science for a changing world

WISCONSIN DEPT. OF NATURAL RESOURCES

IOWA DNR

UMRBA Upper Mississippi River Basin Association

Upper Mississippi River Restoration Program
Quarterly Meetings

Attachment E

Additional Items

Upper Mississippi River
Quarterly Meetings

Future Meeting Schedule

May 2025 — La Crosse, Wisconsin

May 20	UMRBA Quarterly Meeting
May 21	UMRR Coordinating Committee Quarterly Meeting

August 2025 — Minneapolis, Minnesota

August 5	UMRBA Quarterly Meeting
August 6	UMRR Coordinating Committee Quarterly Meeting

Acronyms Frequently Used on the Upper Mississippi River System

AAR	After Action Report
A&E	Architecture and Engineering
ACRCC	Asian Carp Regional Coordinating Committee
AFB	Alternative Formulation Briefing
AHAG	Aquatic Habitat Appraisal Guide
AHRI	American Heritage Rivers Initiative
AIS	Aquatic Invasive Species
ALC	American Lands Conservancy
ALDU	Aquatic Life Designated Use(s)
AM	Adaptive Management
ANS	Aquatic Nuisance Species
AP	Advisory Panel
APE	Additional Program Element
ARRA	American Recovery and Reinvestment Act
ASA(CW)	Assistant Secretary of the Army for Civil Works
A-Team	Analysis Team
ATR	Agency Technical Review
AWI	America's Watershed Initiative
AWO	American Waterways Operators
AWQMN	Ambient Water Quality Monitoring Network
BA	Biological Assessment
BATIC	Build America Transportation Investment Center
BCOES	Bid-ability, Constructability, Operability, Environmental, Sustainability
BCR	Benefit-Cost Ratio
BMPs	Best Management Practices
BO	Biological Opinion
CAP	Continuing Authorities Program
CAWS	Chicago Area Waterways System
CCC	Commodity Credit Corporation
CCP	Comprehensive Conservation Plan
CEICA	Cost Effectiveness Incremental Cost Analysis
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CG	Construction General
CIA	Computerized Inventory and Analysis
CMMP	Channel Maintenance Management Plan
COE	Corps of Engineers
COPT	Captain of the Port
CPUE	Catch Per Unit Effort
CRA	Continuing Resolution Authority
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program

CSP	Conservation Security Program
CUA	Cooperative Use Agreement
CWA	Clean Water Act
CY	Cubic Yards
DALS	Department of Agriculture and Land Stewardship
DED	Department of Economic Development
DEM	Digital Elevation Model
DET	District Ecological Team
DEWS	Drought Early Warning System
DMMP	Dredged Material Management Plan
DNR	Department of Natural Resources
DO	Dissolved Oxygen
DOA	Department of Agriculture
DOC	Department of Conservation
DOER	Dredging Operations and Environmental Research
DOT	Department of Transportation
DPR	Definite Project Report
DQC	District Quality Control/Quality Assurance
DSS	Decision Support System
EA	Environmental Assessment
ECC	Economics Coordinating Committee
EEC	Essential Ecosystem Characteristic
EIS	Environmental Impact Statement
EMAP	Environmental Monitoring and Assessment Program
EMAP-GRE	Environmental Monitoring and Assessment Program-Great Rivers Ecosystem
EMP	Environmental Management Program [Note: Former name of Upper Mississippi River Restoration Program.]
EMP-CC	Environmental Management Program Coordinating Committee
EO	Executive Order
EPA	Environmental Protection Agency
EPM	Environmental Pool Management
EPR	External Peer Review
EQIP	Environmental Quality Incentives Program
ER	Engineering Regulation
ERDC	Engineering Research & Development Center
ESA	Endangered Species Act
EWMN	Early Warning Monitoring Network
EWP	Emergency Watershed Protection Program
FACA	Federal Advisory Committee Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FDR	Flood Damage Reduction
FFS	Flow Frequency Study
FMG	Forest Management Geodatabase
FONSI	Finding of No Significant Impact
FRM	Flood Risk Management

FRST	Floodplain Restoration System Team
FSA	Farm Services Agency
FTE	Full Time Equivalent
FWCA	Fish & Wildlife Coordination Act
FWIC	Fish and Wildlife Interagency Committee
FWS	Fish and Wildlife Service
FWWG	Fish and Wildlife Work Group
FY	Fiscal Year
GAO	Government Accountability Office
GEIS	Generic Environmental Impact Statement
GI	General Investigations
GIS	Geographic Information System
GLC	Governors Liaison Committee
GLC	Great Lakes Commission
GLMRIS	Great Lakes and Mississippi River Interbasin Study
GPS	Global Positioning System
GREAT	Great River Environmental Action Team
GRP	Geographic Response Plan
H&H	Hydrology and Hydraulics
HAB	Harmful Algal Bloom
HEC-EFM	Hydrologic Engineering Center Ecosystems Function Model
HEC-RAS	Hydrologic Engineering Center River Analysis System
HEL	Highly Erodible Land
HEP	Habitat Evaluation Procedure
HNA	Habitat Needs Assessment
HPSF	HREP Planning and Sequencing Framework
HQUSACE	Headquarters, USACE
H.R.	House of Representatives
HREP	Habitat Rehabilitation and Enhancement Project
HSI	Habitat Suitability Index
HU	Habitat Unit
HUC	Hydrologic Unit Code
IBA	Important Bird Area
IBI	Index of Biological (Biotic) Integrity
IC	Incident Commander
ICS	Incident Command System
ICWP	Interstate Council on Water Policy
IDIQ	Indefinite Delivery/Indefinite Quantity
IEPR	Independent External Peer Review
IGE	Independent Government Estimate
IIA	Implementation Issues Assessment
IIFO	Illinois-Iowa Field Office (formerly RIFO - Rock Island Field Office)
ILP	Integrated License Process
IMTS	Inland Marine Transportation System
IPR	In-Progress Review
IRCC	Illinois River Coordinating Council

IRPT	Inland Rivers, Ports & Terminals
IRTC	Implementation Report to Congress
IRWG	Illinois River Work Group
ISA	Inland Sensitivity Atlas
IWR	Institute for Water Resources
IWRM	Integrated Water Resources Management
IWS	Integrated Water Science
IWTF	Inland Waterways Trust Fund
IWUB	Inland Waterways Users Board
IWW	Illinois Waterway
L&D	Lock(s) and Dam
LC/LU	Land Cover/Land Use
LDB	Left Descending Bank
LERRD	Lands, Easements, Rights-of-Way, Relocation of Utilities or Other Existing Structures, and Disposal Areas
LiDAR	Light Detection and Ranging
LMR	Lower Mississippi River
LMRCC	Lower Mississippi River Conservation Committee
LOI	Letter of Intent
LTRM	Long Term Resource Monitoring
M-35	Marine Highway 35
MAFC	Mid-America Freight Coalition
MARAD	U.S. Maritime Administration
MARC 2000	Midwest Area River Coalition 2000
MCAT	Mussel Community Assessment Tool
MICRA	Mississippi Interstate Cooperative Resource Association
MDM	Major subordinate command Decision Milestone
MIPR	Military Interdepartmental Purchase Request
MMR	Middle Mississippi River
MMRP	Middle Mississippi River Partnership
MNRG	Midwest Natural Resources Group
MOA	Memorandum of Agreement
MoRAST	Missouri River Association of States and Tribes
MOU	Memorandum of Understanding
MRAPS	Missouri River Authorized Purposes Study
MRBI	Mississippi River Basin (Healthy Watersheds) Initiative
MRC	Mississippi River Commission
MRCC	Mississippi River Connections Collaborative
MRCTI	Mississippi River Cities and Towns Initiative
MRRC	Mississippi River Research Consortium
MR&T	Mississippi River and Tributaries (project)
MSP	Minimum Sustainable Program
MVD	Mississippi Valley Division
MVP	St. Paul District
MVR	Rock Island District
MVS	St. Louis District

NAS	National Academies of Science
NAWQA	National Water Quality Assessment
NCP	National Contingency Plan
NIDIS	National Integrated Drought Information System (NOAA)
NEBA	Net Environmental Benefit Analysis
NECC	Navigation Environmental Coordination Committee
NED	National Economic Development
NEPA	National Environmental Policy Act
NESP	Navigation and Ecosystem Sustainability Program
NETS	Navigation Economic Technologies Program
NGO	Non-Governmental Organization
NGRREC	National Great Rivers Research and Education Center
NGWOS	Next Generation Water Observing System
NICC	Navigation Interests Coordinating Committee
NPDES	National Pollution Discharge Elimination System
NPS	Non-Point Source
NPS	National Park Service
NRC	National Research Council
NRCS	Natural Resources Conservation Service
NRDAR	Natural Resources Damage Assessment and Restoration
NRT	National Response Team
NSIP	National Streamflow Information Program
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O&M	Operation and Maintenance
OHWM	Ordinary High Water Mark
OMB	Office of Management and Budget
OMRR&R	Operation, Maintenance, Repair, Rehabilitation, and Replacement
OPA	Oil Pollution Act of 1990
ORSANCO	Ohio River Valley Water Sanitation Commission
OSC	On-Scene Coordinator
OSE	Other Social Effects
OSIT	On Site Inspection Team
P3	Public-Private Partnerships
PA	Programmatic Agreement
PAS	Planning Assistance to States
P&G	Principles and Guidelines
P&R	Principles and Requirements
P&S	Plans and Specifications
P&S	Principles and Standards
PCA	Pollution Control Agency
PCA	Project Cooperation Agreement
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PED	Preconstruction Engineering and Design
PgMP	Program Management Plan

PILT	Payments In Lieu of Taxes
PIR	Project Implementation Report
PL	Public Law
PMP	Project Management Plan
PORT	Public Outreach Team
PPA	Project Partnership Agreement
PPT	Program Planning Team
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RCP	Regional Contingency Plan
RCPP	Regional Conservation Partnership Program
RDB	Right Descending Bank
RED	Regional Economic Development
RIFO	Rock Island Field Office (now IIFO - Illinois-Iowa Field Office)
RM	River Mile
RP	Responsible Party
RPEDN	Regional Planning and Environment Division North
RPT	Reach Planning Team
RRAT	River Resources Action Team
RRCT	River Resources Coordinating Team
RRF	River Resources Forum
RRT	Regional Response Team
RST	Regional Support Team
RTC	Report to Congress
S.	Senate
SAV	Submersed Aquatic Vegetation
SDWA	Safe Drinking Water Act
SEMA	State Emergency Management Agency
SET	System Ecological Team
SMART	Specific, Measurable, Attainable, Risk Informed, Timely
SONS	Spill of National Significance
SOW	Scope of Work
SRF	State Revolving Fund
SWCD	Soil and Water Conservation District
T&E	Threatened and Endangered
TEUs	twenty-foot equivalent units
TIGER	Transportation Investment Generating Economic Recovery
TLP	Traditional License Process
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
TSP	Tentatively selected plan
TSS	Total Suspended Solids
TVA	Tennessee Valley Authority
TWG	Technical Work Group
UMESC	Upper Midwest Environmental Sciences Center

UMIMRA	Upper Mississippi, Illinois, and Missouri Rivers Association
UMR	Upper Mississippi River
UMRBA	Upper Mississippi River Basin Association
UMRBC	Upper Mississippi River Basin Commission
UMRCC	Upper Mississippi River Conservation Committee
UMRCP	Upper Mississippi River Comprehensive Plan
UMR-IWW	Upper Mississippi River-Illinois Waterway
UMRNWFR	Upper Mississippi River National Wildlife and Fish Refuge
UMRR	Upper Mississippi River Restoration Program [Note: Formerly known as Environmental Management Program.]
UMRR CC	Upper Mississippi River Restoration Program Coordinating Committee
UMRS	Upper Mississippi River System
UMWA	Upper Mississippi Waterway Association
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VTC	Video Teleconference
WCI	Waterways Council, Inc.
WES	Waterways Experiment Station (replaced by ERDC)
WHAG	Wildlife Habitat Appraisal Guide
WHIP	Wildlife Habitat Incentives Program
WIIN	Water Infrastructure Improvements for the Nation Act
WLM	Water Level Management
WLMTF	Water Level Management Task Force
WQ	Water Quality
WQEC	Water Quality Executive Committee
WQTF	Water Quality Task Force
WQS	Water Quality Standard
WRDA	Water Resources Development Act
WRP	Wetlands Reserve Program
WRRDA	Water Resources Reform and Development Act

Upper Mississippi River Restoration 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),
Section 3177 of the Water Resources Development Act of 2007 (P.L. 110-114),
Section 307 of the Water Resources Development Act of 2020 (P.L. 116-260), and
Section 8345 of the Water Resources Development Act of 2022 (P.L. 117-263).

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 $75,000,000 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 $15,000,000 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.

EMP OPERATING APPROACH

2006 marks the 20th anniversary of the Environmental Management Program (EMP). During that time, the Program pioneered many new ideas to help deliver efficient and effective natural resource programs to the Upper Mississippi River System (UMRS). These included the creation of an effective partnership of five states, five federal agencies, and numerous NGOs; a network of six field stations monitoring the natural resources of the UMRS; and the administrative structure to encourage river managers to use both new and proven environmental restoration techniques.

EMP has a history of identifying and dealing with both natural resource and administrative challenges. The next several years represent new opportunities and challenges as Congress considers authorization of the Navigation and Environmental Sustainability Program (NESP), possible integration or merger of EMP with NESP, and changing standards for program management and execution.

We will continue to learn from both the history of EMP and experience of other programs. Charting a course for EMP over the next several years is important to the continued success of the Program. EMP will focus on the key elements of partnership, regional administration and coordination, LTRMP, and HREPs.

The fundamental focus of EMP will not change, however the way we deliver our services must change and adapt. This will include:

- further refinements in regional coordination and management,
- refinement of program goals and objectives,
- increased public outreach efforts,
- development and use of tools such as the regional HREP database and HREP Handbook,
- exploring new delivery mechanisms for contracting,
- continued refinement of the interface between LTRMP and the HREP program components, and
- scientific and management application of LTRMP information and data.

The focus of these efforts must benefit the resources of the UMRS through efficient and effective management.